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NetResults Tracker Help

Administration Overview

Welcome to Administration Guide for NetResults Tracker ™.

This guide provides information about customizing and maintaining your Tracker system. Topics such as user accounts, email and workflow configuration settings within each workgroup (database) are covered in this guide. Information on installation and security are provided in the Installation Help Guide.

Tracker is available in two versions: Tracker Standard Edition and Tracker Enterprise Edition. Tracker Enterprise Edition includes all of the features of Tracker Standard Edition plus some additional features such as Alerts, Discussions, to provide improved support for enterprise-wide use.

Prior to using the operations described in this guide, you should create a new workgroup using the information in the Workgroup Management System Guide. The Workgroup Management System is the central interface for creating multiple workgroups within your Tracker system.

An interface called the User Management System is also available for adding and maintaining Tracker user accounts.

Click here for the Tracker User's Guide. Typical operations done by end users are covered in this guide.

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Administration Guide Glossary

Glossary of Terms

Account Info - A link on the Home Page where you can update your user profile information such as address, phone number, email address, etc.
More information: Account Information

Add & Copy - The operation on the Add Page that allows you to add a record while saving the information currently entered in the fields on the Add Page that can be used to submit another record.
More information: Adding Records

Add Page - The page where a new record can be submitted to the system.
More information: Adding Records

Add Similar - The operation on the View Page that allows you to add a record using the information from the record you are viewing.
More information: Viewing Records

Add via Email - Also known as Submit via Email, this separately purchased option allows end users to submit records via an email message instead of logging into Tracker.
More information: Adding Records via Email

Admin Page - The area where you can customize Tracker. The fields, workflow, email preferences and many other items can be customized in this area.
More information: Admin Guide

Alerts - Per-record email notifications triggered at a particular date & time, or relative to a date field or when there is a lack of change of status within a certain period of time.
More information: Alerts (Enterprise Edition Only)

Allowed Add States - The group of states to which a new record can be routed based on the combination of Form and Project selected for the record.
More information: Workflows

Attachments - Files or URLs that can be added to a record or created as a file accessible to the workgroup (rather than just one record). See also "global file attachments" or "record attachments".
More information: Record Attachments
Global File Attachments
Record Attachments List

AutoFill Item - This feature allows you to configure a field to automatically capture information about an end user's environment when submitting a record on the Add or Submit Pages.
More information: Fields

Calendar - The icon that can be used to display a calendar for selecting dates. Click on the day to select the date to be entered into the date field. Click < or > to move backward or forward one month or click << or >> to move backward or forward one year. Click Now to set the date field to be the current date and time. Click on Exclude Time if you want to exclude

the time information from being saved in the date field. For a field where the time information has previously been excluded, click Set Time if you wish to include the current time information in the field. Click OK to choose the highlighted date to be entered into the date field. Date will be selected and calendar dismissed when a date is clicked when the time is excluded. Dates displayed in red are non-business days according to the Business Days option in the Preferences section. Click Cancel to dismiss the calendar without saving changes.

Child pulldown - A pulldown which is dependent on a parent pulldown. When an option menu item is selected in the parent pulldown, only the option menu items related to the item in the parent pulldown will be available in the child pulldown.

Clone - A duplicate of a record created using the Cloning feature. Clones can also be created using the Task operation.

Color Preferences - The Admin section where color settings for Tracker pages can be configured.
More information: Color Preferences

Default Add State - The state to which a newly added record will be routed by default based on the combination of Form and Project selected for the record.
More information: Workflows

Delete - The operation which you can use to mark a record as deleted.
More information: Deleting Records

Dependent Pulldowns - The feature that allows a relationship to be created between pulldowns. When an option menu item is selected in a parent pulldown, the values in a child pulldown are limited to only those option menu items that are associated with the value selected in the parent pulldown.

Discuss - The area where you can view, reply or start a new discussion thread for a record.
More information: Discussions

Edit Page - The page where the fields, attachments list, source code list and alerts settings for a record can be modified.
More information: Editing Records

Edit Records - The icon that can be used to edit a set of query results.
More information: Querying Records

Email Configuration - The Admin section where Outgoing (email notifications based on actions performed on a record) and Incoming (Submit via Email feature) mail options can be configured.
More information: Email Configuration - Overview

Export - The Export link can be used to export report data from the reports on the History, Home, Query or Metrics pages.

Field - A part of the form where data is collected. Fields are added and edited in the Fields section.

Field Help - Placing your cursor on this icon in the Add, Edit and Task will display additional information about each field. Field Help can be enabled / disabled via the Preferences page. Field Help text can be customized by entering Text in the "Help Description" property of a field in the Fields section.

Field Visibility - A feature which allows you to control where (on what pages such as Add, Edit, reports, email notifications, etc.) and by whom (which user groups) fields can be accessed.

More information: User Administration - Group

Floating user account - Also known as non-Restricted, this type of user account is associated with a floating license.
More information: Users

Form - A set of fields that combined make up a particular "record". For example, if you are using Tracker for issue tracking, the fields that are filled out on the Add Page are part of the "form" for submitting issues into Tracker. It is possible to set up multiple forms (e.g. you may want to have a form for submitting bugs and a separate form for submitting enhancements. Each form has its own set of fields that are collected when submitting a record).
More information: Forms

General Preferences - The Admin section where workgroup-wide preferences can be set (e.g. choosing whether a soft delete or hard delete is done when records are deleted, how are user's names displayed throughout the workgroup pages, etc.).
More information: General Preferences

Global Field Properties - When a field is present on form(s), it can have global properties (the field has the same properties on all forms) or it can have properties set differently on one or more forms.
More information: Forms

Global File Attachment - A file attachment that can be viewed by anyone, including users who do not have a Tracker user account.
More information: Global File Attachments

Help - Clicking on this icon in the top button bar will display the User Help Guide in a second browser window. Clicking on this link in the Status bar will display the context-sensitive Help section in a second browser window.
More information: Administrative Help Guide Table of Contents

History Page - The page where a query can be run to search for information in the audit trail of the records.
More information: Record History

Home Page - The first page a user sees when logging into a workgroup. It can be configured to display up to 3 reports and includes links to update your account information and set your preferences.
More information: Home Page

Key Fields - Important fields configured in a form that can be searched via the Search Window or via Link Fields when trying to identify or locate particular records.
More information: Forms

Knowledge Base - This separately purchased option allows your end users to search for information to resolve questions and issues without logging into Tracker.
More information: Knowledge Base Overview

License Manager - The interface where your Tracker license keys are stored.
More information: Entering License Information

Login Options - The Admin section where Login and Self Registration Page settings can be configured.
More information: Login Options

Login to workgroup - The operation used to access a workgroup.
More information: Logging In

Logoff - Clicking on this icon in the toolbar will end your Tracker session.

Maintenance - This Admin section contains the Delete All Records operation which can be used to remove all records from a workgroup while preserving the configuration (workflow settings, fields, email notification rules, etc. are not altered by this operation). The rest of the utilities in this section are only to be used under the guidance of NetResults Technical Support for troubleshooting purposes.

Fields - The Admin section where fields can be defined and pulldown fields can be customized (e.g. defining option menu items, associating items between dependent pulldowns).
More information: Fields
Customizing Menu Items

Forms - The Admin section where forms can be defined and fields can be selected for each form.
More information: Forms

Projects - The Admin section where projects can be defined and the forms, workflow, state managers and visibility can be configured for each project.
More information: Projects

Workflows - The Admin section where workflow configuration can be set up (e.g. creating states and transitions for processing records).
More information: Workflows

Metrics - The page where you can generate graphical reports such as bar, line or pie charts.
More information: Metrics

Obsolete Item - A value in a pulldown field that has been marked as inactive. Option menu items can be marked as obsolete to allow the item to be preserved in existing records, but an obsolete item cannot be selected when adding new records or modifying existing records.
More information: Customizing Menu Items

Option Menu Item - Values in a pulldown field.
More information: Customizing Menu Items

Parent Pulldown - A pulldown that has one or more child pulldowns associated with it. When an option menu item is selected in the parent pulldown, it limits the option menu items available in the child pulldown to only those values associated with the item selected in the parent pulldown.

Preferences - A link on the Home Page where you can set user preferences such as selecting the reports displayed on the Home Page, choosing your local time zone and other date settings among others.
More information: Preferences

Print - The Print link can be used to print the report(s) displayed on the History, Home, Query or Metrics pages.

Project - A plan or design. A project can be a collection of records or actions that need to be completed by a particular group of people. Projects can be defined to use certain forms, workflows, state managers and visibility to particular user groups.
More information: Projects

Query Page - The page where reports can be generated (including the reports available on the Home Page). You can run

ad-hoc queries, saved queries, advanced saved queries and configure report layouts.
More information: Querying Records

Record Attachment - A file or URL attachment that is associated with a particular record. Record file attachments can only be viewed by a user actively logged into Tracker (requires a user account).
More information: Record Attachments
Record Attachments List

Record Visibility - A feature that allows you to control which records a user is allowed to access based on his / her user group membership. For example, if you have external vendors, customers or partners logging into Tracker, you may not want Company A to access Company B's records.
More information: General Preferences

Restricted User - This type of user account has a limited set of privileges available as opposed to a static or floating user account.
More information: Users

Restricted User Group - Members of this type of user group can be Restricted or non-Restricted user accounts. This type of user group has a limited set of privileges.
More information: User Groups

Self Registration - This feature allows users to create their own user account.
More information: Self Registration

Send Email - A utility that an Admin can use to send email to a user or user group. Most commonly used for troubleshooting email configuration issues.
More information: Sending an Administrative Email

Source Code Control - Tracker can be integrated with Microsoft Visual SourceSafe to associate relevant source files to a record.
More information: Source Code Control Integration Overview

Standard User Group - Also known as non-Restricted user groups, members of this type of user group can only be user accounts with Static or Floating license types. Restricted users cannot be members of a standard user group.
More information: User Groups

State - A state represents a step in the workflow process.

State Group - Workflow states that share a common characteristic. For example, a state group called "Active" could include all states where a record is actively being processed; the group excludes states such as "Closed" or "On Hold" or "Deferred". State groups can be created for the purpose of simplifying report criteria (e.g. return all records in "Active" states) or workflow configuration (e.g. allow end users to choose from "Active" states when deciding where to route a record).
More information: Workflow States

State Manager - A user assigned to a certain state in the State Managers section for a specific project. State Managers can be used as a routing table for automatic assignment for the Add or Task operations.
More information: Form State Managers

Static User Account - Also known as non-Restricted, this type of user account is associated with a static license.
More information: Users

Submit via Email - Also known as Add via Email, this separately purchased option allows end users to submit records via an email message instead of logging into Tracker.
More information: Adding Records via Email

Submit Page Options - The Admin section where the Submit via Web Page for Unregistered Users can be configured.
More information: Submit Page Options

Submit via Web for Unregistered Users - This separately purchased option allows end users to submit records via a web form instead of logging into Tracker.
More information: Submit via Web for Unregistered Users

Task - The operation that can be used to process a record. The Task operation prompts you with transitions available for processing a record based on the record's current state, prompts you with the fields that correspond to each transition and routes the record automatically based on the workflow settings.
More information: Marking a Task Complete

Task Fields - Fields presented to the user when a transition is selected to process a record during the Task operation.
More information: Workflow Transitions

Transition - A path used to move records from one state to another in the workflow.
More information: Workflow Transitions

UMS Administrator - The user account for accessing UMS. The User ID of the UMS Administrator is "useradmin".
More information: Overview

User Accounts - The Admin section in a workgroup where user accounts and user groups are maintained.
More information: Users

User Management System (UMS) - The interface for adding and maintaining user accounts for all workgroups in Tracker.
More information: Overview

User Preferences - The Admin section where preferences can be set that are applied to static/floating and restricted user accounts when they are added to the workgroup.
More information: User Preferences

User Sessions - The Admin section that lists which users are currently logged into the workgroup and allows an Admin user to logoff users if necessary.
More information: User Sessions

View Page - The page where a record's fields, attachments, clone info, alerts, source code list, discussion threads and record history can be viewed.
More information: Viewing Records

WMS Administrator - The user account for accessing WMS. The User ID of the WMS Administrator is "ptadmin".
More information: Logging In

Workflow - The set of steps that represents your organization's process.
More information: Workflows

Workgroup - Created in the Workgroup Management System (WMS), a workgroup is an area with its own database and web pages. When a workgroup is created, you can select many parameters including what database type is used (Access, SQL Server or Oracle), what languages it supports (via the character set option) and where the web pages should be located. Each workgroup is intended to be an area independent of other workgroups (e.g. a workgroup has its own database and features can be enabled / disabled within each workgroup).
More information: Adding a Workgroup

Workgroup Administrator - The User ID "Admin" in each workgroup or any user in a workgroup that is a member of a group with the Admin privilege.

Workgroup Management System (WMS) - The interface for creating and maintaining workgroups. An unlimited number of workgroups can be created in WMS. A user must have Local Administrator rights on the machine where Tracker is installed in order to access WMS.
More information: WMS Overview

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Overview

This section provides general information to help you start using Tracker for tracking different issues and managing information. This section will also introduce you to the various features and how they can play a role in your processes.

The first step is to determine what you will be tracking. The following questions can guide you in this step:

- What projects will be managed?
- What are the processes or forms associated with managing these projects?
- What data needs to be collected during those processes / on those forms?
- What steps are needed to complete the processes?
- Who completes the steps at each point in the processes?

Overview of Tracker structure

Tracker is made up of:

- Project(s) - A project is a plan or design. It can be a collection of records or tasks that are completed by a particular set of users or groups.
- Form(s) - A form is a set of fields that combined make up a particular "record".
- Workflow(s) - A workflow is a set of steps that represents a process.

The relationship between Project, Form and Workflow isn't strictly hierarchical. A Project has one or more Forms available for use in the Project. Each Form within a Project has one (and only one) Workflow associated with it for that Project (for use when an instance of that Form is created via the Add operation in that Project). The same Form may be used in other Projects with other Workflows. The same Workflow may be shared by multiple Forms (in the same Project or in different Projects). Workflow and Form are always related. Every Workflow is associated with (available for) at least one Form. An example of multiple Projects, Forms and Workflows handled in a Tracker workgroup is shown below:

Project 1

- Form 1 using Workflow 1
- Form 2 using Workflow 2

Project 2

- Form 1 using Workflow 2
- Form 2 using Workflow 1

Project 3

- Form 3 using Workflow 3

The best order to set up Tracker is:

- Create Project(s)
- Create Form(s) and Fields
- Create Workflow(s)

The next section provides information for creating Projects and Forms.

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Projects

One example of a project might be a line of products that are grouped together in some fashion (e.g. Project A, which includes Products 1A and 2A).

Projects are created in the Projects section. Each project that is managed in Tracker will have one or more forms available for collecting the information needed to complete the project tasks or track issues associated with the project. If you are planning to only use one project, a "Default Project" is already configured for you to use so you can skip this section and move on to the Forms section. You may decide to use multiple projects. Each project is intended to be a very independent item. In many ways they have been designed to be analogous to workgroups or databases (the projects happen to be in a single workgroup/database). One factor that can be important is visibility of records. If you need sets of records to only be visible to certain groups of users, then this can be done by creating multiple projects. For example, you only want user group A to access Project A records and not Project B records.

When creating a new project, you will have the option to select an existing form to be associated with the new project. Selecting a form is not required (select <None> if you have not yet created the Form you want to use). If you have selected a form, you can also select the Workflow that should be used by the Form in this Project.

When creating new projects, keep in mind that each user needs to be a member of a user group that has access to at least one project in order to be able to login to Tracker.

Forms and Fields

A form is a set of fields that grouped together make up a record. Examples of forms are a bug report, enhancement request, change request, support or help desk issue or Knowledge Base article.

Forms are created in the Forms section. If you are planning to only use a single form, a default form called "Record Form" is already configured for you to use so you can skip this section and move on to the Fields section.

If the workgroup is created using a SQL Server or Oracle database and you are using multiple forms, cross-form metrics are allowed. This is only available in SQL Server or Oracle databases because they are more robust at handling the performance impact of cross-form computations.

You may decide to use multiple forms. In most cases, it's more advantageous to use multiple projects rather than multiple forms. The reason is that there are a limited number of forms that can be created and there is a performance impact when performing cross-form reporting. For example, if the forms you wish to create differ only in name (they share all or most of the same fields), that is a sign that you should not use multiple forms. You can instead use multiple projects (same form in each project, but perhaps use a different workflow in each to change how the fields are set).

When creating a form, you will have the option to select whether the form will be used with a Workflow. If you never intend to use a Workflow (states, transitions, automatic assignment and email notifications) with the form, select "No" for the Used in Workflow option. Selecting No will set all of the system-required fields (Product, Status, Reported By, Assignee) such that they are not visible to non-Admin users on the form being created. Select "Yes" for the Used in Workflow option if you ever intend to use this form with a Workflow. A Workflow allows you to set up states, transitions, automatic assignment and email notifications when records are submitted using the form. When "Yes" is selected for the Used in Workflow field, the Workflow field contains a list of available workflows that can be associated with the form you are creating. Select a Workflow for the Form. If you do not wish to select an existing workflow (e.g. you plan to create one for this form at a later time), you can select "Empty Workflow". Empty Workflow is a Workflow that has only one state called "Not Applicable", has no transitions or email rules and has TBD as a state manager for the "Not Applicable" state (the state manager cannot be changed). If you wish to create a new workflow for the form you are adding, select the "<Create New Workflow>" option.

Fields

Select which existing fields should be available on each Form via the Forms section. Every form will have the system required fields: PRN, Status, Reported By, Assigned To, Deleted and Product. These fields cannot be removed from any form. They can,

however, be made so that they are not visible to any groups using the Field Visibility settings for each field. If No was selected for "Used In Workflow" option for the form, the fields Assignee, Status, Reported By and Product will be hidden on that form for all user groups (including the Admin user group).

Create any other fields that will be needed for each form. Fields can added to more than one form. Fields are added in the Fields section. After adding a field, you will have the option to select which forms in which the new field will appear.

When deciding which fields you need, keep in mind what kind of information you and other users and groups involved in the projects will want to track within a single record and in reports. For example, if you want to be able to track when a record was closed, you will want to have a "Close Date" field available for this piece of data to be captured.

Other questions that can help you identify the fields you need and the properties they should have are:

- What data type should the field be? For example, you could create a field called "Customer" in order to collect the name of the customer related to the record being reported. You could make this field a Text type field so that a name can be typed into the field. Alternatively, you could make this field a Pulldown menu where the menu options are pre-configured. Making this field a Pulldown field would prevent users from typing in different versions of the same choice and would make running reports simpler.
- Where should this field be displayed? You can choose whether each field is displayed on the Add, Submit, Edit and View Pages, Query and Home Page reports and email notifications.
- If this field is included on the Add or Submit Pages, should it be required? Making a field required ensures that a user adding a new record must enter information into the field before the new record can be submitted.
- If you are using multiple forms, will you need to link records created with one form to records created using another form? For example, let's say you have created a form for submitting support issues and another form for submitting development issues. You may want to be able to identify support issues that are related to development issues and vice versa. You can use Link fields to associate records of one form to another.

The next section provides information for creating Workflows.

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NetResults Tracker Help

Workflows

Central to a tracking process are the states that define the process. Each state encompasses its own rules regarding what action must be taken, by what individual, what data is involved, and where the request should go next within the process. The states and the behavior and rules associated with them are collectively called a workflow. A workflow is associated with a Form within a Project. Multiple workflows can be created. Each form can only use one workflow within a Project, but multiple forms can use the same workflow within a Project as in the Example below:

Project 1

- Form 1 using Workflow 1
- Form 2 using Workflow 1

Project 2

- Form 1 using Workflow 2
- Form 2 using Workflow 1

Workflows are created in the Workflows section.

States

In general, a state in the process can be defined as one or more actions that must be performed in a serial fashion by a single individual or a group. In most cases, it will be a single task that must be performed by team member. For example, a developer must fix a bug or a QA engineer must test a bug fix or a Support or Help Desk engineer must resolve an issue. By identifying the tasks that must be performed to process a request, you will have a good starting point for defining a workflow.

Once the states have been identified, you must determine the order in which they occur, and whether there are points where a record could be returned to a previous state. This information defines the state transitions. Transitions are paths that move records from one state to another. In the simplest case, the states are arranged in a single linear order, where at each point in the workflow, the only option (a single transition) is to cause the request to move to the next defined state. However, in some cases you may wish to give an individual the choice to move the record to one of several possible states using multiple transitions. This is called *branching*. Branching from one to several possible states is useful in cases where an individual is entrusted with this decision making capability. Tracker allows you to define any number of states in a workflow and also optionally an unlimited number of transitions to and from each state.

To add, remove or edit a state in a workflow, click on the Admin icon in the Button Bar and then click on the Workflows link, then click on the States button. Detailed information on configuring workflow states can be found in the Workflow States Help section. To add, remove or edit transitions for a state, click on the Admin icon, click on the Workflows link, click on the "+" icon to the left of the state, then click on the Manage link to the right of the Transitions heading.

Transition State

When creating transitions, you need to decide what is the New State for the record. In other words, where does the record go when a particular transition is used to process it?

To help you develop transitions for each state, answer the following questions about each state (or step in your process):

- Does this state have a path (transition) to another state(s)?
  If there is more than one possible state, add one transition for each possible new state or you may decide to create a single transition that will allow the end user to choose the next state from a list of possible states using the "Prompt with State Group" option. If there is a need to send a record back to the last state it was in, use the "<Previous State>" option.

- Can an update transition occur for this state?
  This type of transition allows changes to be made to fields of the record without moving to another state or assigning to another user. Add a transition to be used to update a record in the state.

- Is this a terminal state?
  A terminal state denotes an end to the workflow process. For example, the Closed state is a terminal state because records that are sent to this state will not be processed any further. A terminal state can also be signified by a state which does not have any transitions to other states.

Transition Assignments

A New Assignee also needs to be defined for each transition. In some cases, it may be desirable to automatically assign the record to a particular individual or to a manager who will then assign it to a particular individual.

There are many options available to choose from when determining the New Assignee for a transition:

- Should the record be assigned to an individual?
  Choosing to automatically assign a record to a particular user on a state transition has the advantage that no manager intervention is required, and the record becomes the user's responsibility as soon as possible. However, it does not allow for flexibility in scheduling resources - for example if you have several individuals who are capable of handling the task, only one of them can be assigned the job under this scheme.

  In addition to choosing a specific user as the assignee, you can choose a new assignee from a list of users that are members of a particular user group (such as the "Developers" group) using the "Prompt with User Group" option, assign the record to the "<Reporter>" (the user who added the record), or allow users to assign records to themselves (e.g. you can set up a "queue" in Tracker to allow users to pick up records from the queue and assign the record to his or herself using the "<LoginUser>" option). If you are sending a record back to a state which the record passed through earlier in the workflow, you can automatically assign the record to the user who last worked on the record in that particular state using the "<Last Assignee for New State>" or "Last Assignee for <State>" options.

- Should the record be assigned to a manager?
  Assigning to the manager responsible for the state means that a manager must manually assign the record to another user for completion. This allows the manager to allocate resources more dynamically. One drawback to this to this scheme, is that it is difficult for someone to determine if the record is waiting to be assigned for completion, or if it has been assigned and is in the process of being handled.

- Should the record be assigned to manager using a state?
  Another option is to define a separate state for the task of assigning the record to an individual for processing. That is, when a task is marked complete, it is assigned to a new state with a particular manager. The only task associated with the state is for the manager to assign it to somebody, at which point it moves to the state associated with actually handling the work. For example, rather than a single state called "Scheduled" which covers both assignment and completion of the task, you might define two states called "Scheduled" and "In Development". In this case the "Scheduled" state only covers the assignment, while the "In Development" state covers the actual work.

- Assign to last assignee for new state
  In some cases, you may want to assign a record to a user who was previously assigned to it in a state earlier in the workflow process. This option is useful in situations where an approval decision is made. For example, when a QA engineer has to verify a fix. If the fix cannot be verified, the QA engineer may need to move the record back to the state where the fix is completed and assign the record to the original developer who completed the fix.

- Are there cases where a record does not need to be re-assigned?
  If the transition is to be used for updating a record and the assignee should not change, choose the "<Same Assignee>" option.

Transition Data

Another important issue is determining what data should be entered by a user when he/she has completed a task. This information, known as Task Fields is kept in the data form and generally is either used to process a state further down the workflow or to log information about how the user completed the task.

Rather than just present the entire data form for editing to the user when marking the task complete, only the necessary information should be presented. This eliminates the need for each user to know what fields are important for each state transition. Tracker allows this via the Task operation. This operation presents the user with only the fields defined for the particular state transition and can automatically change the record state and assignee or prompt the user to choose the next state or assignee.

To define Task Fields for each state transition:

1. Click on the Admin icon on the Button Bar
2. Click on the Workflows link
3. Select the desired workflow in the Workflows pulldown at the top. The page will be refreshed to show the properties of the selected workflow
4. Click on the "+" icon to the left of Available States to expand the list of states in the selected workflow.
5. Click on the "+" icon to the left of the state that contains the transition you wish to modify
6. Click on the Manage link to the right of Transitions
7. Each transition listed for the state has a Task Fields button. Click on the Task Fields button to define the set of fields to present for each transition.

Use the following questions to help you define Task Fields for each transition:

- Which fields need to be filled in or updated when the record is processed by this transition?
  For fields that need to be filled in or updated, decide whether the fields should be "Optional" for the user to fill in or "Required" using the Input Type option.

- Are there fields that should be displayed for the users reference during the Task operation?
  Task fields can be set as "Read Only" so the user can refer to the contents of the field, but cannot make changes to the field using the Input Type option.

- Are there fields that should be initialized?
  There may be cases where you wish to have fields reset to their default value during the Task operation or you may want a Date field to be initialized with the current date and time using the Initialize (Reset) option. If you wish to automatically capture a date and time in a field (e.g. a "Close Date" or "Fixed Date"), set Initialize (Reset) to "Yes" for the Date field.

- Should an Annotation to TextArea fields be set to happen automatically?
  An Annotation that includes a date and time stamp and the User ID of the user who modified the field can be set to occur automatically if desired using the Annotate option.

- Should the existing data in TextArea fields be preserved?
  The Append option allows you to define whether any data added to TextArea fields is appended to the field vs. allowing a user to modify any part of the field's contents.

Additional Options for Transitions

Additional options include choosing which transitions are visible to user groups, whether a history comment should be set, whether to allow users to add/remove attachments and source code files and whether to allow a record to be cloned during the Task operation.

To help decide which additional options are appropriate for each transition:

- Do you wish to have users explain what they are doing to the record?
  If so, you may wish to make the History Comment "Required" for a transition. Any information typed into the History Comment field will be saved in the Record History.

- Should users be allowed to add/remove Attachments or Source Code Files when using a particular transition?
  Adding attachments might be necessary in cases where the Reporter is adding more information to a record. Adding Source Code Files might be necessary in cases where a Developer is marking a record as fixed.

- Should a record be cloned at a particular step in the workflow?
  Cloning creates a duplicate of a record. This is useful in cases where you want to link records that report a similar issue or link records that report the same issue in different products or projects.

- Which users and user groups should be able to see this transition?
  The "Make Visible To Users/User Groups" option allows you to limit which users or groups can access a transition. This is useful in cases where you have multiple users that could process a record in a single state. For example, let's say you would like to allow the "Reporter" to add more detail to a record while it is assigned to a Developer in the In Development state. You could create two transitions for the In Development state:

1. One called "Mark Fixed" that the Developer will use to reflect that he/she has completed the development for the record. This transition is only visible to the Developers group.
2. Another called "Update" that the Reporter can use to add more information to the record while it is In Development. This transition is only visible to the "Reporter".

- For which forms should this transition be available?
  If a particular workflow is being used with multiple forms, you can choose which forms the transition will be available for. In other words, there may be some transitions that are not relevant to all forms.

More information about Transitions and Task Fields can be found in the Workflow Transitions Help section.

Note that if all users are sophisticated enough to understand the entire workflow, it may be acceptable or preferable to have all users to mark a task complete by using the Edit operation instead, as this allows full access to all fields of the data record.

The next section provides information about Email Notification.

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NetResults Tracker Help

Email Notification

An important aid to timely and smooth processing of the defect tracking process is automatic notification of events. Standard Internet email is the most widely accepted form of notification.

There are several events that could trigger notification:

- Adding a record
- Editing a record
- Deleting a record
- Performing the Task operation on a record
- Change of record state
- Change of assignment

For each of these events, a set of users may be affected. When a record is added, the following users may be interested:

- The user who is currently assigned to the record
- The user who reported the record
- The manager assigned to the state of the record when it is added
- User Groups within your database

When an edit or task operation is performed on a record, the following users may be interested:

- The user who is currently assigned to the record
- The individual assigned to the record if the Assigned To field is changed during the Edit / Task operation.
- The individual who was the previous assignee if the Assigned To field is changed during the Edit / Task operation.
- The individual who reported the record.
- The manager assigned to the process state of the record when the Edit / Task operation is performed.
- The manager assigned to the new process state of the record if the State field is changed during the Edit / Task operation.
- The manager assigned to the previous process state of the record if the State field is changed during the Edit / Task operation.
- User Groups within your database

When a record is deleted, the following users may be interested:

- The individual who is currently assigned to the record.
- The individual who reported the record.
- The manager assigned to the process state of the record when it is deleted.
- User Groups within your database

On a change of record state, the following users may be interested:

- The individual who is currently assigned to the record.
- The individual who reported the record.
- The manager assigned to the new process state.
- The manager assigned to the original process state.
- User Groups within your database

On a change of record assignment, the following users may be interested:

- The individual the record is being assigned to.
- The individual the record was assigned to before the change of assignment.
- The individual who reported the record.
- The manager assigned to the current process state of the record.
- User Groups within your database

Unregistered Users

Tracker can be configured to send email notification messages to unregistered users who submit records via the Submit Page or via Email. Details about configuring notifications for unregistered users can be found in the General Preferences section.

Determining which users and under what events notification should occur is really a trial-and-error process determined by the personal working habits and preferences of users of the system. The issue should be discussed and tested with the users in your organization until consensus is reached on the desired behavior.

Email Rules are configured for each workflow and can be set differently based on each option menu item in a pulldown if desired. Details on setting your email notification rules can be found in the Workflows Help section.

Alerts

If you have purchased Tracker Enterprise Edition, the Alerts feature is another means of generating email notifications. Alerts are notifications that can be triggered relative to a date field in a record or based on a lack of change of status.

Alerts can be set differently for each individual record if desired. Alerts can also be set based on:

- The form that was used to submit the record
- Which item was selected in a particular pulldown
- The transition used to process the record

Alerts can be set to notify the following users:

- The user who is currently assigned to the record
- The user who reported the record
- The manager assigned to the state of the record when it is added
- Other Users or User Groups within your database

Information about customizing Alerts can be found in the Alerts Help section.

Discussion

If you have purchased Tracker Enterprise Edition, the Discussion feature is a message board or news group feature where your users can have conversations related to a record. These conversations can happen in parallel to the record moving through a workflow. Notification messages can be sent for the following actions:

- Users or user groups can be invited to participate in a discussion via an email notification
- Users can subscribe to discussion threads so that they receive an email notification when a new message is posted to a thread

More detail about Discussion notifications can be found in the Discussion section.

The next section provides more information about Security.

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The basic purpose of security is to limit access to a resource on a per user basis. Resources may either be operations, or data. For example, you may wish to restrict some users from editing records, and other from viewing only certain records.

When used to limit access to operations, security can help to ensure that the desired workflow chain is maintained. For example, by removing the option to edit all fields in the data record, users can be prevented from mistakenly entering the wrong information or altering previously entered information.

Security can also be used to help protect data, allowing only select groups of individuals to operate on particular records. This is useful if you wish to prevent a group of users from viewing records that are of no concern to them, for example customers or users working on different projects.

User Groups and Privileges

Tracker allows you to set security for both operations and data using a User Group security model similar to that used by Microsoft Windows Server. You can create any number of user groups and assign access to operations and other privileges to each group. Individual users can then be assigned to groups. Being a member of a group means that you obtain all the rights and privileges assigned to the group. For example, to be able to access the Admin operations, you must be a member of a group(s) that has the Admin privilege assigned to it.

Information about creating and managing User Groups can be found in the User Accounts - Groups section.

Information about user group privileges can be found in the User Accounts - Privileges section.

Project Visibility

Tracker allows projects to be set such that they are visible to certain user groups via the Projects section. This allows you to restrict users such that they can only add and access records for projects in which they are involved.

Record Visibility

Record Visibility allows you to restrict the individual records a user can access based on their user group membership. Record Visibility is useful when you have external users (e.g. customers, vendors, partners) who will be accessing Tracker and you want to keep Company A from accessing Company B's records, while still allowing internal users to access records for all customers. Information on configuring Record Visibility can be found in the General Preferences section.

Field Visibility

Field Visibility is the feature that allows you to configure which fields are available on the pages in Tracker for each user group. For example, let's say there are some fields that you only want internal users to be able to see when they go to the View page for a record. Field Visibility allows you to choose which fields are displayed in the different areas such as Add, View, Edit, Query/Home reports, email notification messages. Information about configuring Field Visibility can be found in the Fields section.

The next section provides information to help you put it all together.

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Once you have determined how to handle the issues involved in a defect tracking process, you can implement it. There are many ways to do this, two of the largest challenges being maintaining the request information, and dissemination of the current state of the process to the individuals involved in making it happen.

Tracker provides a framework to implement your defect tracking process, and in many ways can be thought of as a programmable general workflow engine. All the states, rules, and individuals that as a whole define your process can be entered into Tracker. Tracker makes it easy for all your users to follow the correct process and access real-time information about the state of any record in the system.

The following sections discuss in some detail the sample templates provided with Tracker and the issue tracking process supported by each:

Product Development

Web Site Development

Knowledge Base

Help Desk

Support

Base

Change Management

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NetResults Tracker Help

The Product Development Template

Overview

The Product Development template supports a typical product development process. The bundling of numerous bug fixes into a particular product release is common in this process. This model assumes the follow organizations are involved in the defect tracking process:

Development
Responsible for performing development tasks necessary to handle the request.

QA
Verifies that the request has been successfully implemented by the Development organization.

Build
Places the updated files into the final product package.

Projects

A default project called Product Development is available in this template and is visible to all user groups. This project can be customized and additional projects can be added via the Projects section.

Forms

A default form called "Issue" is available in this template, is associated with the "Product Development" Project and is visible to all user groups. This form can be customized and additional forms can be added via the Forms section.

Fields

The Issue form contains the following fields. Note that you can customize the database by adding to or removing fields, or changing any pulldown menu values via the Fields section. Field names with an asterisk are required by the system and cannot be removed from any form(s).

PRN*	Numeric record identifier. Assigned at the time the issue is created.
Title	A one line text summary of the issue being reported. Set at the time the issue is created.
Product*	Identifies the product related to the issue that has been reported. Set at the time the issue is created.
Last Updated Date*	The date and time the issue was last modified. Set automatically as the issue is processed through the workflow.
Platform	Describes the hardware or software platform where the issue occurs. An example is the operating system (e.g. Windows XP). Set at the time the issue is created.
Reported In Version	Version number of the product where the issue occurs. Set at the time the issue is created.
Request Type	Classifies the issue. Possible values are: Bug, Contract Requirement, Customer Feedback, Customer Problem, Enhancement. Set at the time the issue is created.
Severity	Describes the relative impact of the issue. Set at the time the issue is created.
Description	Full description of the issue. Ideally describes the nature of the problem and how to reproduce the behavior. Set at the time the issue is created.
Reported By*	Name of the user that reported the problem. Initially set to the name of the current user logged in. Set at the time the issue is created.
Date Reported	The date the issue was created. Automatically initialized, and set at the time the issue is created.
Workaround	Describes how to work around the reported problem. Set at the time the issue is created.
Status*	Current state of the issue. Changes as the issue is processed through the workflow.

Substatus	Describes the condition of the issue in the current state. Possible values are: None, In Progress. Optionally set by each user while processing the issue.
Assigned To*	User the issue is currently assigned to for processing. Set either manually or automatically during processing of the workflow.
Estimated Size	Used to enter an estimated amount of time it will take for a developer to fix the problem.
Planned for Version	Identifies the release number of the product in which the fix for the issue is planned to be included.
Released in Version	Identifies the release number of the product that the fix for the issue will be included in.
Fix Date	Date when the issue was fixed. Set by Development when the problem is fixed. Automatically initialized to the current date/time.
Fix Detail	A Description of the action taken by a developer to fix the problem. Set by Development when the problem is fixed.
Test Date	Date when the fix was tested. Set by QA when the fix for the problem is tested. Automatically initialized to the current date/time.
Test Description	A Description of the action taken by a QA Engineer to test the fix. Set by QA when the fix for the problem is tested.
Priority	Describes the relative importance of handling this issue compared to other issues entered in the system.
Close Date	Date when the issue was closed. Set by Process Manager when no development work will be done for the issue. Automatically initialized to the current date/time.
Close Detail	A Description of the reason an issue will be closed. Set by Process Manager when no development work will be done for the issue.
Defer Reason	Describes the reason an issue will not be worked on until a later date.
Duplicate Record #	Lists the record number of another previously-entered issue in the database which describes the same problem.
Deleted*	Denotes whether the issue has been deleted.

Workflows

It is assumed that issues will be processed and moved through the workflow process by using the Task operation. A default workflow called "Product Issue Process" is available in this template and is associated with the "Issue" Form and is in use in the "Product Development" Project. You can customize the Product Issue Process workflow or add additional workflows via the Workflows section.

1. State 1 - Reported
   When an issue is created, it is set to the state Reported and assigned to the Process Manager (process_mgr). It is assumed that the Process Manager is responsible for looking at all incoming issues and deciding how to process each issue from a list of possible workflow paths. The Process Manager can choose one of the following:
   - Start the process for the issue by selecting the transition called Schedule. This transition will assign the issue to the Development Manager (dev_mgr) and place the issue in the Scheduled state. The Process Manager can also enter a Planned for Version and Priority for the issue when choosing this transition.
   - Defer the processing of the issue by selecting the transition called Defer. This transition will place the issue in the Deferred state and assign it to the state manager of that state (process_mgr). The Process Manager can review deferred issues at a later time and decide whether processing will resume. The Process Manager must enter a Defer Reason and has the option of entering a Planned for Version when choosing this transition.
   - Close the issue by selecting the transition called Close. This transition will place the issue in the Closed state and assign it to TBD (no one - since this issue will not be processed any further). The Close Date will be set automatically with the current date and time. The Process Manager will be required to enter a reason the issue was closed in the Close Detail field.
   - Mark the issue as a duplicate of another issue by selecting the transition called Mark Duplicate. This transition will place the issue in the Duplicate State and assign it to TBD (no one - since this issue will not be processed any further). The Process Manager will be required to enter the record number of the original issue that describes the

same problem.

This is implemented by:

Workflow Properties

- Defining Reported as the Default Add State when an issue is added
- Assigning the process_mgr user as the manager for the Reported and Deferred states
- Assigning dev_mgr as the manager for the Scheduled state

Transitions

- Defining transitions to move an issue to the Scheduled and Deferred states where the assignee is the State Manager for each respective state.
- Defining transitions to move an issue to the Closed and Mark Duplicate states where the assignee is TBD for each transition.

Task Fields

- Configuring Planned for Version and Priority to be presented as optional during the task operation for the transition to the Scheduled state.
- Configuring Defer Reason (required) and Planned for Version (optional) to be presented during the task operation for the transition to the Deferred state.
- Configuring Close Detail (required) and Close Date (read only and initialized) to be presented during the task operation for the transition to the Closed state.
- Configuring Duplicate Record # (required) to be presented during the task operation for the transition to the Mark Duplicate state.

2. State 2 - Scheduled
The Development Manager (dev_mgr) is assumed to be a manager responsible for assigning tasks to the developers for resolution. The Development Manager uses the transition Assign to Developer to assign the issue to a member of the Developers user group. This places the issue in the In Development state. The Development Manager can also decide to defer an issue by choosing the Defer transition, which will place the issue in the Deferred state and assign it to the Process Manager (process_mgr).

   This is implemented by:

   Transitions

   - Defining a transition to move an issue to the In Development state with the assignee to be chosen from a list of developers (User Group called "Developers")
   - Defining a transition to move an issue to the Deferred state with the state manager as the assignee

   Task Fields

   - Configuring Defer Reason (required) and Planned for Version (optional) to be presented during the task operation for the transition to the Deferred state

3. State 3 - In Development
The Developer (dev_one) assigned to the issue makes the changes necessary to address the problem and can either update any progress made on the issue using the Update transition or marks the task complete by selecting the transition Mark Fixed. The Mark Fixed transition allows the Developer to enter a description and date of the fix, advances the state of the issue to Fixed, and assigns the issue to the QA Manager (qa_mgr).

   This is implemented by:

   Workflow Properties

   - Defining the qa_mgr as the manager for the Fixed state

   Transitions

- Defining a transition to keep the issue in the In Development state where the assignee is <Same Assignee>
- Defining a transition to move an issue to the Fixed state where the assignee is the State Manager

Task Fields

- Configuring Fix Detail (required) to be presented during the Task operation for the Update transition. The Description field has been configured as a read only task field for the user to reference when selecting this transition.
- Configuring the Fix Date (read only and initialized) and Fix Detail (required) to be presented during the Task operation for the transition to the Fixed state. The Description field has been configured as a read only task field for the user to reference when selecting this transition.

4. State 4 - Fixed
Once the issue has entered the Fixed state, the QA Manager (qa_mgr) assigns the issue to the QA Engineer (qa_one), a member of the QA user group, and advances the state to In Test by selecting the transition Assign to QA Engineer.

   This is implemented by:

   Transitions

   - Defining a transition to move an issue to the In Test state with the assignee to be chosen from a list of QA Engineers (User Group called "QA")

5. State 5 - In Test
The QA Engineer (qa_one) verifies that the issue has been resolved, and then uses the transition called Mark Tested to advance the issue to Tested and assigns the issue to the Build Manager (bld_mgr). If an issue has not been resolved and needs to be returned to Development, the QA Engineer can move the issue back to the In Development state using the transition Reject, which will assign the issue to the developer who worked on the issue. For each of these possible paths, the QA Engineer enters information in the Test Date and Test Description fields.

   This is implemented by:

   Workflow Properties

   - Configuring bld_mgr to be the manager of the Tested state

   Transitions

   - Defining a transition to move an issue to the Tested state where the assignee is the state manager
   - Creating a transition to move an issue to the In Development state or <Previous State> where the assignee is the Last Assignee for the new state.

   Task Fields

   - Configuring Test Date (read only and initialized) and Test Description (required) to be presented during the Task operation for the transitions to the In Development and Tested states. The Fix Detail field is presented as a read only task field for the QA Engineer to reference when selecting this transition.

6. State 6 - Tested
The Build Manager (bld_mgr) user is assumed to be the user in charge of packaging the product for release and responsible for ensuring that all the desired fixes are included in the release. The Build Manager does what is necessary to make sure that the fix for the issue is included in the release, enters the released in version for the issue, then advances the state of the issue to "Released" using the transition called Release.

   This is implemented by:

   Transitions

   - Defining a transition to move the issue to the Released state where the assignee is TBD. TBD ("no one") is selected since the release is the last step in the processing of the issue.

   Task Fields

   - Configuring Released in Version (required) as a field to be presented during the task operation for the transition to

the Released state. The Planned for Version field is presented as a read only task field for the Build Manager to reference when choosing this transition.

7. State 7 - Released
   This state indicates that processing of the issue is complete.

8. State 8 - Closed
   This state indicates that the issue will not be processed.

9. State 9 - Deferred
   This state indicates the decision on whether or not to process the issue has been deferred until a future date. The Process Manager can update an issue in this state by using the transition called Update. The Update transition will keep the issue in the Deferred state and assigned to the state manager (process_mgr). The fields Defer Reason and Priority are presented as optional fields during the task operation. The Process Manager is required to enter a history comment to describe what was changed within the issue when using the Update transition.

   The Process Manager can decide to begin processing an issue by choosing the Schedule transition, which will place the issue in the Scheduled state and assign it to the State Manager (dev_mgr). The Process Manager can set the Planned for Version and Priority fields when choosing this transition.

   This is implemented by:

   Transitions

   - Defining a transition called Update with Deferred set as the New State, <Same Assignee> selected as the New Assignee, and history comment required
   - Creating a transition to move the issue to the Scheduled state and assign it to the state manager

   Task Fields

   - Configuring Defer Reason and Priority to be presented during the task operation for the transition to update a deferred issue
   - Configuring Planned for Version and Priority to be presented during the task operation for the transition to the Scheduled state.

Sample Saved Charts

A set of sample saved charts are included in this template. Click here to see details of these sample metrics.

Email Notification

The Product Development template is set up to notify users as follows:

On Add or Delete of a Record
The current assignee, the manager for the current state, and the reporter of the issue are notified

On Change of State to Released, Deferred, Duplicate or Closed
The user who reported the issue is notified when an issue is moved to a state where processing is stopped

On Change of Assignment
Both the current assignee and the manager for the current state of the issue are notified

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Security

The Product Development template assumes a very simple security model reflecting a workgroup situation where all users are able to see any issue. This is implemented by setting Enable Record Visibility option under General Preferences in the Administration Task page to No.

In addition, the privileges related to editing fields within the issues have been removed from users that are not managers or Admin. With this configuration, users can rely on the Task operation to move issues through the workflow. This can be changed within the

User Accounts section of the Admin page.

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NetResults Tracker Help

The Web Site Development Template

Overview

The Web Site Development template supports a traditional web site development process. Typical of this process is the immediate posting of bug fixes to the web site being developed and maintained. This model assumes the follow organizations are involved in the defect tracking process:

Development
Responsible for performing development tasks necessary to handle the request.

QA
Verifies that the request has been successfully implemented by the Development organization.

Build
Places the updated files onto the live server.

Projects

A default project called "Web Site Development" is available in this template and is visible to all user groups. This project can be customized and additional projects can be added via the Projects section.

Forms

A default form called "Issue" is available in this template, is associated with the "Web Site Development" Project and is visible to all user groups. This form can be customized and additional forms can be added via the Forms section.

Fields

The Issue form contains the following fields. Note that you can customize the database by adding to or removing fields, or changing any pulldown menu values via the Fields section. Field names with an asterisk are required by the system and cannot be removed from any form(s).

PRN*	Numeric record identifier. Assigned at the time the issue is created.
Title	A one line text summary of the problem. Set at the time the issue is created.
Product*	Identifies the product related to the issue has been reported. Set at the time the issue is created.
Last Updated Date*	The date and time the issue was last modified. Set automatically as the issue is processed through the workflow.
Browser	Identifies the browser type related to the issue that has been reported. Set at the time the issue is created.
Platform	Describes the hardware or software platform where the issue occurs. An example is the operating system (e.g. Windows XP). Set at the time the issue is created.
Problem URL	URL of the web page where the issue was found. Set at the time the issue is created.
Request Type	Classifies the issue. Possible values are: Bug, Contract Requirement, Customer Feedback, Customer Problem, Enhancement. Set at the time the issue is created.
Severity	Describes the relative impact of the issue. Set at the time the issue is created.
Description	Full description of the issue. Ideally describes the nature of the problem and how to reproduce the behavior. Set at the time the issue is created.
Reported By*	Name of the user that reported the issue. Initially set to the name of the current user logged in. Set at the time the issue is created.
Date Reported	The date the issue was created. Automatically initialized, and set at the time the issue is created.
Workaround	Describes how to work around the reported issue. Set at the time the issue is created.
Status*	Current state of the issue. Changes as the issue is processed through the workflow.
Substatus	Describes the condition of the issue in the current state. Possible values are: None, In Progress. Optionally

	set by each user while processing the issue.
Assigned To*	User the issue is currently assigned to for processing. Set either manually or automatically during processing of the workflow.
Operating System	The operating system installed on the machine of the user who reported the issue. Set automatically when the ticket is created using the AutoFill feature.
Reporter's Web Browser	The browser installed on the machine of the user who reported the issue. Set automatically when the ticket is created using the AutoFill feature.
Screen Size	The screen size set on the machine of the user who reported the issue. Set automatically when the ticket is created using the AutoFill feature.
Estimated Size	Used to enter an estimated amount of time it will take for a developer to fix the issue.
Fix Date	Date when the issue was fixed. Set by Development when the issue is fixed. Automatically initialized to the current date/time.
Fix Detail	A Description of the action taken by a developer to fix the issue. Set by Development when the problem is fixed.
Test Date	Date when the fix was tested. Set by QA when the fix for the issue is tested. Automatically initialized to the current date/time.
Test Description	A Description of the action taken by a QA Engineer to test the fix. Set by QA when the fix is tested.
Test URL	A URL where the fix can be tested. Set by Developer when the issue is fixed.
Priority	Describes the relative importance of handling this issue compared to other issues entered in the system.
Close Date	Date when the issue was closed. Set by Process Manager when no development work will be done on an issue. Automatically initialized to the current date/time.
Close Detail	A Description of the reason for closing an issue. Set by the Process Manager when no development work will be done on an issue.
Defer Reason	Describes the reason an issue will not be worked on until a later date.
Duplicate Record #	Lists the record number of another previously-entered issue in the database which describes the same problem.
Date Released	Date when the fix for the issue was released. Set by the Build Manager when the fix for the issue is released. Automatically initialized to the current date/time.
Deleted*	Denotes whether the issue has been deleted.

Workflows

It is assumed that issues will be processed and moved through the workflow process by using the Task operation. A default workflow called "Web Site Issue Process" is available in this template and is associated with the "Issue" Form and is in use in the "Web Site Development" Project. You can customize the Web Site Issue Process workflow or add additional workflows via the Workflows section.

1. State 1 - Reported
   When an issue is created, it is set to the state Reported, and assigned to the Process Manager (process_mgr). It is assumed that the Process Manager is responsible for looking at all incoming issues and deciding how to process each one from a list of possible workflow paths. The Process Manager can choose one of the following:
   - Start the process for the issue by selecting the transition called Schedule. This transition will assign the issue to the Development Manager (dev_mgr) and place the issue in the Scheduled state. The Process Manager can also enter a Priority for the issue when choosing this transition.
   - Defer the processing of the issue by selecting the transition called Defer. This transition will place the issue in the Deferred state and assign it to the state manager of that state (process_mgr). The Process Manager can review deferred issues at a later time and decide whether processing will resume.
   - Close the issue by selecting the transition called Close. This transition will place the issue in the Closed state and assign it to TBD (no one - since this issue will not be processed any further). The Process Manager will be required to enter a reason the issue was closed in the Close Detail field. The Close Date will be updated automatically.
   - Mark the issue as a duplicate of another issue by selecting the transition called Mark Duplicate. This transition will place the issue in the Duplicate State and assign it to TBD (no one - since this issue will not be processed any further). The Process Manager will be required to enter the issue number of the original issue that describes the same problem.

This is implemented by:

Workflow Properties

- Defining Reported as the Default Add State when an issue is added
- Assigning the process_mgr user as the manager for the Reported and Deferred states
- Assigning dev_mgr as the manager for the Scheduled state

Transitions

- Defining transitions to move an issue to the Scheduled and Deferred states where the assignee is the State Manager for each respective state.
- Defining transitions to move an issue to the Closed and Mark Duplicate states where the assignee is TBD for each transition.

Task Fields

- Configuring Priority (optional) to be presented during the task operation for the transition to the Scheduled state.
- Configuring Defer Reason (required) to be presented during the task operation for the transition to the Deferred state.
- Configuring Close Detail (required) and Close Date (read only and initialized) to be presented during the task operation for the transition to the Closed state.
- Configuring Duplicate Record # (required) to be presented during the task operation for the transition to the Mark Duplicate state.

2. State 2 - Scheduled
The Development Manager (dev_mgr) is assumed to be a manager responsible for assigning tasks to the developers for resolution. The Development Manager uses the transition Assign to Developer to assign the issue to a developer (dev_one), a member of the "Developers" user group. This places the issue in the In Development state. The Development Manager can also decide to defer a issue by choosing the Defer transition, which will place the issue in the Deferred state and assign it to the Process Manager (process_mgr).

This is implemented by:

Transitions

- Defining a transition to move an issue to the In Development state with the assignee to be chosen from a list of developers (User Group called "Developers")
- Defining a transition to move an issue to the Deferred state with the state manager as the assignee

Task Fields

- Configuring Defer Reason (required) to be presented during the task operation for the transition to the Deferred state

3. State 3 - In Development
The Developer (dev_one) assigned to the issue makes the changes necessary to address the problem and can either update any progress made on the issue using the Update transition or can mark the task complete using the transition called Mark Fixed. The Mark Fixed transition allows the Developer to enter a description as well as a URL to be used by QA to test the fix, advances the state of the issue to Fixed, and assigns the issue to the QA Manager (qa_mgr). The Fix Date will be automatically set to the current date and time.

This is implemented by:

Workflow Properties

- Defining the qa_mgr as the manager for the Fixed state

Transitions

- Defining a transition with New State set to In Development and New Assignee set to "<Same Assignee>"
- Defining a transition to move an issue to the Fixed state where the assignee is the State Manager

Task Fields

- Configuring Fix Detail (required) to be presented during the Task operation for the Update transition. The Description field is presented as a read only task field for the Developer's reference when choosing this transition.
- Configuring the Fix Date (read only and initialized), Fix Detail (required), and Test URL (optional) to be presented during the Task operation for the transition to the Fixed state. The Description field is presented as a read only task field for the Developer's reference when choosing this transition.

4. State 4 - Fixed
   Once the issue has entered the Fixed state, the QA Manager (qa_mgr) assigns the issue to the QA Engineer (qa_one), a member of the QA user group, and advances the state to In Test by using the transition called Assign to QA Engineer.

   This is implemented by:

   Transitions

   - Defining a transition to move an issue to the In Test state with the assignee to be chosen from a list of QA Engineers (User Group called "QA")

5. State 5 - In Test
   The QA Engineer (qa_one) verifies that the problem has been resolved, and then uses the transition Mark Tested to advance the issue to the Tested state and assigns the issue to the Build Manager (bld_mgr). If a problem has not been resolved and needs to be returned to Development, the QA Engineer can move the issue back to the In Development state and assign it to the developer who worked on the issue by using the Reject transition. For each of these possible paths, the QA Engineer enters information in the Test Description and Test URL fields. The Test Date is automatically updated.

   This is implemented by:

   Workflow Properties

   - Configuring bld_mgr to be the manager of the Tested state

   Transitions

   - Defining a transition to move an issue to the Tested state where the assignee is the state manager
   - Creating a transition to move an issue to the In Development state or <Previous State> where the assignee is the Last Assignee for the New State.

   Task Fields

   - Configuring Test Date (read only and initialized), Test Description (required), and Test URL (optional) to be presented during the Task operation for the transitions to the In Development and Tested states. The Fix Detail field is presented as a read only task field for the QA Engineer to reference when selecting this transition.

6. State 6 - Tested
   The Build Manager (bld_mgr) user is assumed to be the user in charge of packaging the product for release, and responsible for ensuring that all the desired fixes are included in the release. The Build Manager does what is necessary to make sure that the fix for the issue is included in the release, then advances the state of the issue to Released using the transition Release. The Date Released field is automatically updated.

   This is implemented by:

   Transitions

   - Defining a transition to move the issue to the Released state where the assignee is TBD ("no one" as the processing for this issue has been completed).

   Task Fields

   - Configuring Date Released (read only and initialized) as a field to be presented during the task operation for the transition to the Released state

7. State 7 - Released

This state indicates that processing of the issue is complete.

8. State 8 - Closed
   This state indicates that the issue will not be processed.

9. State 9 - Deferred
   This state indicates the decision on whether or not to process the issue has been deferred until a future date. The Process Manager can update an issue in this state by using the Update transition. The Update transition will keep the issue in the Deferred state and assigned to the same user (process_mgr). The fields Defer Reason and Priority are presented as optional fields during the task operation. The Process Manager is required to enter a history comment to describe what was changed within the issue when using the Update transition.

   The Process Manager can decide to begin processing a issue by choosing the Schedule transition, which will place the issue in the Scheduled state and assign it to the State Manager (dev_mgr). The Process Manager can set the Priority field when choosing this transition.

   This is implemented by:

   Transitions

   - Defining a transition called Update with Deferred selected as the New State (same state), <Same Assignee> set as the New Assignee and history comment required
   - Creating a transition to move the issue to the Scheduled state and assign it to the state manager

   Task Fields

   - Configuring Defer Reason and Priority to be presented during the task operation for the transition to update a deferred issue
   - Configuring Priority to be presented during the task operation for the Schedule transition

---

Sample Saved Charts

A set of sample saved charts are included in this template. Click here to see details of these sample metrics.

Email Notification

The Web Site Development template is set up to notify users as follows:

On Add or Delete of a Record
The current assignee, the manager for the current state, and the reporter of the issue are notified

On Change of State to Released, Deferred, Duplicate or Closed
The user who reported the issue is notified when an issue is moved to a state where processing is stopped

On Change of Assignment
Both the current assignee and the manager for the current state of the issue are notified

---

Security

The Web Site Development template assumes a very simple security model reflecting a workgroup situation where all users are able to see any issue. This is implemented by setting Enable Record Visibility option under General Preferences in the Administration Task page to No.

In addition, the privileges related to editing the field of the issues have been removed from users that are not managers or Admin. With this configuration, users can rely on the Task operation to move issues through the workflow. This can be changed within the User Accounts section of the Admin page.

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NetResults Tracker Help

The Knowledge Base Template

Overview

The Knowledge Base template supports a process to compose, review and publish Knowledge Base articles that are searchable by end users. Typical of this process is the immediate posting of articles so end users can access the most up to date information. This model assumes the follow organizations are involved in the process:

Support
Responsible for composing, publishing, and maintaining the Knowledge Base articles

Development
Responsible for reviewing the articles for technical accuracy

Publications
Responsible for reviewing articles for consistency with other documentation

---

Projects

A default project called "Knowledge Base" is available in this template and is visible to all user groups. This project can be customized and additional projects can be added via the Projects section.

Forms

A default form called "Article" is available in this template, is associated with the "Knowledge Base" Project and is visible to all user groups. This form can be customized and additional forms can be added via the Forms section.

Fields

The Article form contains the following fields. Note that you can customize the database by adding to or removing fields, or changing any pulldown menu values via the Fields section. Field names with an asterisk are required by the system and cannot be removed from any form(s).

Article ID*	Numeric record identifier. Assigned at the time the article is created.
Title	A one line text summary of the article. Set at the time the article is created.
Article Type	Classifies the article. Possible values are: Defect, Hot Fix, Tech Note, and Unknown. Set at the time the article is created.
Last Updated Date*	The date and time the article was last modified. Set automatically as the article is processed through the workflow.
Product*	Identifies the product for which the article has been composed. Set at the time the article is created.
Version	Identifies the version of the product to which the article pertains. Set at the time the article is created.
Oldest Version	Identifies the oldest article in a range of versions to which the article is applicable. Values displayed in this field depend on the value selected in the Version field. Set at the time the article is created.
Newest Version	Identifies the newest article in a range of versions to which the article is applicable. Values displayed in this field depend on the value selected in the Version field. Set at the time the article is created.
Severity	Indicates the level of severity of the article's subject. Set at the time the article is created.
Description	Full details of the article. Ideally describes the nature of an issue or a procedure and how to resolve it or perform a set of steps. Set at the time the article is created.
Workaround	Describes how to work around the problem described in the article. Set at the time the article is created.
Status*	Current state of the article. Changes as the article is processed through the workflow.
Assigned To*	User the article is currently assigned to for processing. Set either manually or automatically during processing of the workflow.

Author*	Name of the user that composed the article. Initially set to the name of the current user logged in. Set at the time the article is created.
First Draft Date	The date the article was created. Automatically initialized, and set at the time the article is created.
Dev Comments	Describes the comments made by the Developer reviewing the article. Set after review by a member of the Developers group.
Pubs Comments	Describes the comments made by the Publications user reviewing the article. Set after review by a member of the Publications group.
Support Notes	Describes the response from the Author (usually a member of the Support group) about the comments resulting from the reviews made by the Development and Publications groups. Set after review by the Author.
Publication Date	The date the article was published. Automatically initialized, and set at the time the article is published as part of the workflow.
Archive Date	Date when the article was removed from the Knowledge Base. Set by Support when the article has become obsolete or was replaced by a newer article. Automatically initialized to the current date/time.
Deleted*	Denotes whether the article has been deleted.

Dependent Pulldowns

The pulldown fields Oldest Version and Newest Version are dependent on the pulldown field called Version to create a range that describes which versions are affected by the content of an article.

The Version field has the option menu values:

Unknown
Version 1
Version 2
Multiple Versions

Oldest Version has the option menu values:

Unknown
1.0.0
1.0.1
1.5.0
2.0.0
2.0.1
2.0.2

Newest Version has the option menu values:

Unknown
1.0.0
1.0.1
1.5.0
2.0.0
2.0.1
2.0.2
Latest Release

The examples below illustrate the dependencies between Version and the Oldest Version and Newest Version:

Article content applies to Versions 1.x only

Version field set to "Version 1". Selecting this value for the Version field will result in the Oldest Version and Newest Version fields only displaying those option menu values that start with "1".
Oldest Version set to "1.0.0"
Newest Version set to "1.5.0"

Article content applies to Versions 1.5.0 through latest version

Version field set to "Multiple Versions". Selecting this value for the Version field will result in the Oldest and Newest Version fields displaying all possible values.

Oldest Version set to "1.5.0"
Newest Version set to "Latest Release"

Details on setting up dependencies between pulldown fields can be found in the Customizing Pulldown Dependencies section of the Admin Guide.

Workflows

It is assumed that articles will be processed and moved through the workflow process by using the Task operation. A default workflow called "KB Article Process" is available in this template and is associated with the "Article" Form and is in use in the "Knowledge Base" Project. You can customize the KB Article Process workflow or add additional workflows via the Workflows section.

1. State 1 - Pending Dev Review
   When an article is created, it is set to the state Pending Dev Review, and assigned to the Development Manager (dev_mgr). It is assumed that the Development Manager is responsible for assigning the article to a Developer (a member of the "Developers" user group) to review and comment on the article's technical accuracy. The Development Manager uses the transition called Assign to Developer For Review, which sets the article's state to In Dev Review and prompts the Development Manager to select a user from the list of members of the Developers user group.

   This is implemented by:

   Workflow Properties

   - Defining Pending Dev Review as the Default Add State when an article is added
   - Assigning the dev_mgr user as the manager for the Pending Dev Review state

   Transitions

   - Defining a transition to move an article to the In Dev Review state where the assignee is the Developer selected by dev_mgr during the Task operation

2. State 2 - In Dev Review
   The Developer (dev_one) reviews the article for technical accuracy, then decides whether to approve or reject the article by choosing the corresponding transition. To approve the article, dev_one selects the transition Approve Article and provides any desired comments in the Dev Comments field. This results in the article being placed in the Pending Pubs Review state and is assigned to the Publications Manager. To reject the article, dev_one selects the transition Reject Article and must provide comments to describe why the article was rejected in the Dev Comments field. This results in the article being placed in the Rejected By Dev state and assigned to the Author (Reporter).

   This is implemented by:

   Workflow Properties

   - Selecting Pubs Manager as the state manager for the Pending Pubs Review state

   Transitions

   - Defining a transition to move an article to the Pending Pubs review state with the assignee set to be the state manager
   - Defining a transition to move an article to the Rejected By Dev state with the <Reporter> set as the new assignee

   Task Fields

   - Configuring Dev Comments (optional) to be presented during the task operation for the transition to the Pending Pubs Review state
   - Configuring Dev Comments (required) to be presented during the task operation for the transition to the Rejected By Dev state

3. State 3 - Pending Pubs Review
   The Publications Manager (pubs_mgr) is responsible for assigning the article to a Publications Reviewer (a member of the

Publications user group) to review and comment on the article so that it is consistent with all other documentation. The Publications Manager uses the transition called Assign to Pubs Reviewer, which sets the article's state to In Pubs Review and prompts the Publications Manager to select a user from the list of members of the Publications user group.

This is implemented by:

Transitions

- Defining a transition to move an article to the In Pubs Review state where the assignee is the Publications Reviewer selected by pubs_mgr during the task operation

4. State 4 - In Pubs Review
The Publications Reviewer (pubs_one) reviews the article for its consistency with respect to other documentation, then decides whether to approve or reject the article by choosing the corresponding transition. To approve the article, pubs_one selects the transition Approve Article and provides any desired comments in the Pubs Comments field. This results in the article being placed in the In Final Author Review state and is assigned to the Author (Reporter). To reject the article, pubs_one selects the transition Reject Article and must provide comments to describe why the article was rejected in the Pubs Comments field. This results in the article being placed in the Rejected By Pubs state and assigned to the Author (Reporter).

   This is implemented by:

   Transitions

   - Defining a transition to move an article to the In Final Author Review state with the assignee set to be the <Reporter>
   - Defining a transition to move an article to the Rejected By Pubs state with the <Reporter> set as the new assignee

   Task Fields

   - Configuring Pubs Comments (optional) to be presented during the task operation for the transition to the In Final Author Review state
   - Configuring Pubs Comments (required) to be presented during the task operation for the transition to the Rejected By Pubs state

5. State 5 - In Final Author Review
The Author (Reporter) reviews the article one last time before publishing it to the Knowledge Base. To do this, the Author selects the transition Publish to Knowledge Base and enters any desired information into the Support Comments field. The Publication Date is automatically initialized with the date and time. This will place the article in the Published in KB state and assign it to TBD.

   This is implemented by:

   Transitions

   - Defining a transition to move an article to the Published in KB state where the assignee is TBD ("no one" since it is now published)

   Task Fields

   - Configuring Support Comments (optional) and Publications Date (read only and initialized) to be presented during the Task operation for the transition to the Published in KB state.

6. State 6 - Published in KB
Articles in this state are searchable via the Knowledge Base Search Page and are assigned to TBD. An article may become obsolete and thus will need to be updated or removed from the Knowledge Base by the Support Engineer (sup_one). To update an article, Support can use the transition Update Active (in KB) Article. This transition allows sup_one the option to update any of the following fields: Title, Article Type, Product, Version, Oldest Version, Newest Version, Severity, Description, and Workaround. sup_one is then required to enter a history comment. After making any changes, the article will remain in the Published in KB state, assigned to TBD. To remove an article from being searchable in the Knowledge Base, sup_one can select the transition Archive (Remove From Knowledge Base) and must enter a history comment. This transition will place the article in the Archived (obsolete) state, assigned to TBD. The Archive Date will be

automatically initialized with the date and time.

This is implemented by:

Transitions

- Defining a transition to update fields in the article with New State set to the same state (Published in KB) and New Assignee set to <Same Assignee> with history comment set to be required
- Defining a transition to move the article to the Archived (obsolete) state and assigned to TBD ("no one" since the article is obsolete) with history comment set to be required

Task Fields

- Configuring all of the following fields to be optional fields presented during the task operation for the transition to update the article: Title, Article Type, Product, Version, Oldest Version, Newest Version, Severity, Description, and Workaround
- Configuring Archive Date (read only and initialized) as a field to be presented during the task operation for the transition to the Archived (obsolete) state

7. State 10 - Archived (obsolete)
   This state indicates that the article contains obsolete information and is no longer searchable in the Knowledge Base

8. State 20 - Rejected By Dev
   Articles in this state were rejected during the review made by a Developer. sup_one must make changes recommended by the Developer, then use the transition Resubmit For Development Review to send the article back to the Developer for another review. This transition will require sup_one to enter a history comment, then will move the article to the In Dev Review state and assign it to the Developer who last reviewed the article when it was previously in the In Dev Review state.

   This is implemented by:

   Transitions

   - Defining a transition to move the article to the In Dev Review state with New Assignee set to <Last Assignee for New State> with history comment set to be required

9. State 21 - Rejected By Pubs
   Articles in this state were rejected during the review made by a Publications Reviewer. sup_one must make changes recommended by the Publications Reviewer, then use the transition Resubmit For Pubs Review to send the article back to the Publications Reviewer for another review. This transition will require sup_one to enter a history comment, then will move the article to the In Pubs Review state and assign it to the Publications Reviewer who last reviewed the article when it was previously in the In Pubs Review state.

   This is implemented by:

   Transitions

   - Defining a transition to move the article to the In Pubs Review state with New Assignee set to <Last Assignee for New State> with history comment set to be required

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Sample Saved Charts

A set of sample saved charts are included in this template. Click here to see details of these sample metrics.

Email Notification

The Knowledge Base template is set up to notify users as follows:

On Add of an Article
The current assignee and the reporter of the article as well as the members of the Support Managers user group are notified

On Delete of an Article

The current assignee, the manager for the current state, and the reporter of the article are notified

On Edit of an Article
Both the current assignee, and the manager for the current state of the article are notified

On Task of an Article
The current assignee of the article is notified

On Change of State to Archived (obsolete) or Published in KB
The members of the Support Managers user group are notified

Security

The Knowledge Base template assumes a very simple security model reflecting a workgroup situation where all users are able to see any article. This is implemented by setting Enable Record Visibility option under General Preferences in the Administration Task page to No.

In addition, the privileges related to editing the field of the articles have been removed from all users that are not Admin. With this configuration, users can rely on the Task operation to move articles through the workflow. This can be changed within the User Accounts section of the Admin page.

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NetResults Tracker Help

The Help Desk Template

Overview

The Help Desk template supports a typical Help Desk environment in which issues or requests are reported by end users and the Help Desk team resolves the issues or processes requests.

Projects

A default project called "Help Desk" is available in this template and is visible to all user groups. This project can be customized and additional projects can be added via the Projects section.

Forms

A default form called "Ticket" is available in this template, is associated with the "Help Desk" Project and is visible to all user groups. This form can be customized and additional forms can be added via the Forms section.

Fields

The Ticket form contains the following fields. Note that you can customize the database by adding to or removing fields, or changing any pulldown menu values via the Fields section. Field names with an asterisk are required by the system and cannot be removed from any form(s).

PRN*	Numeric record identifier. Assigned at the time the ticket is created.
Title	A one line text summary of the problem or request. Set at the time the ticket is created.
Product*	Identifies the product for which the ticket has been reported. Set at the time the ticket is created.
Component	Identifies the component for which the ticket has been reported. Values displayed in this field depend on the value selected for the Product field. Set at the time the ticket is created.
Last Updated Date*	The date and time when the ticket was last modified. Set automatically as the ticket is processed through the workflow.
Platform	Describes the hardware or software platform where the problem occurs. An example is the operating system (e.g. Windows XP). Set at the time the ticket is created.
Request Type	Classifies the ticket. Some of the possible values are: Bug / Issue, Enhancement, Equipment Request, Feedback. Set at the time the ticket is created.
Severity	Describes how serious the problem is. Set at the time the ticket is created.
Description	Full description of the problem. Ideally describes the nature of the problem and how to reproduce the behavior. Set at the time the ticket is created.
Reported By*	Name of the user that reported the ticket. Initially set to the name of the current user logged in. Set at the time the ticket is created.
Date Reported	The date the ticket was created. Automatically initialized, and set at the time the ticket is created.
Workaround	Describes how to work around the reported problem. Set at the time the ticket is created.
Pending Issues	Describes what information or tasks are needed before a ticket can continue to be processed. Set by the Help Desk Engineer if issues arise that keep the ticket from being processed.
Status*	Current state of the ticket. Changes as the ticket is processed through the workflow.
Assigned To*	User the ticket is currently assigned to for processing. Set either manually or automatically during processing of the workflow.
Host Name	The host name of the machine of the user who reported the issue. Set automatically when the ticket is created using the AutoFill feature.
IP Address	The IP Address of the machine of the user who reported the issue. Set automatically when the ticket is created using the AutoFill feature.

Operating System	The operating system installed on the machine of the user who reported the issue. Set automatically when the ticket is created using the AutoFill feature.
Est. Close Date	Date when the issue or request is expected to be resolved. Set by the Help Desk Engineer when deciding how to process the ticket.
Priority	Describes the relative importance of handling this ticket compared to other tickets entered in the system.
Close Date	Date when the ticket was closed. Set by Help Desk when issue or request has been resolved. Automatically initialized to the current date/time.
Close Detail	Describes the details about how the issue or request was resolved. Set by the Help Desk when the issue or request has been resolved.
Deleted*	Denotes whether the ticket has been deleted.

Dependent Pulldowns

The pulldown field Component is dependent on the pulldown field called Product, allowing the Component field to only display those values that correspond to the Product selected. The examples below illustrate the purpose of Dependent Pulldowns.

Example 1
When "Hardware" is selected in the Product field, the Component field displays the following option menu items:

Computer
Modem
Monitor
Other
Printer

Example 2
When "Software" is selected for the Product field, the Component field displays the following option menu items:

Our Browser
Our Database
Our Email
Other

Details on setting up dependencies between pulldown fields can be found in the Customizing Pulldown Dependencies section of the Admin Guide.

Workflows

It is assumed that tickets will be processed and moved through the workflow process by using the Task operation. A default workflow called "Help Desk Ticket Process" is available in this template and is associated with the "Ticket" Form and is in use in the "Help Desk" Project. You can customize the Help Desk Ticket Process workflow or add additional workflows via the Workflows section.

1. State 1 - Reported
   It is assumed that each Help Desk Engineer is assigned to a particular product or area of expertise. When a ticket is created, it is set to the state Reported, and assigned to a particular Help Desk Engineer based on the Product selected in the ticket. The user who reported the ticket can update it while it is in the Reported state (before a Help Desk Engineer begins working on it) using the Update Request transition. This transition allows the Reporter to add more information that may help the Help Desk Engineer resolve the issue. The same fields that are available to the Reporter on the Add or Submit pages are available in this transition. The Reporter must explain what was changed in the History Comment field.

   Each Help Desk Engineer reviews the incoming tickets and decides how to process each using a list of possible workflow paths. The Help Desk Engineer can choose one of the following:

   - Begin processing a ticket by selecting the transition called Start Processing Request. The Description field is presented for the Help Desk Engineer's reference. The Help Desk Engineer must enter an Estimated Close Date and can optionally set the Priority of the request. This transition will keep the ticket assigned to the Help Desk Engineer and place the ticket in the In Process state.
   - Close the ticket by selecting the transition called Close. The Description field is presented for the Help Desk Engineer's reference. This transition will place the ticket in the Closed state and assign it to TBD ("no one" since this

ticket will not be processed any further). The Help Desk Engineer will be required to enter a reason the ticket was closed in the Close Detail field. The Close Date will be updated automatically.

- Delay processing of the request by selecting the Hold Request transition. The Description field is presented for the Help Desk Engineer's reference. The Help Desk Engineer is required to enter a reason for the delay in the Pending Issues field and an Estimated Close Date. It is optional to set the Priority for the ticket. This transition will place the ticket in the On Hold state, but will still be assigned to the Help Desk Engineer.

This is implemented by:

Workflow Properties

- Defining Reported as the Default Add State when a ticket is added
- Assigning a Help Desk Engineer as the manager for the Reported and On Hold states for each Product e.g. Help Desk Engineer One (help_one) is the manager for the Reported and On Hold states for the Hardware Product

Transitions

- Defining a transition with New State set to Reported and New Assignee set to "<Same Assignee>"
- Defining a transition to move a ticket to the In Process and On Hold states where the assignee is <Same Assignee>.
- Defining transitions to move a ticket to the Closed state where the assignee is TBD.

Task Fields

- Configuring the History Comment (required) and the following optional fields to be presented during the Update Request transition: Title, Product, Platform, Request Type, Severity, Description, Workaround
- Configuring Description (read only), Est. Close Date (required) and Priority (optional) to be presented during the task operation for the transition to the In Process state.
- Configuring Description (read only), Close Detail (required) and Close Date (read only and initialized) to be presented during the task operation for the transition to the Closed state.
- Configuring Description (read only), Pending Issues (required), Est. Close Date (required) and Priority (optional) to be presented during the task operation for the transition to the On Hold state.

2. State 2 - In Process
The Help Desk Engineer assigned to the ticket attempts to resolve the issue or request, then chooses one of the following transitions:
   - If the issue is resolved, the Help Desk Engineer can close the issue by selecting the transition Close. The Description field is presented for the Help Desk Engineer's reference. This transition will place the ticket in the Closed state and assign it to TBD ("no one" since this ticket will not be processed any further). The Help Desk Engineer will be required to enter a reason the ticket was closed in the Close Detail field. The Close Date will be updated automatically.

   - If the issue has not been resolved and the Help Desk Engineer needs to escalate the issue to a manager for troubleshooting assistance, the Escalate transition will be selected. The Description field is presented for the Help Desk Engineer's reference. The Help Desk Engineer is required to enter the reason for the escalation in the Pending Comments field. This will place the ticket in the Escalated state and will assign it to the Help Desk Manager.

   - If the issue cannot be processed until a later (e.g. because more information is needed or there is a delay to receive equipment needed to resolve the issue), the Help Desk Engineer can select the Hold Request transition. The Description field is presented for the Help Desk Engineer's reference. The Help Desk Engineer is required to enter a reason for the delay in the Pending Issues field and an Estimated Close Date. It is optional to set the Priority for the ticket. This transition will place the ticket in the On Hold state, but will still be assigned to the Help Desk Engineer.

   This is implemented by:

   Workflow Properties

   - Defining Help Desk Manager (help_mgr) as the manager for the Escalated state

   Transitions

   - Defining a transition to move a ticket to the Closed state where the assignee is TBD.

- Defining a transition to move a ticket to the On Hold state where the assignee is <Same Assignee>.
- Defining a transition to move a ticket to the Escalated state where the assignee is the manager of that state

Task Fields

- Configuring Description (read only), Close Detail (required) and Close Date (read only and initialized) to be presented during the task operation for the transition to the Closed state.
- Configuring Description (read only), Pending Issues (required), Est. Close Date (required) and Priority (optional) to be presented during the task operation for the transition to the On Hold state.
- Configuring Description (read only) and Pending Issues (required) to be presented during the task operation for the transition to the Escalated state.

3. State 3 - Escalated
   The Help Desk Manager (help_mgr) decides how to proceed with the issue:

   - The issue can be sent back to the Help Desk Engineer by using the De-escalate transition. The Description field will be provided for help_mgr's reference. Comments to aid the Help Desk Engineer to resolve the issue must be entered into the Pending Issues field. Optionally, the Priority of the ticket can be updated. This will place the ticket back into the In Process state and assign it to the Help Desk Engineer who worked on the ticket when it was previously in that state.
   - The issue can be closed by using the Close transition. The Description field is presented for reference purposes. This transition will place the ticket in the Closed state and assign it to TBD ("no one" since this ticket will not be processed any further). help_mgr will be required to enter a reason the ticket was closed in the Close Detail field. The Close Date will be updated automatically.

   This is implemented by:

   Transitions

   - Defining a transition to move a ticket to the In Process state where the assignee is <Last Assignee for New State>
   - Defining a transition to move a ticket to the Closed state where the assignee is TBD

   Task Fields

   - Configuring the Description (read only), Pending Issues (required), Priority (optional) to be presented during the Task operation for the transition to the In Process state.
   - Configuring the Description (read only), Close Date (read only, initialized), and Close Detail (required) fields to be presented for the transition to the Closed state.

4. State 5 - On Hold
   Processing was stopped for the tickets in this state. The Help Desk Engineer can resume processing of a ticket using the Resume Processing transition. The Description field will be provided for reference purposes and the Help Desk Engineer will have the option to update the Estimated Close Date and Priority fields. This will place the ticket in the In Process state and will remain assigned to the Help Desk Engineer. The Help Desk Engineer can close the issue by using the Close transition. The Description field is presented for reference purposes. This transition will place the ticket in the Closed state and assign it to TBD ("no one" since this ticket will not be processed any further). The Help Desk Engineer will be required to enter a reason the ticket was closed in the Close Detail field. The Close Date will be updated automatically.

   This is implemented by:

   Transitions

   - Defining a transition to move a ticket to the In Process state with New Assignee set to <Same Assignee>
   - Defining a transition to move a ticket to the Closed state and assigned to TBD

   Task Fields

   - Configuring the Description (read only), Est. Close Date (optional), Priority (optional) to be presented during the Task operation for the transition to the In Process state.
   - Configuring the Description (read only), Close Date (read only, initialized), and Close Detail (required) fields to be presented for the transition to the Closed state.

5. State 6 - Closed
   Processing on these tickets has been completed.

Sample Saved Charts

A set of sample saved charts are included in this template. Click here to see details of these sample metrics.

Email Notification

The Help Desk template is set up to notify users as follows:

On Add or Delete of a Record
The current assignee, the manager for the current state, and the reporter of the ticket are notified

On Change of State to Inactive
The user who reported the ticket is notified when a ticket is moved to a state where processing has stopped (any state included in the Inactive state group: Closed or On Hold)

On Change of Assignment
Both the current assignee and the manager of the current state of the ticket are notified

---

Security

The Help Desk template assumes a very simple security model reflecting a workgroup situation where all users are able to see any ticket. This is implemented by setting Enable Record Visibility option under General Preferences in the Administration Task page to No.

In addition, the privileges related to editing the field of the tickets have been removed from users that are not managers or Admin. With this configuration, users can rely on the Task operation to move tickets through the workflow. This can be changed within the User Accounts section of the Admin page.

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NetResults Tracker Help

The Support Template

Overview

The Support template supports a typical Support environment in which issues or requests are reported by customers or end users and the Support team resolves the issues or processes requests. This template incorporates 2 levels of Support:

1st Line Support attempts to process all incoming tickets

2nd Line Support processes any escalated tickets that could not be processed by 1st Line Support

Support Manager processes any escalated tickets that could not be processed by 1st or 2nd Line Support

---

Projects

A default project called "Support" is available in this template and is visible to all user groups. This project can be customized and additional projects can be added via the Projects section.

Forms

A default form called "Ticket" is available in this template, is associated with the "Support" Project and is visible to all user groups. This form can be customized and additional forms can be added via the Forms section.

Fields

The Ticket form contains the following fields. Note that you can customize the database by adding to or removing fields, or changing any pulldown menu values via the Fields section. Field names with an asterisk are required by the system and cannot be removed from any form(s).

PRN*	Numeric record identifier. Assigned at the time the ticket is created.
Title	A one line text summary of the problem or request. Set at the time the ticket is created.
Product*	Identifies the product for which the ticket has been reported. Set at the time the ticket is created.
Last Updated Date*	The date and time the ticket was last modified. Set automatically as the ticket is processed through the workflow.
Platform	Describes the hardware or software platform where the problem occurs. An example is the operating system (e.g. Windows XP). Set at the time the ticket is created.
Request Type	Classifies the ticket. Possible values are: Bug, Contract Requirement, Customer Feedback, Customer Problem, Enhancement. Set at the time the ticket is created.
Severity	Describes how serious the problem is. Set at the time the ticket is created.
Description	Full description of the problem. Ideally describes the nature of the problem and how to reproduce the behavior. Set at the time the ticket is created.
Reported By*	Name of the user that reported the ticket. Initially set to the name of the current user logged in. Set at the time the ticket is created.
Date Reported	The date the ticket was created. Automatically initialized, and set at the time the ticket is created.
Workaround	Describes how to work around the reported problem. Set at the time the ticket is created.
Pending Issues	Describes what information or tasks are needed before a ticket can continue to be processed. Set by the Support Engineer if issues arise that keep the ticket from being processed.
Status*	Current state of the ticket. Changes as the ticket is processed through the workflow.
Assigned To*	User the ticket is currently assigned to for processing. Set either manually or automatically during processing of the workflow.
Browser	The browser installed on the machine of the user who reported the issue. Set automatically when the ticket is

	created using the AutoFill feature.
Operating System	The operating system installed on the machine of the user who reported the issue. Set automatically when the ticket is created using the AutoFill feature.
Est. Close Date	Date when the issue or request is expected to be resolved. Set by the Support Engineer when deciding how to process the ticket.
Priority	Describes the relative importance of handling this ticket compared to other tickets entered in the system.
Close Date	Date when the ticket was closed. Set by Support when issue or request has been resolved. Automatically initialized to the current date/time.
Close Detail	Describes the details about how the issue or request was resolved. Set by the Support when the issue or request has been resolved.
Deleted*	Denotes whether the ticket has been deleted.

Support Queues

The Home Page reports can be set up as a queue for Support Engineers to use in prioritizing and processing incoming tickets. TBD will be the user to which incoming tickets are assigned while they are in a queue. To represent a queue for the 1st Line Support team on the Home Page, the saved query 1st Line Support Queue [Support] was created to display all tickets assigned to TBD in the Reported state. To represent the queue for 2nd Line Support on the Home Page, the saved query 2nd Line Support Queue [Support] was created to display all tickets assigned to TBD in the Escalated state.

Information on how tickets are processed within and outside of the queue are discussed in the Workflow section below.

Workflows

It is assumed that tickets will be processed and moved through the workflow process by using the Task operation. A default workflow called "Support Ticket Process" is available in this template and is associated with the "Ticket" Form and is in use in the "Support" Project. You can customize the Support Ticket Process workflow or add additional workflows via the Workflows section.

1. State 1 - Reported
   It is assumed that 1st Line Support Engineers check a queue to pick up incoming tickets. When a ticket is created, it is set to the state Reported, and assigned to TBD (a placeholder user to represent tickets that are in the queue and have not yet been assigned). The user who reported the ticket can make changes to the ticket while it is in the Reported state (before a 1st Line Engineer has started working on it) using the Update Request transition. This transition allows the Reporter to add more information that may help the Support Engineer resolve the issue. The same fields that are available to the Reporter on the Add or Submit pages are available in this transition. The Reporter must explain what was changed in the History Comment field.

   A 1st Line Support Engineer (sup_one) selects incoming tickets from the queue and decides how to process each using a list of possible workflow paths. sup_one can choose one of the following:

   - Begin processing a ticket by selecting the transition called Start Processing Request. The Description field is presented for reference. sup_one must enter an Estimated Close Date and can optionally set the Priority of the request. This transition will assign the ticket to sup_one and place the ticket in the In Process state.
   - Close the ticket by selecting the transition called Close. The Description field is presented for reference. This transition will place the ticket in the Closed state and assign it to TBD ("no one" since this ticket will not be processed any further). sup_one will be required to enter a reason the ticket was closed in the Close Detail field. The Close Date will be updated automatically.
   - Delay processing of the request by selecting the Hold Request transition. The Description field is presented for reference. sup_one is required to enter a reason for the delay in the Pending Issues field and an Estimated Close Date. It is optional to set the Priority for the ticket. This transition will place the ticket in the On Hold state and will assign it to sup_one.

   This is implemented by:

   Workflow Properties

   - Defining Reported as the Default Add State when a ticket is added
   - Assigning TBD as the manager for the Reported state

Transitions

- Defining a transition with New State set to Reported and New Assignee set to "<Same Assignee>"
- Defining a transition to move a ticket to the In Process and On Hold states where the assignee is <LoginUser> (the user performing the task operation).
- Defining a transition to move a ticket to the Closed state where the assignee is TBD.

Task Fields

- Configuring the History Comment (required) and the following optional fields to be presented during the Update Request transition: Title, Product, Platform, Request Type, Severity, Description, Workaround
- Configuring Description (read only), Est. Close Date (required) and Priority (optional) to be presented during the task operation for the transition to the In Process state.
- Configuring Description (read only), Close Detail (required) and Close Date (read only and initialized) to be presented during the task operation for the transition to the Closed state.
- Configuring Description (read only), Pending Issues (required), Est. Close Date (required) and Priority (optional) to be presented during the task operation for the transition to the On Hold state.

2. State 2 - In Process
The Support Engineer (sup_one) assigned to the ticket attempts to resolve the issue or request, then chooses one of the following transitions:
   - If the issue is resolved, sup_one can close the issue by selecting the transition Close. The Description field is presented for reference. This transition will place the ticket in the Closed state and assign it to TBD ("no one" since this ticket will not be processed any further). sup_one will be required to enter a reason the ticket was closed in the Close Detail field. The Close Date will be updated automatically.

   - If the issue has not been resolved and sup_one needs to escalate the issue to 2nd Line Support for troubleshooting assistance, the Escalate to 2nd Line transition will be selected. The Description field is presented for reference. sup_one is required to enter the reason for the escalation in the Pending Comments field. This will place the ticket in the Escalated state, will assign it to TBD, and place the ticket in the 2nd Line Support queue.

   - If the issue has not been resolved and sup_one needs to escalate the issue to a manager for troubleshooting assistance, the Escalate to Manager transition will be selected. The Description field is presented for reference. sup_one is required to enter the reason for the escalation in the Pending Comments field. This will place the ticket in the Escalated state, will assign it to the Support Manager (sup_mgr).

   - If the issue cannot be processed until a later (e.g. because more information is needed or there is some delay before a task can be performed), sup_one can select the Hold Request transition. The Description field is presented for reference. sup_one is required to enter a reason for the delay in the Pending Issues field and an Estimated Close Date. It is optional to set the Priority for the ticket. This transition will place the ticket in the On Hold state, but will still be assigned to the sup_one.

   This is implemented by:

   Workflow Properties

   - Defining Support Manager (sup_mgr) as the manager for the Escalated state

   Transitions

   - Defining a transition to move a ticket to the Closed state where the assignee is TBD.
   - Defining a transition to move a ticket to the Escalated state where the assignee is the manager of that state
   - Defining a transition to move a ticket to the Escalated state where the assignee is TBD (placeholder for the 2nd Line Support queue)
   - Defining a transition to move a ticket to the On Hold state where the assignee is <Same Assignee>.

   Task Fields

   - Configuring Description (read only), Close Detail (required) and Close Date (read only and initialized) to be presented during the task operation for the transition to the Closed state.
   - Configuring Description (read only) and Pending Issues (required) to be presented during the task operation for the

transitions to the Escalated state.
- Configuring Description (read only), Pending Issues (required), Est. Close Date (required) and Priority (optional) to be presented during the task operation for the transition to the On Hold state.

3. State 3 - On Hold
   Processing was stopped for the tickets in this state. sup_one can resume processing of a ticket using the Resume Processing transition. The Description field will be provided for reference and sup_one will have the option to update the Estimated Close Date and Priority fields. This will place the ticket in the In Process state and will remain assigned to sup_one. sup_one can close the issue by using the Close transition. The Description field is presented for reference purposes. This transition will place the ticket in the Closed state and assign it to TBD ("no one" since this ticket will not be processed any further). sup_one will be required to enter a reason the ticket was closed in the Close Detail field. The Close Date will be updated automatically.

   This is implemented by:

   Transitions

   - Defining a transition to move a ticket to the In Process state with New Assignee set to <Same Assignee>
   - Defining a transition to move a ticket to the Closed state and assigned to TBD

   Task Fields

   - Configuring the Description (read only), Est. Close Date (optional), Priority (optional) to be presented during the Task operation for the transition to the In Process state.
   - Configuring the Description (read only), Close Date (read only, initialized), and Close Detail (required) fields to be presented for the transition to the Closed state.

4. State 4 - Escalated
   2nd Line Support or the Support Manager decides how to proceed with the issues that have been placed in the Escalated state:

   - The issue can be sent back to the sup_one by using the De-escalate transition. The Description field will be provided for reference. Comments to aid sup_one to resolve the issue must be entered into the Pending Issues field. Optionally, the Priority of the ticket can be updated. This will place the ticket back into the In Process state and assign it to sup_one, who worked on the ticket when it was previously in that state.
   - The issue can be closed by using the Close transition. The Description field is presented for reference. This transition will place the ticket in the Closed state and assign it to TBD ("no one" since this ticket will not be processed any further). The user (2nd Line Support or the Support Manager) will be required to enter a reason the ticket was closed in the Close Detail field. The Close Date will be updated automatically.

   This is implemented by:

   Transitions

   - Defining a transition to move a ticket to the In Process state where the assignee is <Last Assignee for New State>
   - Defining a transition to move a ticket to the Closed state where the assignee is TBD

   Task Fields

   - Configuring the Description (read only), Pending Issues (required), Priority (optional) to be presented during the Task operation for the transition to the In Process state.
   - Configuring the Description (read only), Close Date (read only, initialized), and Close Detail (required) fields to be presented for the transition to the Closed state.

5. State 5 - Closed
   Processing on these tickets has been completed.

Sample Saved Charts

A set of sample saved charts are included in this template. Click here to see details of these sample metrics.

Email Notification

The Support template is set up to notify users as follows:

On Add or Delete of a Record
The current assignee, the manager for the current state, and the reporter of the ticket are notified

On Change of State to Inactive
The user who reported the ticket is notified when a ticket is moved to a state where processing has stopped (any state included in the Inactive state group: Closed or On Hold)

On Change of Assignment
Both the current assignee and the manager of the current state of the ticket are notified

Security

The Support template assumes a very simple security model reflecting a workgroup situation where all users are able to see any ticket. This is implemented by setting Enable Record Visibility option under General Preferences in the Administration Task page to No.

In addition, the privileges related to editing the field of the tickets have been removed from users that are not managers or Admin. With this configuration, users can rely on the Task operation to move tickets through the workflow. This can be changed within the User Accounts section of the Admin page.

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NetResults Tracker Help

The Base Template

Overview

The Base template provides a template with minimal configuration: only the required fields are available, one workflow state, only the required users and user groups are present. Use of this template is recommended when the rest of available templates do not closely resemble the process you wish to implement in Tracker.

This template contains the following system required user groups:

Admins
Responsible for performing administrative tasks.

RestrictedUsers
All restricted users are members of this group.

Users
All non-Restricted users are members of this group.

Projects

A default project called "First Project" is available in this template and is visible to all user groups. This project can be customized and additional projects can be added via the Projects section.

Forms

A default form called "Issue" is available in this template, is associated with the "First Project" Project and is visible to all user groups. This form can be customized and additional forms can be added via the Forms section.

Fields

The Issue form contains the following fields. Note that you can customize the database by adding to or removing fields, or changing any pulldown menu values via the Fields section. Field names with an asterisk (all of the fields in this template) are required by the system and cannot be removed from any form(s).

PRN*	Numeric record identifier. Assigned at the time the issue is created.
Product*	Identifies the product for which the issue has been reported. Set at the time the issue is created.
Last Updated Date*	The date and time the issue was last modified. Set automatically as the issue is processed through the workflow.
Reported By*	Name of the user that reported the problem. Initially set to the name of the current user logged in. Set at the time the issue is created.
Status*	Current state of the issue. Changes as the issue is processed through the workflow.
Assigned To*	User the issue is currently assigned to for processing. Set either manually or automatically during processing of the workflow.
Deleted*	Denotes whether the issue has been deleted.

Workflows

A default workflow called "Business Process" is available in this template and is associated with the "Issue" Form and is in use in the "First Project" Project. This workflow contains a single state without any transitions. You can customize the Business Process workflow or add additional workflows via the Workflows section.

1. State 1 - Reported
   When an issue is created, it is set to the state Reported and assigned to TBD

This is implemented by:

Default Add State Settings

- Define Default Add State based on the Product field
- Define Reported as the Default Add State when an issue is added for all products
- Define All as the state group for Allowed Add States for all products

State Managers

State Managers are set in the Form State Managers section.

- Define State Managers based on the Product field
- Assign TBD as the manager for the Reported state

Transitions

There are no transitions defined in the Business Process Workflow.

Task Fields

There are no task fields defined in the Business Process Workflow.

Sample Saved Charts

A set of sample saved charts are included in this template. Click here to see details of these sample metrics.

Email Notification

The Base template is set up to notify users as follows:

On Add or Delete of a Record

The current assignee, the manager for the current state, and the reporter of the issue are notified

On Change of Assignment

Both the current assignee and the manager for the current state of the issue are notified

---

Security

The Base template assumes a very simple security model reflecting a workgroup situation where all users are able to see any issue. This is implemented by setting Enable Record Visibility option under General Preferences in the Administration Task page to No.

In addition, the privileges related to editing fields within the issues have been removed from users that are not managers or Admin. With this configuration, users can rely on the Task operation to move issues through the workflow. This can be changed within the User Accounts section of the Admin page.

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Overview

The Change Management template supports a typical change management process. Common to this process is the review of proposed change requests before they can be implemented. This model assumes the follow organizations are involved in the change management process:

Change Board
Responsible for reviewing and approving proposed change requests

Development
Responsible for implementing change requests.

QA
Verifies that the change request has been successfully implemented by the Development organization.

Build
Places the updated files into the final product package.

Projects

A default project called "Change Management" is available in this template and is visible to all user groups. This project can be customized and additional projects can be added via the Projects section.

Forms

A default form called "Change Request" is available in this template, is associated with the "Change Management" Project and is visible to all user groups. This form can be customized and additional forms can be added via the Forms section.

Fields

The Change Request form contains the following fields. Note that you can customize the database by adding to or removing fields, or changing any pulldown menu values. Field names with an asterisk are required by the system and cannot be removed from any form(s).

PRN*	Numeric record identifier. Assigned at the time the request is created.
Summary	A one line text summary of the change being proposed. Set at the time the request is created.
Change Level*	Identifies the level of change being proposed. Set at the time the request is created.
Last Updated Date*	The date and time the request was last modified. Set automatically as the request is processed through the workflow.
Reported In Version	Version number of the product where related to the proposed change. Set at the time the request is created.
Area	The area related to the proposed change. Possible values are: Hardware, Network, Software, Other and Unknown. Set at the time the request is created.
Severity	Describes how serious the change is. Set at the time the request is created.
Description	Full description of the change. Ideally describes the nature of the change and all ramifications of making the change. Set at the time the request is created.
Reported By*	Name of the user that reported the problem. Initially set to the name of the current user logged in. Set at the time the request is created.
Date Reported	The date the request was created. Automatically initialized, and set at the time the request is created.
Status*	Current state of the request. Changes as the request is processed through the workflow.
Assigned To*	User the request is currently assigned to for processing. Set either manually or automatically during processing of the workflow.

Est. Completion Date	The date the change is estimated to be implemented.
Approval Date	The date the change was approved. Set by the Change Board when the change is approved. Automatically initialized to the current date/time.
Pending Issues	Full description of the reasons a change has been rejected. Set by the Change Board when the change is rejected.
Estimated Size	Used to enter an estimated amount of time it will take for a change to be implemented.
Planned for Version	Identifies the release number of the product in which the change is planned to be included.
Total Time	Used to enter the actual amount of time spent implementing the change.
Implementation Date	Date when the change was implemented. Set by Development when the change is implemented. Automatically initialized to the current date/time.
Implementation Detail	A Description of the action taken by a developer to implement the change. Set by Development when the change is implemented.
Test Date	Date when the implementation of the change was tested. Set by QA when the implementation is tested. Automatically initialized to the current date/time.
Test Description	A Description of the action taken by a QA Engineer to test the implementation. Set by QA when the implementation is tested.
Priority	Describes the relative importance of handling this change compared to other changes entered in the system.
Released in Version	Identifies the release number of the product in which the change will be included.
Close Date	Date when the change was closed. Set when no implementation work will be done for the change. Automatically initialized to the current date/time.
Close Detail	A Description of the reason a change will be closed. Set when no implementation work will be done for the change.
Deleted*	Denotes whether the request has been deleted.

Change Board Queue

A Home Page report can be set up as a queue for the Change Board members to use when reviewing and processing incoming change requests. TBD will be the user to which incoming change requests are assigned while they are in the queue. To represent a queue for the Change Board, the saved query Pending Approval [Change Board] was created to display all requests assigned to TBD in the Pending Approval state. Information on how requests are processed within the queue are discussed in the Workflows section below.

Workflows

It is assumed that requests will be processed and moved through the workflow process by using the Task operation. A default workflow called "Change Request Process" is available in this template and is associated with the "Change Request" Form and is in use in the "Change Management" Project. You can customize this workflow or add additional workflows via the Workflows section. The workflow implemented by the Change Management template is as follows:

1. State 1 - Pending Approval
   When a request is created, it is set to the state Pending Approval and is assigned to the Change Board. It is assumed that the Change Board is responsible for reviewing all incoming requests and deciding whether to approve each change. The Change Board can choose one of the following:
   - Approve the change request by selecting the transition called Approve. This transition will assign the request to the Development Manager and place the request in the Approved state. The Description field has been configured as a read-only task field for the Approver's reference while processing the request. The Approval Date will be set automatically to the current date/time. The Approver has the option to set a Planned for Version and Priority for the request.
   - Reject the change request by selecting the transition called Reject. This transition will assign the request to the Reporter and place the request in the Rejected state. The Description field has been configured as a read-only task field for the Approver's reference while processing the request. The Approver is required to enter comments into the

Pending Issues field to explain the reasons for rejecting the request.
- Close the change request by selecting the transition called Close. This transition will assign the request to TBD (no one - since this request will not be processed any further) and will place the request in the Closed state. The Description field has been configured as a read-only task field for the Approver's reference while processing the request. The Close Date will be set automatically to the current date/time. The Approver is required to be enter comments into the Close Detail field to explain why the request has been closed.

This is implemented by:

Default Add State Settings

- Configuring Default Add State Settings to be based on the Change Level field
- Defining Pending Approval as the Default Add State when a request is added for all products
- Defining All as the state group for Allowed Add States when a request is added for all products

State Managers

State Managers are configured in the Form State Managers section.

- Configuring TBD as the state manager for the Pending Approval state
- Configuring the Development Manager as the state manager for the Approved state

Transitions

- Defining a transition to move a request to the Approved state where the assignee is the State Manager
- Defining a transition to move a request to the Rejected state where the assignee is the Reporter
- Defining a transition to move a request to the Closed state where the assignee is TBD

Task Fields

- Configuring Description (read only), Approval Date (read only and initialized), Planned for Version (optional) and Priority (optional) to be presented during the transition to the Approved state
- Configuring Description (read only) and Pending Issues (required) to be presented during the transition to the Rejected state
- Configuring Description (read only), Close Date (read only and initialized) and Close Detail (required) to be presented during the transition to the Closed state

2. State 2 - Approved

The Development Manager is assumed to be a manager responsible for assigning change requests to the developers for implementation. The Development Manager uses the transition Assign to Resource to assign the request to a member of the Developers user group and has the option to set the Est. Close Date. This places the request in the In Process state.

This is implemented by:

Transitions

- Defining a transition to move a request to the In Process state with the assignee to be chosen from a list of developers (user group called "Developers")

Task Fields

- Configuring Est. Close Date (optional) to be presented during the transition

3. State 3 - In Process

The Developer assigned to the request implements the change and can either update how much time has been spent implementing the change by entering the time spent into the Total Time field in the Update Total Time transition or mark the task complete by selecting the Mark Fixed transition. The developer can enter the time spent implementing the change and is required to enter the details of the work done to implement the change and will place the request in the Implemented state and assign the request to the QA Manager. The Implementation Date will be set automatically with the current date/time.

This is implemented by:

State Managers

- Defining QA Manager as the manager for the Fixed state

Transitions

- Defining a transition to keep the request in the same state and assigned to the same assignee

Defining a transition to move a request to the Fixed state where the assignee is the State Manager

Task Fields

- Configuring Total Time (required) to be presented and History Comment to be required during the update transition
- Configuring Description (read only), Implementation Date (read only and initialized), Total Time (optional), Implementation Detail (required) to be presented during the transition to the Implemented state

4. State 4 - Implemented
   Once the request has been routed to the Implemented state, the QA Manager assigns it to a QA Engineer, a member of the QA user group. The request is routed to the In Test state using the transition Assign to QA.

   This is implemented by:

   Transitions

   - Defining a transition to move a request to the In Test state with the assignee to be chosen from a list of QA Engineers (members of a user group called "QA")

5. State 5 - In Test
   The QA Engineer verifies that the request has been implemented correctly and then uses the transition called Mark Tested to advance the request to the Tested. The transition will assign it to the Build Manager (bld_mgr). If a request has not been implemented correctly and needs to be returned to Development, the QA Engineer can move the request back to the In Development state using the transition Reject, which will assign it to the developer who worked on it. For each of these possible paths, the QA Engineer enters information in the Test Date and Test Description fields.

   This is implemented by:

   State Managers

   - Configuring bld_mgr to be the manager of the Tested state

   Transitions

   - Defining a transition to move a request to the Tested state where the assignee is the state manager
   - Creating a transition to move a request to the <Previous State> (In Development) where the assignee is the Last Assignee for the New State.

   Task Fields

   - Configuring Implementation Detail (read only), Test Date (read only and initialized) and Test Description (required) to be presented during the Task operation for the transitions to the In Development and Tested states.

6. State 6 - Tested
   The Build Manager (bld_mgr) user is assumed to be the user in charge of packaging the product for release, and responsible for ensuring that all the desired changes are included in the release. The Build Manager does what is necessary to make sure that the changes are included in the release, enters the released in version for the request, then advances the state of the request to "Released" using the transition called Release.

   This is implemented by:

   Transitions

   - Defining a transition to move the request to the Released state where the assignee is TBD. TBD ("no one") is selected since the release is the last step in the processing of the request.

   Task Fields

   - Configuring Planned for Version (read only), Released in Version (required) as a field to be presented during the transition to the Released state.

7. State 7 - Released
   This state indicates that processing of the request is complete.

8. State 8 - Closed
   This state indicates that the request will not be processed.

9. State 9 - Rejected
   This state indicates the request was rejected by the Change Board. The Reporter can re-submit the change request to the Change Board using the Re-Submit transition. This transition will place the request in the Pending Approval state and

assign it to TBD (to represent the Change Board). The Reporter has the option to update the Description field and is required to update the Pending Issues field.

This is implemented by:

Transitions

- Creating a transition to move the request to the Pending Approval state and assign it to the state manager

Task Fields

- Configuring Description (optional) and Pending Issues (required) to be presented during the transition to the Pending Approval state

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Sample Saved Charts

A set of sample saved charts are included in this template. Click here to see details of these sample metrics.

Email Notification

The Change Management template is set up to notify users as follows:

On Add of a Record
The current assignee, the manager for the current state, the reporter of the request and the Change Board are notified

On Delete of a Record
The current assignee, the manager for the current state, and the reporter of the request are notified

On Change of Assignment
Both the current assignee and the manager for the current state of the request are notified

On Change of State to Released or Closed
The user who reported the request is notified when a request is moved to a state where processing is stopped

On Change of State to Pending Approval
The Change Board is notified when a request is moved to the Pending Approval

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Security

The Change Management template assumes a very simple security model reflecting a workgroup situation where all users are able to see any request. This is implemented by setting Enable Record Visibility option under General Preferences in the Administration Task page to No.

In addition, the privileges related to editing fields within the requests have been removed from users that are not managers or Admin. With this configuration, users can rely on the Task operation to move requests through the workflow. This can be changed within the User Accounts section of the Admin page.

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NetResults Tracker Help

Sample Saved Charts

The Metrics operation is a way to generate charts and graphs based on your Tracker data. Sample charts are provided by default in the Tracker templates to provide examples of the charts that can be generated. This section explains the sample charts provided in each template. For information about the operations available in the Metrics page, such as generating a chart, saving a chart or chart layout, please review the Metrics section.

The explanations of each saved chart below assume that the fields and states in the templates have not been removed or renamed. Removing or renaming record fields or workflow states may change the configuration of the saved chart or may change the results displayed by the sample saved charts. The explanations below also assume that the sample saved charts and sample chart layouts have not been modified. To generate one of the sample charts, simply select it and click the Show Chart button. To change the chart layout (for instance, from a bar chart to a line chart), simply change the Chart Layout setting after selecting the Saved Chart, then click the Show Chart button. More information on these settings can be found in the Metrics section.

Saved Charts in the Product and Web Site Development Templates

The following saved charts are included with the Product Development and Web Site Development templates. The default Project and Form will be selected as part of the criteria. If your workgroup contains multiple projects and forms, these charts can be edited to include additional projects and forms, if desired:

Project Status (default) [Users]

This metric will generate a pie chart, which displays the relative number of records in each possible state.
It is designed to give you a quick breakdown of the overall status of a project. To limit the chart to a particular project or release, select a Saved Query that only displays (matches) the records for the project or release as the value for Input Records and click Show Chart.

Add Rate [Users]

This metric will generate two dimensional line chart with the number of records added during each week for the previous 26 weeks broken down by product (one line per product that has at least one record added in the last 26 weeks).
It is designed to give you display trend information about the number of new reports (records added) for each product over the last six months.

Average Fix Time [Users]

This metric will generate a two dimensional bar chart with the average number number of days it takes to fix a problem, with one bar for each Severity. The time is calculated by using the difference between the Date Reported field and the Fix Date field of each input record.
It is designed to easily see differences in how fast particular issues are fixed based on their Severity.

Fix Rate [Users]

This metric will generate a line chart, which shows the number of records that were fixed in each of the last 12 months. There is one line for each Request Type. And, the most recent month is a partial month (unless today is the last day of the month). A record is considered fixed if it moved into the Fixed state during the month.
It can be used to view the number of fixes completed each month for the previous year. It allows you to distinguish by Request Type (e.g. Bug, Enhancement).

Fix Totals [Users]

This metric will generate a stacked line chart, which shows the cumulative number of records that have been fixed as of the end of each month for the last twelve months. As with Fix Rate, there is one (filled) line for each Request Type and the most recent month is a partial month (unless today is the last day of the month). A record is considered Fixed if it has moved into the Fixed state at some point prior to the end of the month.
It can be used to see running totals of issues that were fixed in the previous year, broken down by Request Type (e.g. Bug, Enhancement).

Project Summary [Users]

This metric will generate a table, which displays the numbers of records added for each product in each row of the table. Each column breaks down how many records are currently in each state.
It is designed to give you a quick breakdown of the overall status of each project. To limit the chart to a particular project or release, select a Saved Query that only displays (matches) the records for the project or release as the value for Input Records

and click Show Chart.

Severity Trend [Users]
This metric will generate a three dimensional bar chart that displays the number of records added during each of the last twelve weeks, broken down by Severity.
It can be used to see if the severity of records being added is changing over time.

Test Fail Rate [Users]
This metric will generate a line chart, which displays the number of times QA rejected a fix (a record moved from "In Test" to "In Development") during each of the last twelve months. There is one line per product. The most recent month may be a partial month.
It is used to see how many items that were marked as Fixed, subsequently failed quality assurance testing. Note: a single issue (record) may have failed multiple times.

Test Pass Rate [Users]
This metric will generate a line chart, which displays the number of times QA accepted (passed) a fix (a record moved from "In Test" to "Tested") during each of the last twelve months. There is one line per product. The most recent month may be a partial month.
It is used to see how many items that were marked as Fixed, subsequently passed quality assurance testing.

Workload [Users]
This metric will generate bar chart, which displays the number of records assigned to each user.
This can give you a rough idea of the current workload. If you have a field that represents the actual work required for a particular item (e.g. Estimated Size), you can create your own chart to total the value(s) of that field for each user and display it in a similar fashion.

Workload by Project [Users]
This metric will generate a table, which displays in each row the number of records currently assigned to a user. Each column breaks down how many records were reported against each product.
This can give you a rough idea of the current workload by project.

Workload Status [Users]
This metric will generate a table, which displays in each row the number of records currently assigned to a user. Each column breaks down how many records are currently in each state.
This can give you a rough idea of the current workload by status.

Saved Charts in the Knowledge Base Template

The following saved charts are available in the Metrics section of the Knowledge Base template. The default Project and Form will be selected as part of the criteria. If your workgroup contains multiple projects and forms, these charts can be edited to include additional projects and forms, if desired:

Project Status (default) [Users]
This metric will generate a pie chart, which displays the relative number of articles in each possible state.
It is designed to give you a quick breakdown of the overall status of a project. To limit the chart to a particular type of article or release, select a Saved Query that only displays (matches) the records for the type or release as the value for Input Records and click Show Chart.

Add Rate [Users]
This metric will generate two dimensional line chart with the number of articles added during each week for the previous 26 weeks broken down by product (one line per product that has at least one record added in the last 26 weeks).
It is designed to give you display trend information about the number of new articles (records added) for each product over the last six months.

Article Review Status [Users]
This metric will generate a pie chart with the relative number of records in each state in the state group "In Review Process".
It is designed to give a quick breakdown of the overall status of the articles in the review steps of the workflow process.

Average Review Time [Users]
A bar chart which displays the average time in days for an article of each type to go from First Draft to Publication.
This metric is calculated based on the First Draft Date and Publication Date set in each article during the workflow process.

Project Summary [Users]
This metric will generate a table, which displays the numbers of records added for each product in each row of the table. Each column breaks down how many records are currently in each state.
It is designed to give you a quick breakdown of the overall status of each project. To limit the chart to a particular project or release, select a Saved Query that only displays (matches) the records for the project or release as the value for Input Records and click Show Chart.

Publication Rate [Users]
A line chart which displays the number of records moved to the Published in KB state during each month for the last 12 months. A separate line will be graphed for each article type. The most recent month is a partial month (unless today is the last day of the month). A record is considered Published if it moved into the Published in KB state during the month.
This metric is designed to show a trend of the number of articles of each type published each month for the last year.

Publication Totals [Users]
A line chart which displays the number of records moved to the Published in KB state as of the end of each month for the last 12 months. A separate line will be graphed for each product. As in the Publication Rate chart above, the most recent month is a partial month (unless today is the last day of the month). A record is considered Published if it moved into the Published in KB state during the month.
This metric is designed to show a trend of the number of articles for each product published at the end of the month for the last year.

Workload [Users]
This metric will generate bar chart, which displays the number of articles assigned to each user.
This can give you a rough idea of the current workload. If you have a field that represents the actual work required for a particular item (e.g. a float type field that notes the estimated number of hours required to process an article), you can create your own chart to total the value(s) of that field for each user and display it in a similar fashion.

Workload by Project [Users]
This metric will generate a table, which displays in each row the number of records currently assigned to a user. Each column breaks down how many records were reported against each product.
This can give you a rough idea of the current workload by project.

Workload Status [Users]
This metric will generate a table, which displays in each row the number of records currently assigned to a user. Each column breaks down how many records are currently in each state.
This can give you a rough idea of the current workload by status.

Saved Charts in the Help Desk Template

The following saved charts are available in the Metrics section of the Help Desk template. The default Project and Form will be selected as part of the criteria. If your workgroup contains multiple projects and forms, these charts can be edited to include additional projects and forms, if desired:

Project Status (default) [Users]
This metric will generate a pie chart, which displays the relative number of records in each possible state.
It is designed to give you a quick breakdown of the overall status of a project. To limit the chart to a particular project or release, select a Saved Query that only displays (matches) the records for the project or release as the value for Input Records and click Show Chart.

Add Rate [Users]
This metric will generate two dimensional line chart with the number of records added during each week for the previous 26 weeks broken down by product (one line per product that has at least one record added in the last 26 weeks).
It is designed to give you display trend information about the number of new reports (records added) for each product over the last six months.

Average Close Time [Users]
This metric will generate a two dimensional bar chart with the average number number of days it takes to close an issue, with one bar for each Severity. The time is calculated by using the difference between the Date Reported field and the Close Date field of each input record.
It is designed to easily see differences in how fast particular issues are closed based on their Severity.

Close Rate [Users]

This metric will generate a line chart, which shows the number of records that were closed during each of the last 12 months. There is one line for each Request Type. And, the most recent month is a partial month (unless today is the last day of the month). A record is considered closed if it moved into the Closed state during the month.
It can be used to view the number of records closed each month for the previous year. It allows you to distinguish by Request Type (e.g. Bug, Enhancement).

Close Totals [Users]

This metric will generate a stacked line chart, which shows the cumulative number of records that have been closed as of the end of each month for the last twelve months. As with Close Rate, there is one (filled) line for each Request Type and the most recent month is a partial month (unless today is the last day of the month). A record is considered Closed if it has moved into the Closed state at some point prior to the end of the month.
It can be used to see running totals of issues that were closed in the previous year, broken down by Request Type (e.g. Bug, Enhancement).

Deadline Performance [Users]

This metric will generate a bar chart, which shows the average difference in days between the Est. Close Date and the actual Close Date of a record broken down for each product.
It can be used to detect how effective the Est. Close Date is at predicting the actual Close Date of an issue. A negative value for any product indicates that the average issue is resolved before the Est. Close Date.

Hardware Component Performance [Users]

A bar chart which displays the number of current records for every component broken down by request type.
This metric is designed to show a snapshot of the hardware components that have the most issues logged and to categorize the types of issues logged for each. This is useful to identify components that have chronic problems.

Help Desk Workload [Users]

A bar chart which displays the number of records assigned to each member of the Help Desk user group.
This can give you a rough idea of the current workload. If you have a field which represents the actual work required for a particular item (e.g. a float type field which notes the estimated number of hours required to process an issue), you can create your own chart to total the value(s) of that field for each user and display it in a similar fashion.

Project Summary [Users]

This metric will generate a table, which displays the numbers of records added for each product in each row of the table. Each column breaks down how many records are currently in each state.
It is designed to give you a quick breakdown of the overall status of each project. To limit the chart to a particular project or release, select a Saved Query that only displays (matches) the records for the project or release as the value for Input Records and click Show Chart.

Requests On Hold [Users]

A bar chart which displays the number of current records in the On Hold state for every component.
This metric is designed to provide a snapshot of the current records where the processing has been delayed. The data is broken down by component to allow you to easily identify problem components.

Severity 1 Issue Status [Users]

A bar chart which displays the relative number of records with a Severity rating of 1 in each state broken down by Product.
This metric provides an overall status of the most severe issues reported for each Product.

Severity Trend [Users]

This metric will generate a three dimensional bar chart that displays the number of records added during each of the last twelve weeks, broken down by Severity.
It can be used to see if the severity of records being added is changing over time.

Workload [Users]

This metric will generate bar chart, which displays the number of articles assigned to each user.
This can give you a rough idea of the current workload. If you have a field which represents the actual work required for a particular item (e.g. a float type field which notes the estimated number of hours required to process an article), you can create your own chart to total the value(s) of that field for each user and display it in a similar fashion.

Workload by Project [Users]

This metric will generate a table, which displays in each row the number of records currently assigned to a user. Each column breaks down how many records were reported against each product.

This can give you a rough idea of the current workload by project.

Workload Status [Users]
This metric will generate a table, which displays in each row the number of records currently assigned to a user. Each column breaks down how many records are currently in each state.
This can give you a rough idea of the current workload by status.

Saved Charts in the Support Template

The following saved charts are available in the Metrics section of the Support template. The default Project and Form will be selected as part of the criteria. If your workgroup contains multiple projects and forms, these charts can be edited to include additional projects and forms, if desired:

Project Status (default) [Users]
This metric will generate a pie chart, which displays the relative number of records in each possible state.
It is designed to give you a quick breakdown of the overall status of a project. To limit the chart to a particular project or release, select a Saved Query that only displays (matches) the records for the project or release as the value for Input Records and click Show Chart.

Add Rate [Users]
This metric will generate two dimensional line chart with the number of records added during each week for the previous 26 weeks broken down by product (one line per product that has at least one record added in the last 26 weeks).
It is designed to give you display trend information about the number of new reports (records added) for each product over the last six months.

Average Close Time [Users]
This metric will generate a two dimensional bar chart with the average number number of days it takes to close an issue, with one bar for each Severity. The time is calculated by using the difference between the Date Reported field and the Close Date field of each input record.
It is designed to easily see differences in how fast particular issues are closed based on their Severity.

Close Rate [Users]
This metric will generate a line chart, which shows the number of records that were closed during each of the last 12 months. There is one line for each Request Type. And, the most recent month is a partial month (unless today is the last day of the month). A record is considered closed if it moved into the Closed state during the month.
It can be used to view the number of records closed each month for the previous year. It allows you to distinguish by Request Type (e.g. Bug, Enhancement).

Close Totals [Users]
This metric will generate a stacked line chart, which shows the cumulative number of records that have been closed as of the end of each month for the last twelve months. As with Close Rate, there is one (filled) line for each Request Type and the most recent month is a partial month (unless today is the last day of the month). A record is considered Closed if it has moved into the Closed state at some point prior to the end of the month.
It can be used to see running totals of issues that were closed in the previous year, broken down by Request Type (e.g. Bug, Enhancement).

Company A Service [Users]
This metric will generate a bar chart, which shows the status of each record reported by the Company A user group broken down by request type.
It can be used to see an overall picture of the type and status of the issues in process reported by Company A. This can be changed to show the status for records reported by other user groups (other companies, customers, vendors, partners, etc.)

Deadline Performance [Users]
This metric will generate a bar chart, which shows the average difference in days between the Est. Close Date and the actual Close Date of a record broken down for each product.
It can be used to detect how effective the Est. Close Date is at predicting the actual Close Date of an issue. A negative value for any product indicates that the average issue is resolved before the Est. Close Date.

High Severity Issue Status [Users]
A line chart which displays the relative number of records with a Severity rating of 1, 2, or 3 in each state with a line for each Product.

This metric provides an overall status of the most severe issues reported for each Product.

Project Summary [Users]
This metric will generate a table, which displays the numbers of records added for each product in each row of the table. Each column breaks down how many records are currently in each state.
It is designed to give you a quick breakdown of the overall status of each project. To limit the chart to a particular project or release, select a Saved Query that only displays (matches) the records for the project or release as the value for Input Records and click Show Chart.

Requests On Hold [Users]
A bar chart which displays the number of current records in the On Hold state for every component.
This metric is designed to provide a snapshot of the current records where the processing has been delayed. The data is broken down by component to allow you to easily identify problem components.

Severity Trend [Users]
This metric will generate a three dimensional bar chart that displays the number of records added during each of the last twelve weeks, broken down by Severity.
It can be used to see if the severity of records being added is changing over time.

Support Workload [Users]
A bar chart which displays the number of records assigned to each member of the Support user group.
This can give you a rough idea of the current workload. If you have a field which represents the actual work required for a particular item (e.g. a float type field which notes the estimated number of hours required to process an issue), you can create your own chart to total the value(s) of that field for each user and display it in a similar fashion.

Workload [Users]
This metric will generate bar chart, which displays the number of articles assigned to each user.
This can give you a rough idea of the current workload. If you have a field which represents the actual work required for a particular item (e.g. a float type field which notes the estimated number of hours required to process an article), you can create your own chart to total the value(s) of that field for each user and display it in a similar fashion.

Workload by Project [Users]
This metric will generate a table, which displays in each row the number of records currently assigned to a user. Each column breaks down how many records were reported against each product.
This can give you a rough idea of the current workload by project.

Workload Status [Users]
This metric will generate a table, which displays in each row the number of records currently assigned to a user. Each column breaks down how many records are currently in each state.
This can give you a rough idea of the current workload by status.

Saved Charts in the Base Template

The following saved charts are available in the Metrics section of the Support template. The default Project and Form will be selected as part of the criteria. If your workgroup contains multiple projects and forms, these charts can be edited to include additional projects and forms, if desired:

Project Status (default) [Users]
This metric will generate a pie chart, which displays the relative number of records in each possible state.
It is designed to give you a quick breakdown of the overall status of a project. To limit the chart to a particular project or release, select a Saved Query that only displays (matches) the records for the project or release as the value for Input Records and click Show Chart.

Add Rate [Users]
This metric will generate two dimensional line chart with the number of records added during each week for the previous 26 weeks broken down by product (one line per product that has at least one record added in the last 26 weeks).
It is designed to give you display trend information about the number of new reports (records added) for each product over the last six months.

Workload [Users]
This metric will generate bar chart, which displays the number of articles assigned to each user.

This can give you a rough idea of the current workload. If you have a field which represents the actual work required for a particular item (e.g. a float type field which notes the estimated number of hours required to process an article), you can create your own chart to total the value(s) of that field for each user and display it in a similar fashion.

Saved Charts in the Change Management Template

The following saved charts are included with the Change Management template. The default Project and Form will be selected as part of the criteria. If your workgroup contains multiple projects and forms, these charts can be edited to include additional projects and forms, if desired:

Project Status (default) [Users]
This metric will generate a pie chart, which displays the relative number of requests in each possible state.
It is designed to give you a quick breakdown of the overall status of a project. To limit the chart to a particular project or release, select a Saved Query that only displays (matches) the requests for the project or release as the value for Input Records and click Show Chart.

Add Rate [Users]
This metric will generate two dimensional line chart with the number of requests added during each week for the previous 26 weeks broken down by Area (one line per Area that has at least one request added in the last 26 weeks).
It is designed to give you display trend information about the number of new reports (requests added) for each Area over the last six months.

Average Implementation Time [Users]
This metric will generate a two dimensional bar chart with the average number number of days it takes to implement a request, with one bar for each Severity. The time is calculated by using the difference between the Date Reported field and the Implementation Date field of each input record.
It is designed to easily see differences in how fast particular changes are implemented based on their Severity.

Average Total Time
This metric will generate a bar chart, which shows the average value of the Total Time field for the group of input records, with one bar for each Area.
It is designed to easily see the total time spent implementing changes in different Areas.

Implementation Rate [Users]
This metric will generate a line chart, which shows the number of requests that were implemented in each of the last 12 months. There is one line for each Change Level. And, the most recent month is a partial month (unless today is the last day of the month). A request is considered implemented if it moved into the Implemented state during the month.
It can be used to view the number of changes implemented each month for the previous year. It allows you to distinguish by Change Level (e.g. 1 - Urgent, 2 - Standard, 3 - Non urgent).

Implementation Totals [Users]
This metric will generate a stacked line chart, which shows the cumulative number of requests that have been implemented as of the end of each month for the last twelve months. As with Implementation Rate, there is one (filled) line for each Change Level and the most recent month is a partial month (unless today is the last day of the month). A request is considered implemented if it has moved into the Implemented state at some point prior to the end of the month.
It can be used to see running totals of changes that were implemented in the previous year, broken down by Change Level (e.g. 1 - Urgent, 2 - Standard, 3 - Non urgent).

Request Approval Rate
This metric will generate a line chart which shows the number of requests that have been approved in each of the last 12 months. There is one line for each Area. And, the most recent month is a partial month (unless today is the last day of the month). A request is considered approved if it moved into the Approved state during the month.
It can be used to view the number of changes approved each month for the previous year. It allows you to distinguish by Area (Hardware, Software, etc.).

Request Rejection Rate
This metric will generate a line chart which shows the number of requests that have been rejected in each of the last 12 months. There is one line for each Area. And, the most recent month is a partial month (unless today is the last day of the month). A request is considered approved if it moved into the Rejected state during the month.
It can be used to view the number of changes rejected each month for the previous year. It allows you to distinguish by Area (Hardware, Software, etc.).

Severity Trend [Users]

This metric will generate a three dimensional bar chart that displays the number of requests added during each of the last twelve weeks, broken down by Severity.
It can be used to see if the severity of requests being added is changing over time.

Test Fail Rate [Users]

This metric will generate a line chart, which displays the number of times QA rejected an implementation (a request moved from "In Test" to "In Process") during each of the last twelve months. There is one line per Area. The most recent month may be a partial month.
It is used to see how many requests that were marked as Implemented, subsequently failed quality assurance testing. Note: a single request may have failed multiple times.

Test Pass Rate [Users]

This metric will generate a line chart, which displays the number of times QA accepted (passed) an implementation (a record moved from "In Test" to "Tested") during each of the last twelve months. There is one line per Area. The most recent month may be a partial month.
It is used to see how many requests that were marked as Fixed, subsequently passed quality assurance testing.

Workload [Users]

This metric will generate bar chart, which displays the number of requests assigned to each user.
This can give you a rough idea of the current workload. If you have a field that represents the actual work required for a particular item (e.g. Estimated Size), you can create your own chart to total the value(s) of that field for each user and display it in a similar fashion.

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NetResults Tracker Help

Overview

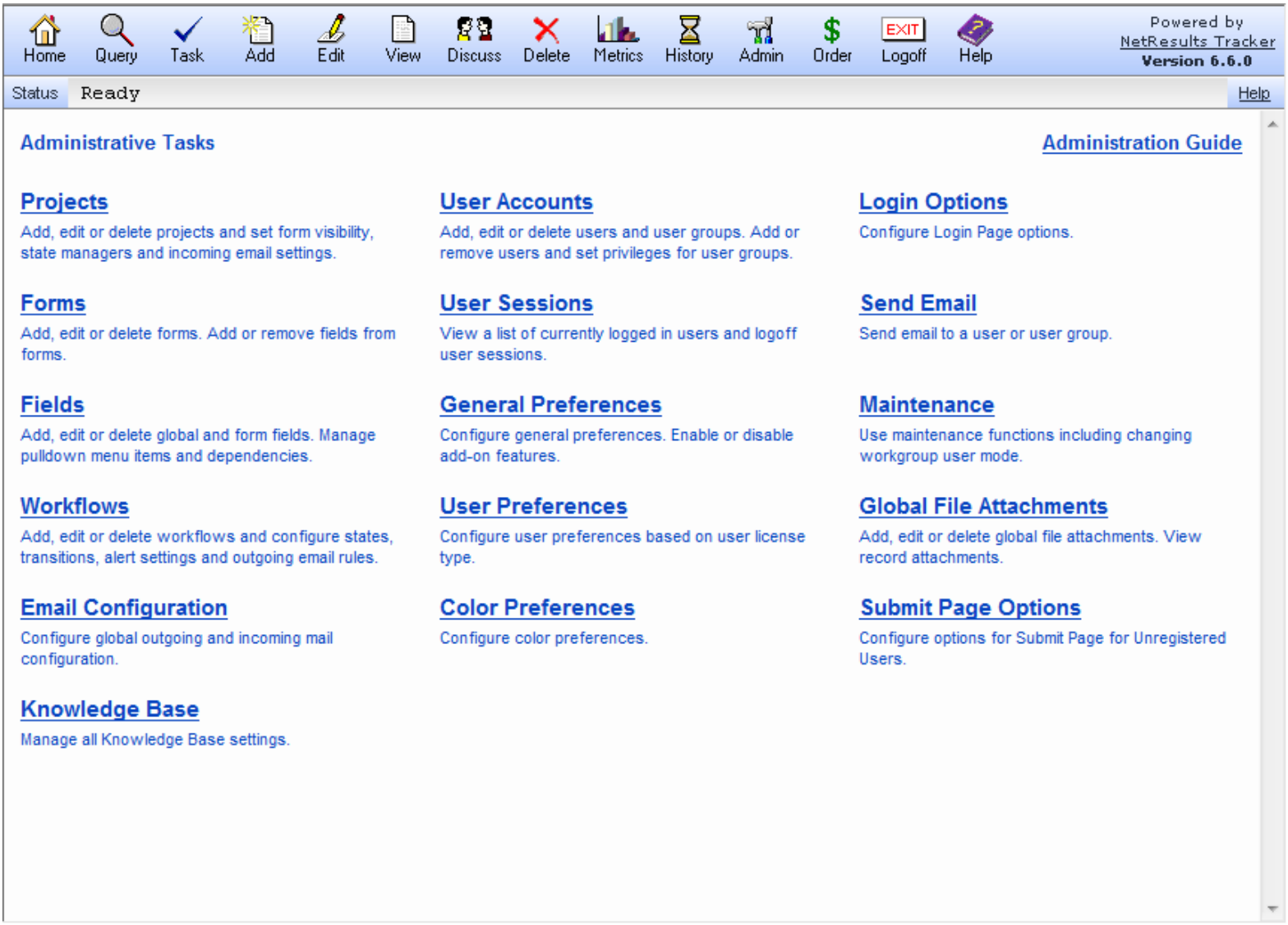
The Tracker Administration section is the interface for performing customization and maintenance. In order to access the Administration section for a workgroup, you must be logged in as a user with the Admin privilege. The Admin group always has this privilege and the Admin user is always a member of this group.

The initial Admin user password is "Admin". When you first log in to the system after installation, you can do so using this User ID and password. It is recommended that you change this password before adding other users to the system.

The Admin icon linked directly to the Tracker Administration section is included in the Tracker Button Bar for all members of user groups that have the Admin privilege enabled.

When clicking on the Admin icon for the first time, Tracker will check to see if there is a newer version available. If a newer version is available, you will see a note at the top of the Administration section.

Note: Many administrative functions can make large changes to the Tracker database. To prevent confusion to users (things may change suddenly as a result of an administrative task), it is recommended that you make administrative changes when no one is using the system. In addition, it is important to make regular backups of your workgroup database and attachments. If you are using SQL Server or Oracle as the database type for your workgroup, a simple file copy or a simple file backup to tape is not sufficient for backing up SQL Server or Oracle database files because they are not standard files. More information on backing up Tracker workgroups can be found in the Database Administration section of the Workgroup Management System Help Guide



The following options are available in the Administration section:

Projects

Add, edit, remove and set up projects, including configuring the forms, workflows, state managers, visibility and incoming email settings for each project.

Forms
Adding, editing and removing forms from the workgroup can be done in this section. In addition, you can set which fields are available on each form

Fields
Adding, editing, and removing global fields can be done in this section. The settings in this area also contain options such as, on which forms and pages and to which user groups should a field be made visible, the order of the fields on each page, and whether a field is required as well as settings for the style of fields, dependent pulldowns, auto fill and field help features. The option menu items for each pulldown field are defined in this section. You can also select a default value for the Add page and set up dependencies between pulldowns.

Workflows
Add, edit, remove, and set up workflows, including configuring the list of states, transitions, fields that are presented during the Task operation, forms, alerts and email rules for each workflow.

Email Configuration
Allows you to set up the email server and define global properties for the outgoing and incoming mail features.

Knowledge Base
Settings for creating and customizing a searchable Knowledge Base are contained in this section. Use of this option requires a license key.

User Accounts
In this section you can add, edit, and remove user accounts. You can also set up user groups and their respective privileges as well as import user accounts into the workgroup.

User Sessions
You can use this section to see how many sessions are currently active in the workgroup. You have the option to end any of the sessions (e.g. to perform maintenance on the workgroup).

General Preferences
Set options for workgroup-wide parameters (e.g. enable features such as Alerts, Discussion, etc.)

User Preferences
Set default preferences applied to any new user accounts added to this workgroup.

Color Preferences
Allows you to customize the colors of items displayed throughout the Tracker pages.

Login Options
Configure options for the Login and Self Registration pages such as self registration and remember password features and text displayed in the header or as instructions as well as custom HTML that can be used to add information, links or your logo to integrate the Login and Self Registration pages with your web site.

Send Email
Allows you to send an email to a user or user group in this workgroup. Also used for troubleshooting email issues.

Maintenance
This section contains an option to delete test records from this workgroup. It also contains other utilities used to diagnose and repair Tracker as directed by NetResults Technical Support.

Global File Attachments
In this section you can add, edit, and delete global file attachments. You can also view record attachments.

Submit Page Options
This section contains settings used to customize the Submit via Web for Unregistered Users feature for the workgroup. Use of this option requires a license key.

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NetResults Tracker Help

Projects

Overview

Projects can be defined in Tracker to allow you to associate the forms (fields), workflow, users and user groups related to a particular project.

A Default Project is created in each workgroup. The name of the default project depends on the template that was used to create the workgroup. For example, the Product Development template has the "Product Development Project" created by default and the Help Desk template has the "Help Desk Project" created by default. Information about the default settings in a particular template can be found in the template list in the Putting It All Together section.

If only one Project is defined in Tracker, users will not see the Project field on any of the pages (Add, Edit, Task, Query, Home, etc.) until additional projects are added. Only users that are members of the Admin group (or are members of a user group with the Admin privilege) will see the Project field in the Admin section.

Please note: In the Projects section, a "+" icon is available for expanding sub-sections and a "-" icon is available for collapsing sub-sections.

The following sections explain the different aspects involved in Projects:

Projects - general operations such as adding, editing and deleting projects
Project Visibility - setting which user groups have access to each project
Forms in a Project - how to choose which forms are associated with a project and set the properties for each
Form Workflow - how to select which workflow will be applied to each form in a project
Form State Managers - configuring the automatic assignment table applied to each form in a project
Incoming Email Settings - how to configure the Submit via Email feature for a project

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Managing Projects

Multiple projects can be created and managed in the Projects section.

To view the properties of a project:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. The properties of the project listed in the Projects (<Projects>) pulldown at the top will be displayed. To view the properties of another project, select a project in the Projects field. The page will be refreshed to display the properties of the selected project.

   Click on the Expand All link to the right of project name to expand all of the sub-sections in the project. The project properties include the associated forms and their respective workflows, state managers and user group visibility.

Global Project Properties

Global Project Properties allow you to choose the name of the Project field and the Help Description displayed in Tracker pages such as Add, Edit and Task. The Help Description is the text that appears when the user places the cursor over the Help Description icon (yellow question mark to the left of the field).

To set the Global Properties of the Project field:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Click on the Edit Global Properties link in the upper right corner
5. Enter a name in the Project Label field
6. Enter a description in the Help Description field
7. Click OK to save the changes

Adding a Project

To add a project:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Click on the Add Project button
5. Enter a name for the project in the Name field.

   Enter an order for the project with respect to other projects in the Order field. This will determine in what order the projects are listed in the Project field on the Add, Edit and Submit pages. Projects with the same order will be displayed alphabetically.

   Select a form that can be used to submit records for this project in the Form field. The forms available for selection are the forms that have been created in the Forms section. If you have not yet added the form you wish to use with the project, you can select "<None>" for Form. Selecting <None> for Form will also select "<None>" for Workflow.

   Select a workflow that will be applied to records submitted using the selected form for this project in the Workflow field or select "Empty Workflow" if you do not wish to have a workflow applied to records submitted using the selected form in this project. The workflows available for selection are the workflows created in the Workflows section and have been associated with the form selected in the Form field above.

6. Click Continue to proceed
7. The Project, Form and Workflow selected will be displayed.

   Enter an order for the Form with respect to other forms associated with this project in the Project Form Order field. This will determine in what order the forms are listed in the Form field on the Add, Edit and Submit pages. Forms with the same order will be displayed alphabetically.

   Select which user group(s) should be able to add and access records that belong to the new project in the Make Visible (Available) To These User Groups field. Keep in mind that each user needs to be a member of a user group that has access to at least one project in order to be able to login to Tracker. The Admins user group is not available for selection because that user group is given visibility to all projects.

8. Click OK to save the project
9. Click OK to return to the Projects section or click on the Add another Form to this Project button to select another form to be available for this new project.
10. If you clicked on the Add another Form to this Project button:
    a. Select a form that can be used to submit records for this project in the Form field. The forms available for selection are the forms that have been created in the Forms section.

       Select a workflow that will be applied to records submitted using the selected form for this project in the Workflow field or select "Empty Workflow" if you do not wish to have a workflow applied to records submitted using the selected form in this project. The workflows available for selection are the workflows created in the Workflows section and have been associated with the form selected in the Form field above. Or, if you would like to add a new workflow to be used with the selected form, select <Create New Workflow>.

    b. Click Continue to proceed
    c. Enter an order for the Form with respect to other forms associated with this project in the Project Form Order field. This will determine in what order the forms are listed in the Form field on the Add, Edit and Submit pages. Forms with the same order will be displayed alphabetically.

       Select which user group(s) should be able to add and access records that belong to the new project in the Make Visible (Available) To These User Groups field. Keep in mind that each user needs to be a member of a user group that has access to at least one project in order to be able to login to Tracker. The Admins user group is not available for selection because that user group is given visibility to all projects.

       If you selected <Create New Workflow>, you will be prompted to enter a name for the new workflow in the Workflow Name field. You will also need to select the states that should be part of the new workflow in the Include These States field. The states available are the states that have been created in the Global States section.

       Select a state group in the Form's Allowed Add States field. The Allowed Add States are the group of states that

will be available in the Status field on the Add page when adding a record for the selected Project and Form.

Select a state in the Form's Default Add State field. The Default Add State is the state selected in the Status field by default when adding a record for the selected Project and Form.

d. Click OK to finishing adding another form to the project. Click OK to return to the Forms section for the selected project or click on the Add another Form to this Project button.

Editing a Project

A project's name or order can be edited from the Projects page.

To edit a project:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project
5. Click on the Edit link to the right of the Project Name
6. Make any desired changes to the project's Name or Order fields
7. Click OK to save the changes
8. Click OK to return to the Projects section

Deleting a Project

Before attempting to delete a project, you must remove any forms from the project (and, as a result, remove any records added using the combination of Project and Form).

To delete a project:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top
5. Click on the Manage link to the right of the Forms section
6. If there are any forms in the "Forms In Use" column, click on a form and click on the Remove button. Click OK to confirm the operation. A warning will be displayed to note that removing the form from the project will remove all its records (with related information such as History, Attachments, Record Security, Source Code Files, Alerts, Discussion Threads, etc.) as well as permanently remove any related State Manager and Incoming Email settings. Click OK to remove the form from the project. Click OK again when the confirmation is displayed. Click OK to return to the Projects section.
7. Click on the Delete button to the right of the Projects pulldown
8. Click OK and OK again to confirm the operation
9. Click OK to return to the Projects section

Setting a Default Project

You can select which project you would like to see by default when you go to the Projects page in the Admin section.

To set the default project:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select the project you wish to make the default in the Projects pulldown at the top
5. Click on the Set as Default button to the right of the Project pulldown. If the Set as Default button is not available, this indicates that the project is already set as the default project.

Project Visibility

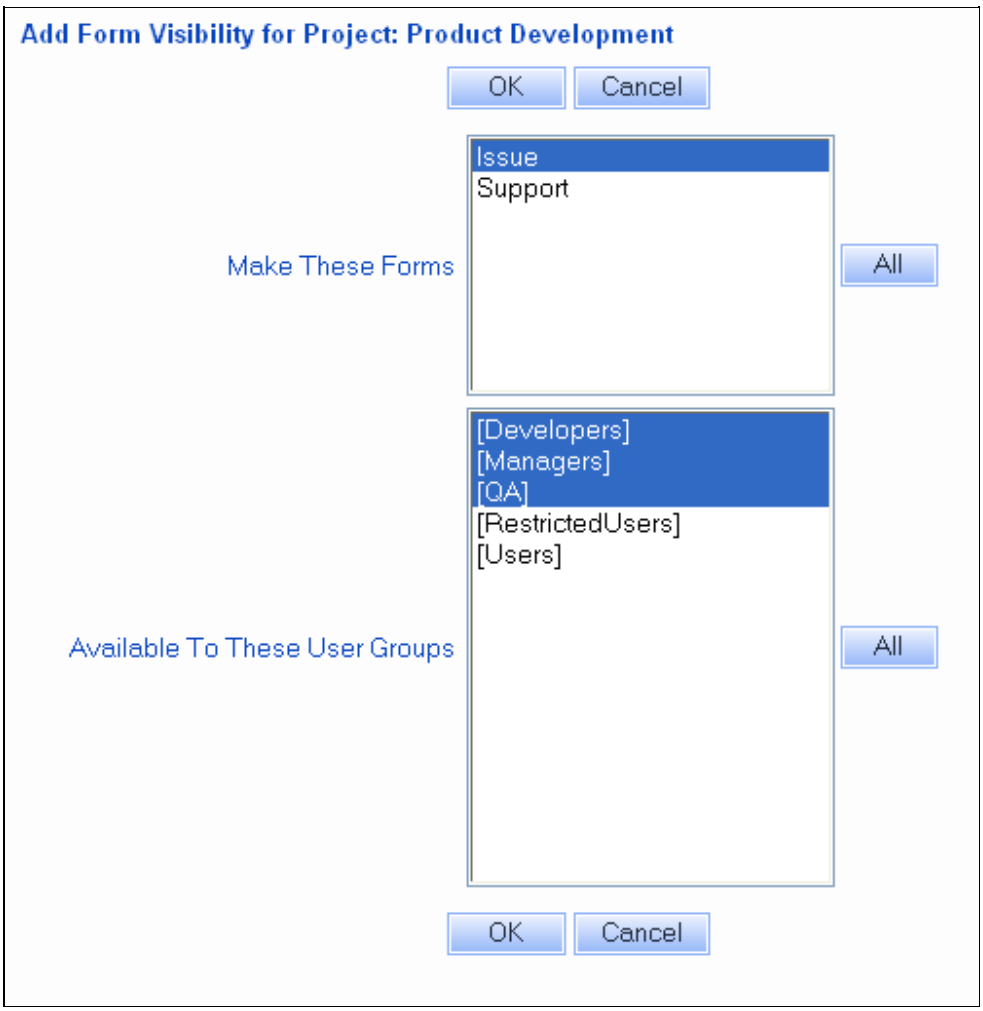
A project can be made visible to certain user groups and forms. This allows you to select which projects and forms a user groups can access such that users can only see projects and forms that are applicable to their role in the project. Each user must be a member of a user group with visibility to at least one Project in order to login to Tracker. Users who do not have visibility to at least one project will be prevented from logging into Tracker.

To add user groups or forms to the list of groups/forms to which the project is visible:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project.
5. A list of user groups to which the project is currently visible will be displayed under the Visible to User Groups heading. Click on the Add button to the right of the Visible to User Groups heading.
6. All available forms will be displayed in the Make These Forms field. The forms that are available are the forms that have been previously associated with this project. Additional forms can be made available to this project in the Forms section. To select a form, click on the form. To select multiple forms, hold down the Ctrl button on your keyboard while selecting forms. To select all forms, click on the All button to the right of the form list.

   All user groups available in the workgroup will be displayed in the Available To These User Groups field. To select a user group, click on the user group. To select multiple user groups, hold down the Ctrl button on your keyboard while selecting user groups. To select all user groups, click on the All button to the right of the user group list.

7. Click OK to save the changes, then click OK to confirm the operation
8. Click OK to return to the Projects section



To remove user groups or forms from the list of groups/forms to which the project is visible:

1. Login to the workgroup as Admin

2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project.
5. A list of user groups to which the project is currently visible will be displayed under the Visible to User Groups heading. Click on the Remove button to the right of the Visible to User Groups heading.
6. All available forms will be displayed in the Make These Forms field. The forms that are available are the forms that have been previously associated with this project. To select a form, click on the form. To select multiple forms, hold down the Ctrl button on your keyboard while selecting forms. To select all forms, click on the All button to the right of the form list.

   All user groups available in the workgroup will be displayed in the Unavailable To These User Groups field. To select a user group, click on the user group. To select multiple user groups, hold down the Ctrl button on your keyboard while selecting user groups. To select all user groups, click on the All button to the right of the user group list.

7. Click OK to save the changes, then click OK to confirm the operation. When removing user groups, fields that are only visible to the groups that were removed will also be removed from any saved queries, report layouts, charts or chart layouts where this project is selected.

   If there are any saved queries or charts created for the user group being removed (or created by users that are members of that user group) and the saved queries/charts only have this combination of project and form selected, those saved queries/charts will be deleted. Saved queries that have this project and form selected in addition to others will be modified to remove the project and form from the query criteria.

   If the Users group is being de-selected (removed), any system defined queries that only have this combination of project and form selected must be edited to select * or another combination of Project and Form. Similarly, if the Users group is being de-selected (removed), any system defined charts that only have this combination of project and form selected must be edited to select * or another combination of Project and Form.

8. Click OK to return to the Projects section

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Forms in a Project

Multiple forms can be associated with a single project. The forms available for a project can be configured from the Projects section.

To manage the forms for a project:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project
5. Click on the Manage link to the right of Forms
6. Any forms currently used by the project will be listed in the Forms In Use column. Any forms not currently used by the project will be listed in the Forms Not In Use column. The forms available in the Forms Not In Use column are created in the Forms section.

   To add a form to be used by the project, click on the form in the Forms Not In Use column, then click on the Add button.

   To remove a form so that it is no longer used by the project, click on the form in the Forms In Use column, then click on the Remove button. If there are any records that have been added using the selected combination of Project and Form, a warning will be displayed to note that removing the form from the project will remove all its records (with related information such as History, Attachments, Record Security, Source Code Files, Alerts, Discussion Threads, etc.) as well as permanently remove any related State Manager, Incoming Email settings, Saved Queries and Saved Charts.

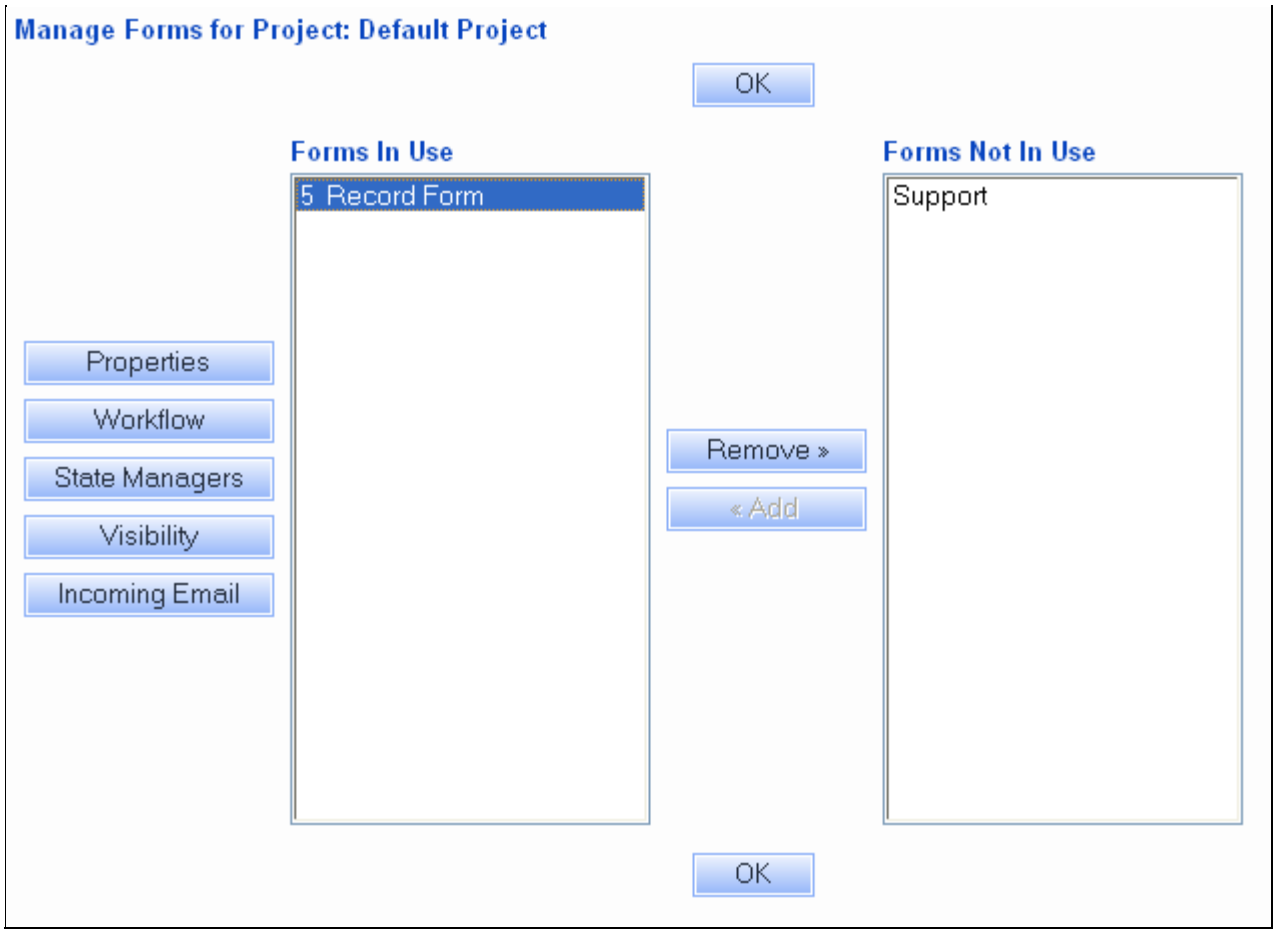
   If the form you are trying to remove is the only form selected in system defined saved queries that cannot be removed from the system (e.g. the saved query "Assigned To Me [Users]"), you will not be able to remove the form from the project until you edit the saved query to select a form other than the one you are trying to remove.

   If the form you are trying to remove is the only form selected in system defined charts that cannot be removed from the system (e.g. the chart "Project Status (Default) [Users]"), you will not be able to remove the form from the project until you edit the saved chart to select a form other than the one you are trying to remove or select *.

   If the form you are trying to remove is the only form selected in any saved queries or charts other than the system defined reports, these reports will be deleted when you remove the form from the project. If any users had these affected reports configured as their Home Page reports, the reports will be replaced with "<No Report>". If any saved charts had one of the affected saved queries selected for "Default Input Records", the query will be replaced with "<All Records>".

   Click OK to remove the form from the project. Click OK again when the confirmation is displayed.

7. Click OK to return to the Projects section or click on a form in the Forms In Use column and click on Properties, Workflow, State Managers or Visibility buttons to modify the form's properties.



Modifying Forms

The forms in use by a project can be modified. Expanding a form in the Forms section of a project will display the form's workflow, visibility, state managers and incoming email settings. Or, you can set some general properties for each form.

Form Properties

Some general properties can be set for forms:

Form Order - When a project has multiple forms in use, the order in which the forms are displayed in the Form field can be set using this option. Enter a number for this field to determine the order the form will be displayed in the Form field with respect to other forms. Entering the same order for multiple forms will sort the forms alphabetically.

History Comment Type - This option controls whether the History Comment is required, optional or not displayed on the Edit Page. If a record is edited via the Edit Page and this option is set to "Required", the user will not be able to complete the edit operation until something is typed into the History Comment field. If this option is set to "Optional", entering text into the History Comment field not mandatory. If this option is set to "Do Not Display", the History Comment will not be displayed on the Edit Page.

History Comment Position - This option controls whether the History Comment will be located on the top or bottom of the Edit Page.

Add Page Instruction Message - You can enter text that will be displayed at the top of the Add page for this form. Up to 1000 characters of text can be entered as way of providing the user customized information on how to proceed with adding a record of this form. An example of the Add Page Instruction Text is the "Note: To ensure accurate information..." text in the Adding Records help section. You can utilize format tags such as **bold**, *italics* and others as part of the instruction message. A complete list of available tags can be found here.

Edit Page Instruction Message - You can enter text that will be displayed at the top of the Edit page for this form. Up to 1000 characters of text can be entered as way of providing the user customized information on how to proceed with editing a record of this form. An example of the Edit Page Instruction Text is the "Note: Please be careful..." text in the Editing Records help section.

You can utilize format tags such as bold, *italics* and others as part of the instruction message. A complete list of available tags can be found here.

Delete Page Instruction Message - You can enter text that will be displayed at the top of the Delete page for this form. Up to 1000 characters of text can be entered as way of providing the user customized information or warnings about deleting a record of this form. By default, this will be set to display "Please enter an optional history comment below and click "Delete" button to delete the record <formnumber>." on the Delete page. You can utilize format tags such as bold, *italics* and others as part of the instruction message. A complete list of available tags can be found here.

To configure the properties of a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project
5. Click on the Manage link to the right of Forms
6. Click on a form in the Forms In Use column
7. Click on the Properties button
8. Enter an order and make selections for the available options
9. Click OK to save the change
10. Click OK to return to the Forms section

Form Visibility

A form can be made visible to certain user groups. This allows you to select which forms a user groups can access such that users can only see forms that are applicable to their role in the project.

To edit the visibility of a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project.
5. Click on the "+" icon to the left of the Visible to User Groups heading in the Forms section to see a list of user groups to which the form is currently visible. Click on the Edit link to the right of the Visible to User Groups heading to add or remove user groups from the list of user groups to which the project is visible.
6. All user groups available in the workgroup will be displayed in the Make Visible (Available) To These User Groups field. To select or de-select a user group, click on the user group. To select or de-select multiple user groups, hold down the Ctrl button on your keyboard while selecting/de-selecting user groups. To select all user groups, click on the All button to the right of the user group list. To remove all user groups, click on the None button to the right of the user group list. Click Reset if you wish to reset the list to how it was set when the list was last saved (the last time the OK button was clicked to save the user group selections). The Admins user group is not available for selection because that user group is given visibility to all forms.
7. Click OK to save the changes. When removing user groups, fields that are only visible to the groups that were removed will also be removed from any saved queries, report layouts, charts or chart layouts where this form is selected.

   If there are any saved queries or charts created for the user group being de-selected (or created by users that are members of that user group) and the saved queries/charts only have this combination of project and form selected, those saved queries/charts will be deleted. Saved queries that have this project and form selected in addition to others will be modified to remove the project and form from the query criteria.

   If the Users group is being de-selected (removed), any system defined queries that only have this combination of project and form selected must be edited to select * or another combination of Project and Form. Similarly, if the Users group is being de-selected (removed), any system defined charts that only have this combination of project and form selected must be edited to select * or another combination of Project and Form.

8. Click OK to return to the Projects section

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Form Workflow

A form in use by a project can have a workflow associated with it if needed or can have no workflow.

To set the workflow property for a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project
5. Click on the Change link to the right of Workflow
6. Select a workflow for the form. The workflows available for selection are managed in the Forms section of the Workflows page.
7. Click OK to save the selection and click OK again to confirm the operation

   If the new workflow does not contain states that are were present in the old workflow, you will be prompted to select replacements for the states that are not in the new workflow to be used in records (where the Status field is set to one of the old states), State Manager settings, Incoming Email settings, Saved Queries and Saved Charts. Click OK to save the selections.

8. Click OK to return to the Projects section

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Form State Managers

A set of state managers can be configured for a form. State Managers are users who are responsible for records in a particular state. State Managers can be used for automatic assignment during the Add and/or Task operations or can be used as roles when configuring email notification or alert settings. State Managers can be configured for a form or based on each option menu item in a particular pulldown.

Here are a few examples of how you can use State Managers. For the examples that involve newly added records or records processed using the Task operation, you can assign the record to a particular user by making that user a state manager for the state where the record will be routed. The state where the record is routed depends on several things which are outlined in the automatic assignment during the Add and/or Task operations in the Workflows section. In these examples we will discuss the simplest case where the Status field is not available on the Add Page or during the Task operation. The state where a record will be routed when it is added is the state listed as the Default Add State. The Default Add State can be found in the Forms section of the Workflows page. The state where a record will be routed during the Task operation is the state defined as "Next State" for the transition being used.

Example 1: Assign newly added records to a single user

In this scenario, to route all new records to a single user, select the user as the State Manager for the state which is the Default Add State for a form. So if "Reported" is the Default Add State:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select the appropriate project in the Project pulldown. The page will be refreshed to display the properties of the selected project.
5. Locate the appropriate form in the Forms section, then click on the Manage link to the right of State Managers
6. Locate the Reported state, then select the user who should be assigned to newly added records and click OK

Example 2: Assign newly added records to different users depending on what was selected for a pulldown (e.g. Product, Priority, Severity or another pulldown you create)

Let's say you want to route records based on Product. If a record is added for Product A, you want it to be assigned to user_one. If a record is added for Product B, you want it to be assigned to user_two instead. To do this, set the "Based On" property to be "Product", then set the state managers for the Default Add State. Let's assume the Default Add State is "Reported":

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select the appropriate project in the Project pulldown. The page will be refreshed to display the properties of the selected project.
5. Locate the appropriate form in the Forms section, then click on the Edit Based On link to the right of State Managers
6. Set Based On Pulldown to "Product" and click OK
7. Click OK to confirm
8. Click Set State Managers
9. In the Product pulldown, select "Product A"
10. Locate the Reported state, the select "user_one" and click OK
11. Click on the Set State Managers button again to set the state manager for Product B
12. Select "Product B" in the Product pulldown
13. Select "user_two" for the Reported state and click OK
14. Click OK again to return to the Projects page

Example 3: Assign records to a single user any time a record is moved to a particular state

As records move through the workflow, you may want to have a specific user assigned to records in each state in the workflow. Let's say that each time a record moves to the "Scheduled" state, you want it to be assigned to the Development Manager ("dev_mgr"). To do this, select the user as the state manager for the appropriate state and configure transitions that move records to that state to be assigned to "<State Manager>":

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select the appropriate project in the Project pulldown. The page will be refreshed to display the properties of the selected project.
5. Locate the appropriate form in the Forms section, then click on the Manage link to the right of State Managers
6. Locate the Scheduled state, then select "dev_mgr" and click OK
7. Click on the Admin icon
8. Click on the Workflows link
9. Select the appropriate workflow in the Workflows pulldown. The page will be refreshed to display the properties of the selected workflow.
10. Click on the Expand All link to the right of States
11. Using your browser's search function, search for any states where "Next States" contains "Scheduled". Perform the following sub-steps for any state where "Scheduled" is listed as a Next State. However, please note that there may be some transitions where you don't want to make this change. For example, if a transition is set to use "Last Assignee for New State" or "Last Assignee for State X", you may want the record to be assigned to another user besides the state manager. Take a look at each transition before using the sub-steps to make this change to all transitions:
    a. In the section for the appropriate state, click on the Manage link next to Transitions
    b. Locate the transition(s) where "Scheduled" is listed as the New State. Verify that New Assignee is set to "<State Manager>". If it is not, click on the Edit button to the left of the transition and set New Assignee to be "<State Manager>".
    c. Repeat these sub-steps for each state where Scheduled is listed as a Next State

Example 4: You want a user to oversee what happens in a state, but not necessarily be assigned to records in that state

This example is commonly used for users who are managers. A manager may want to get email notifications to keep them updated about what records are moved into a state, but are not the user who will be assigned to the records. Let's say you want the Development Manager ("dev_mgr") to oversee the activities in the In Development state, but the records in that state will be assigned to the developers (dev_one, dev_two, etc.). To configure this, set dev_mgr as the state manager for the In Development state, configure the transitions that move records to the In Development state to use something other than "<State Manager>" for "New Assignee" and set the email rules to notify the state manager:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select the appropriate project in the Project pulldown. The page will be refreshed to display the properties of the selected project.
5. Locate the appropriate form in the Forms section, then click on the Manage link to the right of State Managers
6. Locate the In Development state, select dev_mgr and click OK
7. Click on the Admin icon
8. Click on the Workflows link
9. Select the appropriate workflow in the Workflows pulldown. The page will be refreshed to display the properties of the selected workflow.
10. Click on the Expand All link to the right of States
11. Using your browser's search function, search for any states where "Next States" contains "In Development". Perform the following sub-steps for any state where "In Development" is listed as a Next State:
    a. In the section for the appropriate state, click on the Manage link next to Transitions
    b. Locate the transition(s) where "In Development" is listed as the New State. Verify that New Assignee is set to something other than "<State Manager>". If "<State Manager>" is selected, click on the Edit button to the left of the transition and set New Assignee to be something other than "<State Manager>". Using The Product Development Template as an example, records go from the Scheduled state to the In Development state. In the Scheduled state, they are assigned to the Development Manager. There is a transition in the Scheduled state where "New State" is In Development. This transition is configured with "New Assignee" set to "Prompt with User Group" "[Developers]", such that the Development Manager can select a developer from the list as the user who will be assigned to the record in the next state. A complete list of alternatives can be found in the Transitions section.
    c. Repeat these sub-steps for each state where In Development is listed as a Next State
12. Click on the Admin icon

13. Click on the Workflows link
14. Select the appropriate workflow in the Workflows pulldown. The page will be refreshed to display the properties of the selected workflow.
15. Click on the Manage link to the right of Outgoing Email Rules
16. Check the Notification Rule List to see if there is a rule configured for "On Change of "<Record>" Status to In Development". Or, check any other rules where "<State Manager>" is listed as one of the recipients as that rule may fulfill your requirement.

    If there is not such a rule, for Condition select "Change of", "<Record>", "Status", "In Development". For Notification List, select "<State Manager>". Hold down the Ctrl button on your keyboard if you wish to select other roles or user groups to be notified. Enter text into the Subject and Operation Description. You can use variables described in the Outgoing Email Rules section.

17. Click on the Add Notification button
18. Click OK to save the changes

Configuring State Managers

To manage the state managers for a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project
5. Under the desired form, click on the "+" icon to the left of the State Managers heading see the current state manager settings. Click on the Manage link to the right of State Managers heading to make changes to the state manager settings.
6. The current State Managers will be displayed.

   If the state managers are based on a particular pulldown field, a <Pulldown Name> <Option Menu Item> State Managers field will be displayed (where <Pulldown Name> is the name of the selected pulldown field and <Option Menu Item> is the option menu item in the selected pulldown field). If a <Pulldown Name> <Option Menu Item> State Managers field is not displayed, this indicates that the state managers are not based on the option menu item selected in

a particular field. To select a pulldown field for the state managers to be based on, use the Edit Based On link to the right of the State Managers heading on the Projects section.

Select an option in the <Pulldown Name> <Option Menu Item> State Managers field to set the State Managers that will be applied when records are added to Tracker with this option menu item selected. When selecting an option in this field, the page will be refreshed to display the State Managers that correspond to that selection.

The <Pulldown Name> <Option Menu Item> State Managers field contains the following options:

- <Default>
  Selecting this option will allow you to choose the State Managers that will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). When this option is selected, the option Apply these settings to other <Pulldown Name> values will be available. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same State Managers that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

- Option Menu Items for the Based On pulldown
  Each option menu item configured for the pulldown field selected in the Based On field will be listed. Selecting an option menu item will allow you to set the State Managers that will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the State Managers configured for <Default> to be filled into the State Managers for the option menu item selected.

The states listed in the State Managers list will be the states configured for the workflow associated with the selected form. Select a user to be the state manager for each state in the list. Only non-Restricted users will be available for selection.

7. Click OK to save the selections
8. Click OK to return to the Projects section

To edit the pulldown that the State Managers are based on:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project.
5. Click on the "+" icon to the left of the State Managers section for the form you wish to modify
6. Click on the Edit Based On link to the right of State Managers
7. Select a pulldown in the Based on Pulldown so that you can configure different State Managers for each option menu item in this pulldown
8. Click OK to save your selection
9. Click OK to return to the Projects section or click Set State Managers to configure the settings for each option menu item in the selected pulldown

To edit the state managers for a specific pulldown option menu item:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project.
5. Click on the "+" icon to the left of the State Managers section for the form you wish to modify
6. Click on the Manage link to the right of the State Managers section
7. The State Managers for the selected option menu item will be displayed.

   If you are editing the settings for the option menu item <Default>, the State Managers displayed will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). The option Apply these settings to other <Pulldown Name> values will be available when editing the settings for <Default>. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same State Managers that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired

option menu items.

If you are editing the settings for an option menu item in the pulldown, the State Managers displayed will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the State Managers configured for <Default> to be filled into the State Managers for the option menu item selected.

The states listed in the State Managers list will be the states configured for the workflow associated with the selected form. Select a user to be the state manager for each state in the list. Only non-Restricted users will be available for selection.

8. Click OK to save the selections
9. Click OK to return to the Projects section

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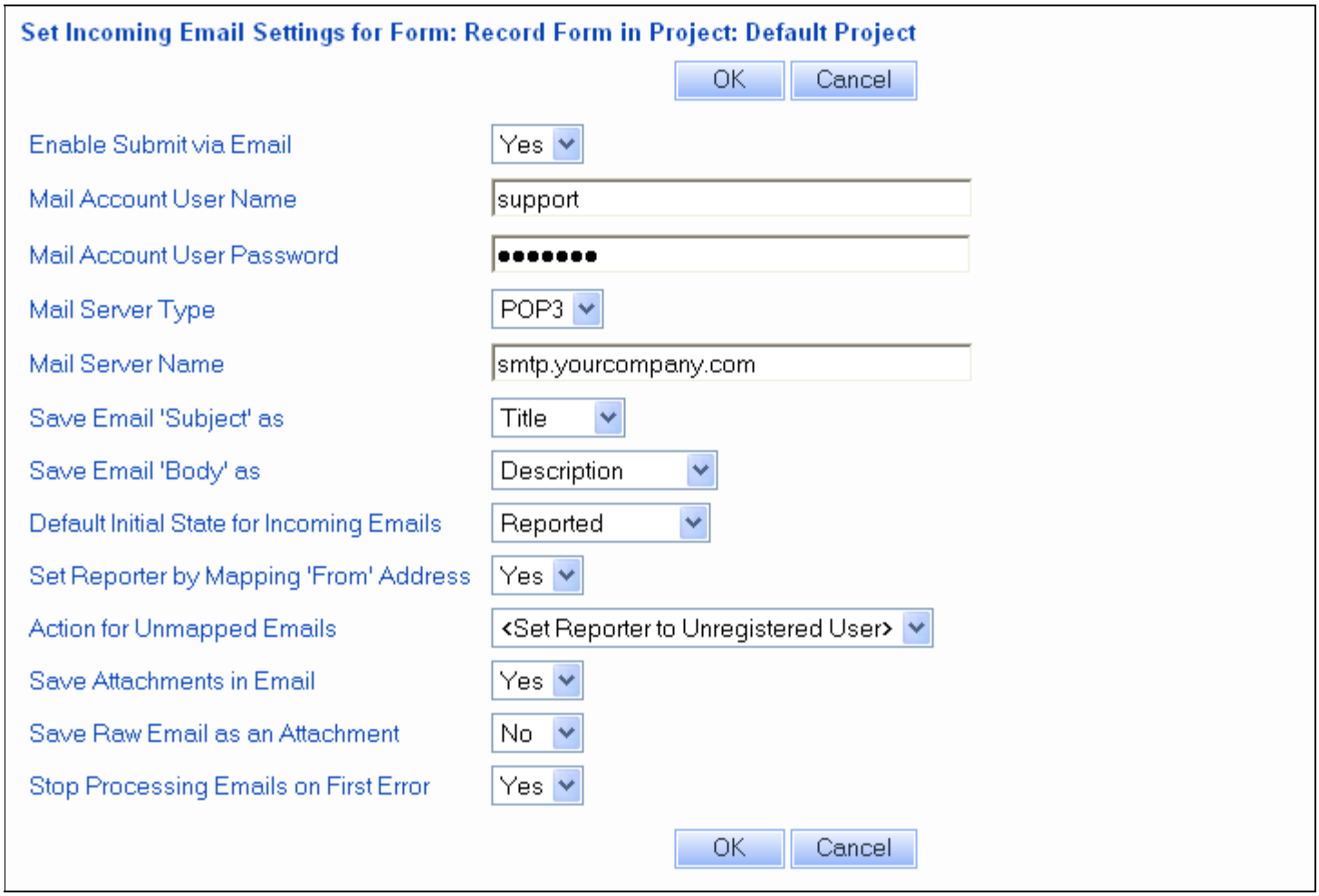
NetResults Tracker Help

Form Incoming Email Settings

Incoming Email Settings are configuration settings for the Submit via Email feature that determine how incoming email messages are processed by Tracker. Incoming Email Settings can be configured for a form or based on the option menu item selected in a particular pulldown field.



To manage the Incoming Email Settings for a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project
5. Click on the Manage link to the right of Incoming Email Settings
6. The current Incoming Email Settings will be displayed.

   If a <Pulldown Name> <Option Menu Item> Incoming Email Settings field is displayed (where <Pulldown Name> is the name of the selected pulldown field and <Option Menu Item> is one of the option menu items in the selected pulldown), this indicates that the Incoming Email Settings are different for each option menu item in a particular pulldown field. If the <Pulldown Name> <Option Menu Item> Incoming Email Settings field is not displayed, this indicates that the Incoming Email Settings are not different for each option menu item in a pulldown (the same settings will be applied to all records submitted with this combination of Project and Form). The pulldown selected in the <Pulldown Name> <Option Menu Item> Incoming Email Settings can be set using the Edit Based On link in the Projects section.

   Select an option in the <Pulldown Name> <Option Menu Item> Incoming Email Settings field to set the Incoming Email Settings that will be applied when records are added to Tracker with this option menu item selected. When selecting an option in this field, the page will be refreshed to display the Incoming Email Settings that correspond to that

selection.

The <Pulldown Name> Values field contains the following options:

- <Default>
  Selecting this option will allow you to choose the Incoming Email Settings that will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). When this option is selected, the option Apply these settings to other <Pulldown Name> values will be available. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same Incoming Email Settings that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

- Option Menu Items for the Based On pulldown
  Each option menu item configured for the pulldown field selected in the Based On field will be listed. Selecting an option menu item will allow you to set the Incoming Email Settings that will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the Incoming Email Settings configured for <Default> to be filled into the Incoming Email Settings for the option menu item selected.

Enable Submit via Email
In order to enable the Submit via Email feature for a form, this property must be set to "Yes", which will allow records to be added to this workgroup via email. This property is grayed out (cannot be set) for "<Default>" when the Incoming Email Settings are set to be based on a pulldown.

Mail Account User Name
Enter a unique mail account (mailbox) on the mail server specified in the "Mail Server Name" field to receive the incoming email messages. Enter the User Name for this account. Up to 80 characters can be entered into this field. This property is grayed out (cannot be set) for "<Default>" when the Incoming Email Settings are set to be based on a pulldown.

Mail Account User Password
Enter the password that corresponds to the user account (mailbox) specified in the "Mail Account User Name" field above. Up to 50 characters can be entered into this field. This property is grayed out (cannot be set) for "<Default>" when the Incoming Email Settings are set to be based on a pulldown.

Warning: Tracker deletes all emails that it successfully reads. It is possible that Tracker could read (and delete) an email, but still be unable to store the full information from the email into your workgroup. If you need to keep a copy of all emails sent to a particular mailbox, do not use that mailbox for Tracker. Instead, create a new mailbox and forward copies of email from the mission critical mailbox (or create a mailing list to distribute emails to both mailboxes). In general, this is a good idea, at least until you have made certain you have configured the Submit via Email feature properly. Please contact your email administrator for information on how to set up email accounts.

Mail Server Type
Select the type that corresponds to the mail server entered into the mail server name field below. The mail server types supported are POP3 and IMAP.

Mail Server Name
Enter the name of the mail server to be used by default to process the incoming email messages intended for this workgroup. The mail server name can be of the form "smtp.yourcompany.com" or can be the IP Address of the machine where your mail server is installed.

Save Email 'Subject' as
Select a field of Text type to which the contents of the email message's subject will be saved in the new record. The choices available are based on the Text fields created in the Fields section. Choosing <None> will not save the email message's subject in any field. A Text field must be selected, if ?Enable Submit via Email? is set to ?Yes?. Please note that Field Visibility settings are not enforced when a record is created via email. Thus, if the Text field selected for this option is configured such that it is not visible to certain groups on the Add page, this restriction will not be enforced for records added via email.

Save Email 'Body' as
Select a field of TextArea type to which the contents of the email message's body will be saved in the new record. The choices available are based on the TextArea fields created in the Fields section. Choosing <None> will not save the email

message's body in any field. A TextArea field must be selected if "Enable Submit Record via Email" is set to "Yes". If the body of an email is not plain text (for example, it's an image, audio, or HTML file), then it will be saved as a file attachment and a note telling the user that the body was saved as an attachment will be placed in the TextArea field you selected. If the body of the email comes in multiple versions (MIME multipart/alternative format), the plain text version (if any) will be saved in the TextArea field you selected and the other alternative versions will be saved as file attachments. Please note that Field Visibility settings are not enforced when a record is created via email. Thus, if the TextArea field selected for this option is configured such that it is not visible to certain groups on the Add page, this restriction will not be enforced for records added via email.

Default Initial State for Incoming Emails
When a new record is created by an incoming email, the Status field of the new record will be set with the state selected in this option. The state selected also determines the assignee of the new record. The user assigned to the new record will be the State Manager as determined by the State Manager settings for the combination of Form and Project set in the record (refer to the section Form State Managers for more information).

Set Reporter by Mapping 'From' Address
You can use the email address in the 'From' field of the incoming message to set the "Reported By" field for the new record. This is done by setting this option to "Yes", which will allow Tracker to compare the email address listed in the 'From' field of the incoming message to the email addresses entered in the user profiles in the workgroup's User Accounts section. If the address is not found or this option is set to "No", the incoming email will be processed according to the setting of the "Action for Unmapped Emails" option.

Action for Unmapped Emails
Tracker can be configured to map the email address in the 'From' field of the incoming message to the email addresses entered in the user profiles in the workgroup's User Accounts section. The result of this mapping will set the "Reported By" field for the new record. If the mapping does not find a match in the User Administration table OR if the option "Set Reporter by Mapping 'From' Address" is set to "No", one of the following actions can be selected to process the incoming message:

- Selecting "<Delete Email>" will result in the incoming email message being deleted and no record will be created.
- Selecting "<Set Reporter to Unregistered User>" will set the "Reported By" field of the new record to be the "Unregistered User". The Unregistered User is a built-in user within Tracker used to distinguish records reported by unregistered users.

Save Attachments in Email
If the incoming message contains any file attachments, these can be saved as files attached to the new record by setting this option to "Yes". Please note that the Add Attachments user group privilege is not enforced for records that are added via email. When this option is set to "Yes", any user will be able to create a record that contains an attachment using the Submit via Email feature.

Save Raw Email as an Attachment
Select "Yes" for this option if you wish to save the entire incoming email as a file attached to the new record. The entire contents of the email including the attachments (raw email prior to processing by Tracker) will be saved as a text file (with .txt as extension) and attached to the new record. This can be useful if some of the information in the email could not be stored in the Tracker fields you have selected (for example, if the Subject line is very long and must be truncated to be stored in the Text field you have selected).

Stop Processing Emails on First Error
Incoming messages are processed in batches periodically by Tracker's Email Processor. If there is an issue which prevents an incoming message from being processed successfully, you can choose whether Tracker should attempt to process any remaining incoming messages. Setting this option to "Yes" indicates that Tracker should not process any additional incoming messages once an error occurs (an incoming message cannot be processed successfully).

7. Click OK to save the selections
8. Click OK to return to the Projects section

To edit the pulldown that the Incoming Email Settings are based on:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link

4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project.
5. Click on the "+" icon to the left of the Incoming Email Settings section for the form you wish to modify
6. Click on the Edit Based On link to the right of Incoming Email Settings
7. Select a pulldown in the Based on Pulldown so that you can configure different Incoming Email Settings for each option menu item in this pulldown
8. Click OK to save your selection
9. Click OK to return to the Projects section or click Set Incoming Email Settings to configure the settings for each option menu item in the selected pulldown

To edit the Incoming Email Settings for a specific pulldown option menu item:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Projects link
4. Select a project in the Projects pulldown at the top. The page will be refreshed with the properties of the selected project.
5. Click on the "+" icon to the left of the Incoming Email Settings section for the form you wish to modify
6. Click on the Edit link to the right of the pulldown option menu item
7. The Incoming Email Settings for the selected option menu item will be displayed.

   If you are editing the settings for the option menu item <Default>, the Incoming Email Settings displayed will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). The option Apply these settings to other <Pulldown Name> values will be available when editing the settings for <Default>. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same Incoming Email Settings that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

   If you are editing the settings for an option menu item in the pulldown, the Incoming Email Settings displayed will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the Incoming Email Settings configured for <Default> to be filled into the Incoming Email Settings for the option menu item selected.

   Enable Submit via Email
   In order to enable the Submit via Email feature for a form, this property must be set to "Yes", which will allow records to be added to this workgroup via email. This property is grayed out (cannot be set) for "<Default>" when the Incoming Email Settings are set to be based on a pulldown.

   Mail Account User Name
   Enter a unique mail account (mailbox) on the mail server specified in the "Mail Server Name" field to receive the incoming email messages. Enter the User Name for this account. Up to 80 characters can be entered into this field. This property is grayed out (cannot be set) for "<Default>" when the Incoming Email Settings are set to be based on a pulldown.

   Mail Account User Password
   Enter the password that corresponds to the user account (mailbox) specified in the "Mail Account User Name" field above. Up to 50 characters can be entered into this field. This property is grayed out (cannot be set) for "<Default>" when the Incoming Email Settings are set to be based on a pulldown.

   Warning: Tracker deletes all emails that it successfully reads. It is possible that Tracker could read (and delete) an email, but still be unable to store the full information from the email into your workgroup. If you need to keep a copy of all emails sent to a particular mailbox, do not use that mailbox for Tracker. Instead, create a new mailbox and forward copies of email from the mission critical mailbox (or create a mailing list to distribute emails to both mailboxes). In general, this is a good idea, at least until you have made certain you have configured the Submit via Email feature properly. Please contact your email administrator for information on how to set up email accounts.

   Mail Server Type
   Select the type that corresponds to the mail server entered into the mail server name field below. The mail server types supported are POP3 and IMAP.

   Mail Server Name
   Enter the name of the mail server to be used by default to process the incoming email messages intended for this workgroup. The mail server name can be of the form "smtp.yourcompany.com" or can be the IP Address of the machine

where your mail server is installed.

Save Email 'Subject' as

Select a field of Text type to which the contents of the email message's subject will be saved in the new record. The choices available are based on the Text fields created in the Fields section. Choosing <None> will not save the email message's subject in any field. A Text field must be selected, if ?Enable Submit via Email? is set to ?Yes?. Please note that Field Visibility settings are not enforced when a record is created via email. Thus, if the Text field selected for this option is configured such that it is not visible to certain groups on the Add page, this restriction will not be enforced for records added via email.

Save Email 'Body' as

Select a field of TextArea type to which the contents of the email message's body will be saved in the new record. The choices available are based on the TextArea fields created in the Fields section. Choosing <None> will not save the email message's body in any field. A TextArea field must be selected if "Enable Submit via Email" is set to "Yes". If the body of an email is not plain text (for example, it's an image, audio, or HTML file), then it will be saved as a file attachment and a note telling the user that the body was saved as an attachment will be placed in the TextArea field you selected. If the body of the email comes in multiple versions (MIME multipart/alternative format), the plain text version (if any) will be saved in the TextArea field you selected and the other alternative versions will be saved as file attachments. Please note that Field Visibility settings are not enforced when a record is created via email. Thus, if the TextArea field selected for this option is configured such that it is not visible to certain groups on the Add page, this restriction will not be enforced for records added via email.

Default Initial State for Incoming Emails

When a new record is created by an incoming email, the Status field of the new record will be set with the state selected in this option. The state selected also determines the assignee of the new record. The user assigned to the new record will be the State Manager as determined by the State Manager settings for the combination of Form and Project set in the record (refer to the section Form State Managers for more information).

Set Reporter by Mapping 'From' Address

You can use the email address in the 'From' field of the incoming message to set the "Reported By" field for the new record. This is done by setting this option to "Yes", which will allow Tracker to compare the email address listed in the 'From' field of the incoming message to the email addresses entered in the user profiles in the workgroup's User Accounts section. If the address is not found or this option is set to "No", the incoming email will be processed according to the setting of the "Action for Unmapped Emails" option.

Action for Unmapped Emails

Tracker can be configured to map the email address in the 'From' field of the incoming message to the email addresses entered in the user profiles in the workgroup's User Accounts section. The result of this mapping will set the "Reported By" field for the new record. If the mapping does not find a match in the User Administration table OR if the option "Set Reporter by Mapping 'From' Address" is set to "No", one of the following actions can be selected to process the incoming message:

- Selecting "<Delete Email>" will result in the incoming email message being deleted and no record will be created.
- Selecting "<Set Reporter to Unregistered User>" will set the "Reported By" field of the new record to be the "Unregistered User". The Unregistered User is a built-in user within Tracker used to distinguish records reported by unregistered users.

Save Attachments in Email

If the incoming message contains any file attachments, these can be saved as files attached to the new record by setting this option to "Yes". Please note that the Add Attachments user group privilege is not enforced for records that are added via email. When this option is set to "Yes", any user will be able to create a record that contains an attachment using the Submit via Email feature.

Save Raw Email as an Attachment

Select "Yes" for this option if you wish to save the entire incoming email as a file attached to the new record. The entire contents of the email including the attachments (raw email prior to processing by Tracker) will be saved as a text file (with .txt as extension) and attached to the new record. This can be useful if some of the information in the email could not be stored in the Tracker fields you have selected (for example, if the Subject line is very long and must be truncated to be stored in the Text field you have selected).

Stop Processing Emails on First Error

Incoming messages are processed in batches periodically by Tracker's Email Processor. If there is an issue which prevents

an incoming message from being processed successfully, you can choose whether Tracker should attempt to process any remaining incoming messages. Setting this option to "Yes" indicates that Tracker should not process any additional incoming messages once an error occurs (an incoming message cannot be processed successfully).

8. Click OK to save the selections
9. Click OK to return to the Projects section

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NetResults Tracker Help

Forms

Overview

Tracker allows you to create multiple forms in a single workgroup. There can be a maximum of 32 forms in a workgroup. This allows you to manage different sets of data in a central location. Some examples:

1. In an issue tracking workgroup you may wish to have separate forms to submit bugs vs. enhancements where slightly different fields are captured for each (e.g. a "Severity" level is selected for bugs, but not is not applicable for enhancements)
2. In a support workgroup you may wish have a form to save customer contact information (phone number, email address, etc.) in addition to the form used to submit support tickets

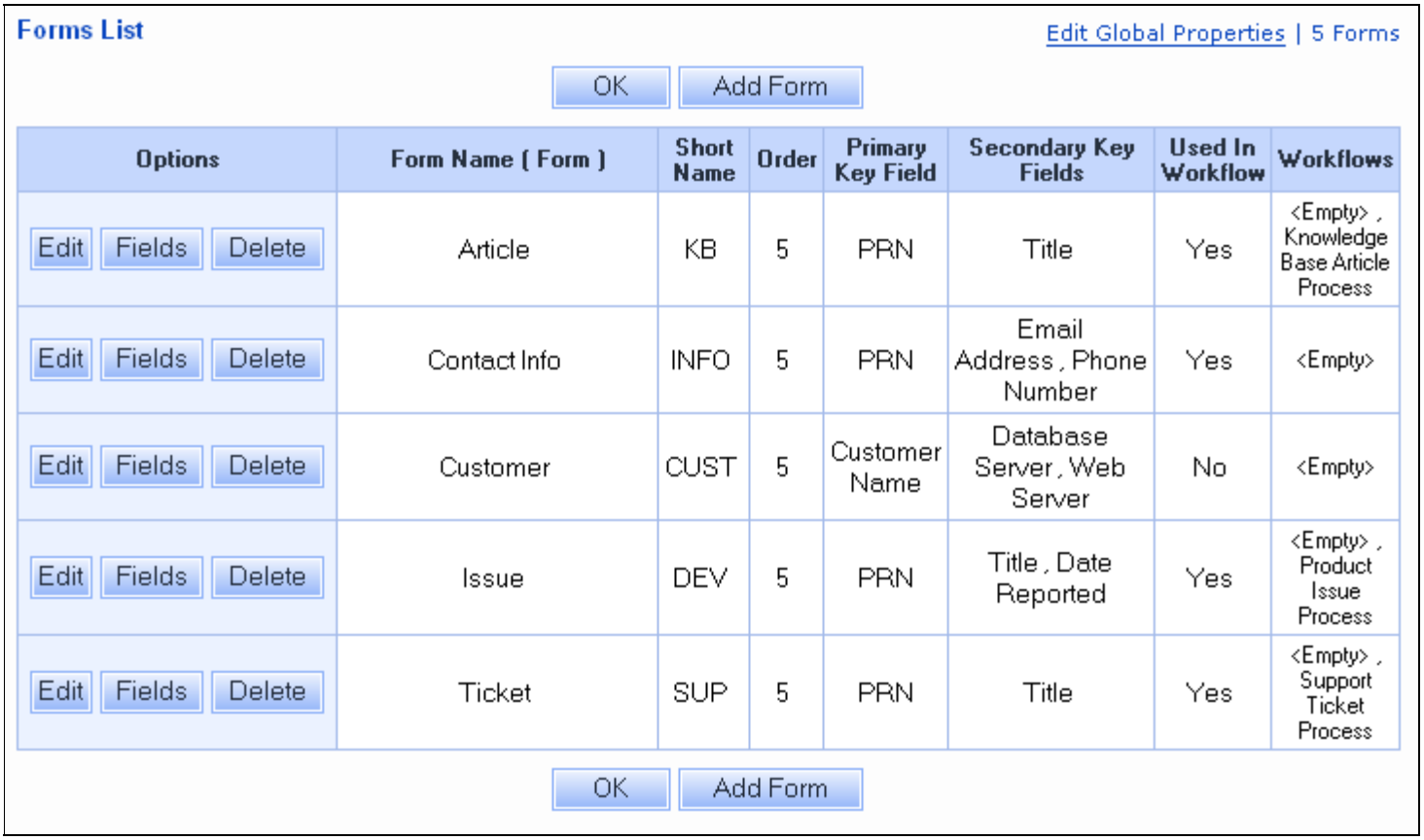
Each form can have its own set of fields. Fields can overlap in multiple forms (e.g. the bug and enhancement forms mentioned in example 1 above can have fields that are shared on both forms). Each form can be associated with one or more workflows or no workflow at all. For example, in example 1 above, you may wish to have a different workflow for bugs vs. enhancements. In example 2, support tickets have a workflow, but customer contacts entered into the workgroup do not follow a workflow.

A Default Form is created in each workgroup. The name of the default form depends on the template that was used to create the workgroup. For example, the Product Development template has the "Issue Form" created by default and the Help Desk template has the "Ticket Form" created by default. Information about the default settings in a particular template can be found in the template list in the Putting It All Together section.

If only one Form is defined in Tracker, users will not see the Form field on any of the pages (Add, Edit, Task, Query, Home, etc.) until additional forms are added to the workgroup. Only users that are members of the Admin group (or are members of a user group with the Admin privilege) will see the Form field in the Admin section.

The following sections explain how to manage forms in detail:

Forms - general operations such as adding, editing and deleting forms
Fields in a Form - how to configure which fields are available in each form and set their properties



Forms List

Edit Global Properties | 5 Forms

OK Add Form

Options	Form Name (Form)	Short Name	Order	Primary Key Field	Secondary Key Fields	Used In Workflow	Workflows
Edit Fields Delete	Article	KB	5	PRN	Title	Yes	<Empty>, Knowledge Base Article Process
Edit Fields Delete	Contact Info	INFO	5	PRN	Email Address, Phone Number	Yes	<Empty>
Edit Fields Delete	Customer	CUST	5	Customer Name	Database Server, Web Server	No	<Empty>
Edit Fields Delete	Issue	DEV	5	PRN	Title, Date Reported	Yes	<Empty>, Product Issue Process
Edit Fields Delete	Ticket	SUP	5	PRN	Title	Yes	<Empty>, Support Ticket Process

OK Add Form

Managing Forms

Multiple forms can be created and managed in the Forms section.

To manage forms:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link

Global Form Properties

Global Form Properties allow you to choose the name of the Form field and the Help Description displayed in Tracker pages such as Add, Submit, Edit and Task, Query, Home, etc. The Help Description is the text that appears when the user places the cursor over the Help Description icon (yellow question mark to the left of the field).

To set the properties of the Form field:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the Edit Global Properties link in the upper right corner
5. Enter a name in the Form Label field
6. Enter a description in the Help Description field
7. Click OK to save the changes

Adding a Form

To add a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the Add Form button
5. Enter a name for the form you are creating in the Name field.

   Enter a short name for the form you are creating in the Short Name field; this will be used to display the record number. For example, if you enter "BUG" as the short name for a form intended for reporting bugs, a record reported using this form will have the record number displayed as "BUG7" where BUG is the short name and 7 is the record number (PRN).

   If you are using a case-sensitive SQL Server or Oracle database, the Short Name will be case sensitive. For example, if you enter "BUG" as the short name for a form in a workgroup that uses a case-sensitive SQL Server or Oracle database, users will only be able to access the records using the short name exactly as it is entered (e.g. they can reach record 1 by typing in "BUG1", but will not be able to access the record when typing in "Bug1" or "bug1").

   You have the option to have one form that has an "empty" Short Name. When the Short Name is empty, you can access records created using this form by only referencing the PRN (for example, typing in "1" when prompted to select a PRN instead of having to enter the Short Name + PRN as in "BUG1").

   Enter a number for the Order of this form with respect to other forms. Forms with the same number will be ordered alphabetically.

   Enter any integer equal to or greater than "0" in the First Record Number field to be the number of the first record created in this workgroup. Each new record will be automatically assigned a number sequentially starting from the value listed for this preference. For example, if "BUG" is the Short Name of the form and "100" is entered for this preference, the number of the first record created will be "BUG100" and the number of the second record will be "BUG101". The default value for this preference is "1".

This value for this form can only be changed when there are no records present for this form in the workgroup. If you wish to change the value of this setting after records for this form have already been created, you must first delete all records that were added using this form, then change the value of the "First Record Number" option. To delete all records that were added using this form, refer to the instructions in section called Permanently Deleting Multiple Records.

Select a field to be the Primary Key Field field. Primary keys are used to link records to multiple forms. When linking a record to another form, the primary key is used to choose a set of records. For example, let's say you have 2 forms in your workgroup: one form for bugs / enhancement requests reported to the Product Development organization and another form for Support issues reported to the Support organization. There may be cases where you want to link a Support record to a bug/enhancement record. Let's say you selected PRN as the Primary Key Field for the bug/enhancement form. When searching for which bug/enhancement record to link to a Support record, the PRN (the field selected as the Primary Key) will be displayed to help you select the desired bug/enhancement record.

For Link fields, when PRN is selected as the Primary Key, the records will be sorted according to the numeric component of the PRN field (e.g. "1" and "2" will be used to sort the records "REC1" and "REC2", the "REC" part will be ignored in the sort order). If something other than PRN is selected as the primary key, the records will be sorted in alphabetical order based on the string (e.g. "1", "10", "2", "20", etc.).

Also when Link fields are available on a form, the fields that are selected as Primary and Secondary Key fields will not be subject to Field Visibility settings. In other words, if you have set a field such that it is not visible to certain user groups in certain areas (Add/Edit/Task pages, Query/Home reports, etc.), but the field is either a Primary or Secondary Key Field, the field will be visible to users when they use the Link field. To prevent users from seeing the field, you can either not use the field as a Primary or Secondary Key Field for the form or you can configure the Link field so that it is not visible to certain user groups using the information in the Field Visibility section.

If desired, select the PRN field, Status, Assigned To, Reported By or any Text field to be the Primary Key Field. Select "<None>" if a primary key field should not be applied to the form.

If desired, select fields to be Secondary Key Field 1 and Secondary Key Field 2 for this form. Secondary keys provide more information when linking records to multiple forms. Up to 2 Secondary keys can be selected for a form. For example, let's say you have 2 forms in your workgroup: one form for bugs / enhancement requests reported to the Product Development organization and another form for Support issues reported to the Support organization. There may be cases where you want to link a Support record to a bug/enhancement record. Let's say you selected PRN as the Primary Key Field and Title as a Secondary Key Field for the bug/enhancement form. When searching for which bug/enhancement record to link to a Support record, the PRN (the field selected as the Primary Key) and Title (Secondary Key) will be displayed to help you select the desired bug/enhancement record.

If desired, select a field for Secondary Key Field 1 or Secondary Key Field 2. Fields of the following types can be used as Secondary key fields: Assigned To, Reported By, Status, Text, Integer, Float, Date, Pulldown, RelNum, Url and YesNo. Select "<None>" if a secondary key field should not be applied to the form.

Select a project that will be associated with this form in the Project field. The projects available for selection are the projects that have been created in the Projects section. You can associate this form with additional projects at a later time using the steps in the Forms in a Project section.

Select "Yes" if the form should be used as part of one or more workflows in the Used in Workflow field. Select "No" if the form should not be used as part of any workflows. If you never intend to use a Workflow (states, transitions, automatic assignment and email notifications) with the form, select ?No?. Selecting No will set the visibility for system required fields (Product, Status, Reported By, Assignee) such that no groups besides Admin can see or access these fields. Select ?Yes? if you ever intend to use this form with a Workflow. A Workflow allows you to set up states, transitions, automatic assignment and email notifications when records are submitted using the form.

Select a workflow for this form in the Workflow field. A workflow can only be selected if "Yes" was selected for Used in Workflow. The workflows available for selection are the workflows that have been created in the Workflows section. You can associate this form with additional workflows at a later time using the steps in the Workflows section. If you do not wish to select an existing workflow (e.g. you plan to create one for this form at a later time), you can select ?Empty Workflow?. Empty Workflow is a Workflow that has only one state called ?Not Applicable?, has no transitions or email rules and has TBD as a state manager for the ?Not Applicable? state (the state manager cannot be changed). If you wish to create a new workflow for the form you are adding, select the "<Create New Workflow>" option.

6. Click Continue to proceed
7. Enter a number for the Project Form order field. This will be used to order the forms available in the Form field on the

Add and Submit pages. Forms with the same order number will be ordered alphabetically.

Select the user groups to which this form should be available in the Make Visible (Available) To These User Groups field. To select multiple user groups, hold down the Ctrl button on your keyboard while selecting user groups. To select all user groups, click on the All button to the right of the field. To de-select all user groups, click on the None button to the right of the field. The Admins user group is not available for selection because that user group is given visibility to all forms.

If you selected "<Create New Workflow>" for the Workflow field, enter a name for the new workflow in the Workflow Name field. Select the states that should be part of the new workflow in the Include These States field. To select multiple states, hold down the Ctrl button on your keyboard while clicking on the states.

Select a state group in the Form's Allowed Add States field. Allowed Add States are the group of states that will be available for selection in the Status field on the Add and Submit Pages for this combination of Project and Form (when the Status field is visible on those pages).

Select a state for the Form's Default Add State field. The Default Add State is the state selected in the Status field by default when records are added using this combination of Project and Form.

8. Click OK to save the new form
9. A confirmation page will be displayed. Click Manage Fields for this Form if you wish to set the fields for the newly added form or click OK to return to the Forms page.

Editing a Form

To edit a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the Edit button to the left of the form you wish to modify
5. Make any desired changes to the form's attributes (described in the adding a form section.
6. Click OK to save the changes

Deleting a Form

Before a form can be deleted, it must first be removed from any projects and workflows where it is in use (and, as a result, all records added with this form must also be removed).

To delete a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the Delete button to the left of the form you wish to delete
5. Click OK to confirm the operation. If the form is currently being used by any projects, you will be prompted to remove the form from specific projects.
6. Click on the Admin icon
7. Click on the Projects link
8. Select a project in the Projects pulldown at the top
9. Click on the Manage link to the right of the Forms section
10. Click on the form in the "Forms In Use" column and click on the Remove button. Click OK to confirm the operation. A warning will be displayed to note that removing the form from the project will remove all its records (with related information such as History, Attachments, Record Security, Source Code Files, Alerts, Discussion Threads, etc.) as well as permanently remove any related State Manager and Incoming Email settings. Click OK to remove the form from the project. Click OK again when the confirmation is displayed.
11. Click on the Admin icon
12. Click on the Forms link

13. Check whether the form has any workflows listed in the Workflows column. If there are any workflows listed, you will need to remove the form from those workflows before you can delete it
14. Click on the Admin icon
15. Click on the Workflows link
16. Select a workflow in the Workflows pulldown
17. Click on the Manage link to the right of the Forms section
18. If the form is not the only form associated with the workflow, click on the form and click on the Remove and proceed to the next step. Click OK to confirm the operation. A warning will be displayed to note that remove the form from the workflow will permanently remove all its related Transitions, Default Add State Settings, Email Common Content, Alerts and Outgoing Email Rules. Click OK to proceed. Click OK when the confirmation page is displayed

    If the form is the only form associated with this workflow, you will need to delete the workflow in order to be able to delete the form (as a workflow cannot exist without at least one form). To delete the workflow, click on the OK button to return to the Workflow page. Click on the Delete button to the right of the Workflows pulldown and click OK to confirm the operation. A warning will be displayed to note that deleting the workflow will permanently remove all its related Transitions, Default Add State Settings, Email Common Content, Alerts and Outgoing Email Rules. Click OK to proceed. Click OK when the confirmation page is displayed. Skip to the next step.

19. Click on the Admin icon
20. Click on the Forms link
21. Click on the Delete button to the left of the form you wish to delete
22. Click OK to confirm the operation. Click OK again to confirm the operation
23. Click OK when the confirmation is displayed

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NetResults Tracker Help

Fields in a Form

You can select which fields are available on each form

To set the fields for a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the Fields button to the left of the form to which you want to add fields
5. The Fields Used By This Form column contains any fields that are currently used by the form. The fields PRN, Status, Reported By, Assigned To, Deleted? and Product are used by every form and cannot be removed. Fields marked with a * are fields that use global properties and can be managed in the Fields section. If you wish to change a field such that it no longer uses global properties, edit the field's properties.

   The fields in the Available Global Fields column are fields that are not currently used by the form.

   To add a field to the form, click on the field in the Available Global Fields column, then click on the Add button. To remove a field so that it is no longer used by the form, click on the field in the Fields Used By This Form column, then click on the Remove button.

   A new field can be added by clicking on the Add Global Field button. Review the Fields Help section for details about adding a new field.

6. Click OK to return to the Forms page.

Removing and Re-adding Fields to a Form

When a field is removed from a form, all values in that field in the records created using that form will be removed. If later the field is re-added to the form, the field's value in all records created using the form will be set to its default (the old values from before the field was removed will not be preserved). Values of the field in records created using other forms will not be affected. Please review the information about the effects of adding/removing fields on a form in the Fields and Forms section.

Add a User Pulldown to a Form with Existing Records

When a pulldown configured as a user pulldown is added to a form with existing records, you will be prompted to set the value of the user pulldown in the existing records. Please review the Set User Pulldown Values for Existing Records section of the Fields and Forms section for details about the available options.

Editing Field Properties

The fields that are used by a form can have Global Field Properties or be modified such that they have different properties when the field appears in each form. Global Field Properties are the properties set for the field in the Fields section.

To edit a field's properties from the Fields section of a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the Fields button to the left of the form to which you want to edit fields
5. Click on a field in the Fields Used By This Form column, then click on the Edit button
6. The properties of the selected field will be displayed. When the box for the property Use Global Field Properties is checked, this indicates that the properties set for the field in the Fields section will be applied to this field on all forms. Unchecking the box for the Use Global Fields Properties option will allow you to set the field's properties for the selected form. An explanation of the available properties for the fields by field type can be found in the Fields Help section.
7. Click OK to save any changes to the field properties

NetResults Tracker Help

Fields

Overview

Tracker allows you to customize forms to suit your needs by adding and removing fields as necessary. In addition, you can specify the name displayed for all fields and other properties of each field such as whether a field is required or not and on which pages the field will appear.

The following sections explain how to manage fields:

Global Field List - information about the global list of fields and general operations such as adding, editing and deleting fields
Field Types and Properties - details of each field type that can be created and the properties that can be set for each
Field Visibility - how to configure which user groups can access each field in the various pages in Tracker
Fields and Forms - how to configure on which forms each field will appear and the properties it exhibits on a given form
Customizing Menu Items - how to define the option menu items within a pulldown or release number field
Customizing Pulldown Menu Dependencies - how to configure a parent-child relationships between pulldown fields

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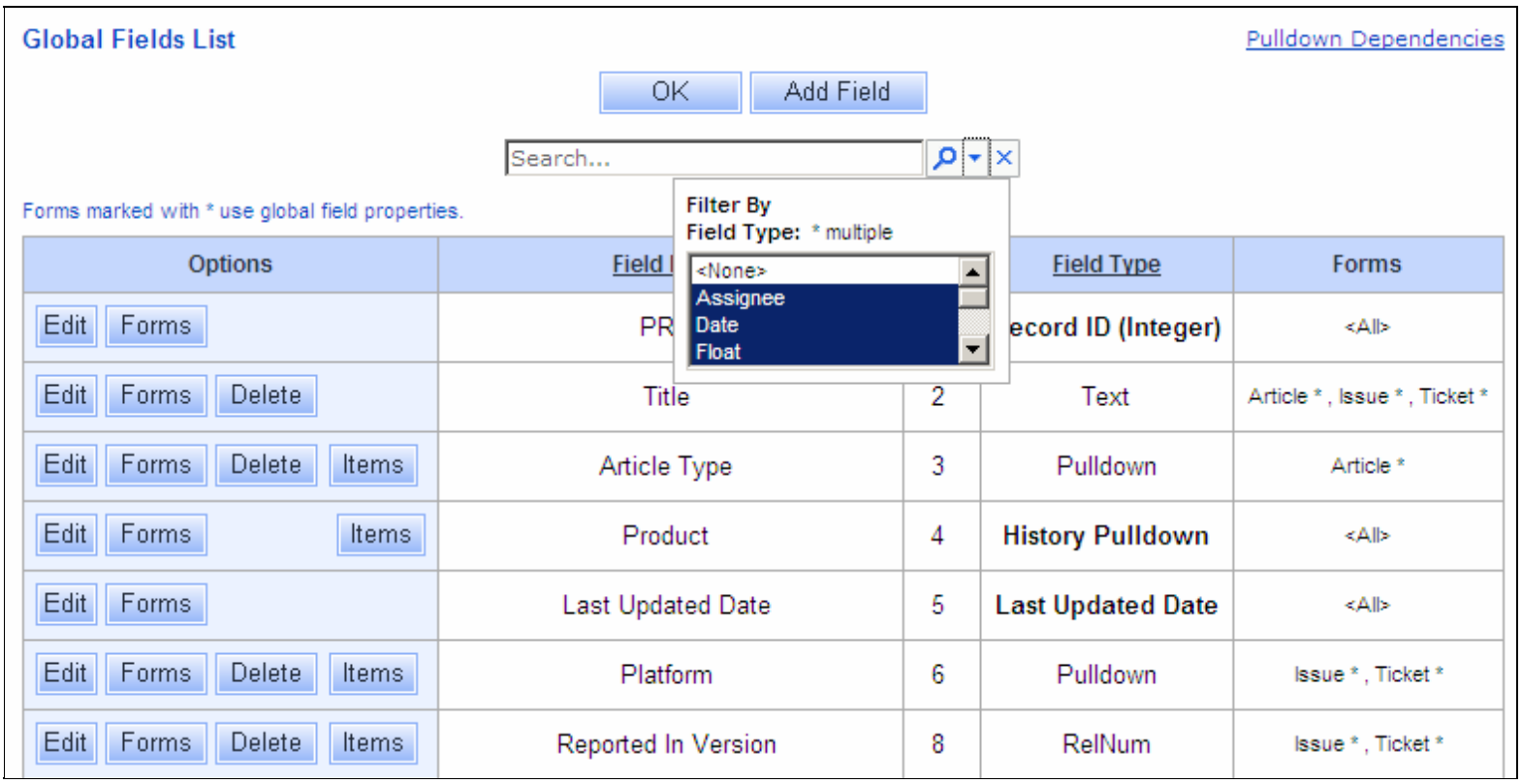
Global Field List

A list of the global fields in the workgroup is available in the Fields section. To get to the list:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link

The list provides information such as Field Label (the name of the field), Order (the order with respect to other global fields), Field Type and the forms on which the field appears. Fields listed in bold are system required fields that cannot be deleted will be present on all forms. By default the fields are sorted by the Order field. The fields can be sorted by the Field Label, Order or Field Type columns. To sort the list by one of these fields, click on the column heading to sort the fields in ascending order. Click on the column heading again to sort them in descending order.



Field Search

A search function is available in the Fields section to help you quickly locate a field or set of fields that match certain criteria.

To search for a field or set of fields:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Type in any desired criteria into the Search... box
5. If you wish to filter the search so that only fields of a certain type(s) are included in the search results, click on the dropdown icon to select by which fields you wish to filter. Selecting "<None>" will include all field types in the search results (this is the default selection). More information about the different field types can be found in the Field Types section. To make multiple selections, hold down the Ctrl button on your keyboard as you click on the field types you wish to select.
6. Click on the Search icon to run the search

Click on the remove icon to remove the search criteria and reset to the defaults (no key word(s) or phrase in the Search... box, "<None> selected).

Pulldown Dependencies

A list of relationships between pulldowns can be accessed by clicking on the Pulldown Dependencies link in the upper right corner of the Fields page.

Adding Fields

It is often a good idea to create a backup of your database before making major changes such as modifying your fields as some modifications are irreversible other than by restoring backup copy of your database.

To add a new field:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Add Field button
5. Select the field type you wish to add, then click Continue
6. Make selections for the field's properties The properties available for each field type are described in the Field Types section.
7. Click OK to save the field or click Continue if you are adding a Link type field. If you are adding a Link type field, make selections for the Reverse Link Field properties, then click OK to proceed
8. A confirmation page will be displayed. Click on the OK button to return to the Fields section or click the Add Another Global Field button to add another field or click Manage Forms for this Field to select which forms in which the field will be included.

Editing Field Properties

The properties set for a field when created or edited in the Fields section are known as Global Field Properties. When a field is added to a form, the field can use its global field properties or the field can be modified such that it has different properties when it is used by each form. For example, you may want to configure a field such that it is required on the Add page on one form, but not required on the Add page for another form.

To edit a field's properties from the Set Forms section:

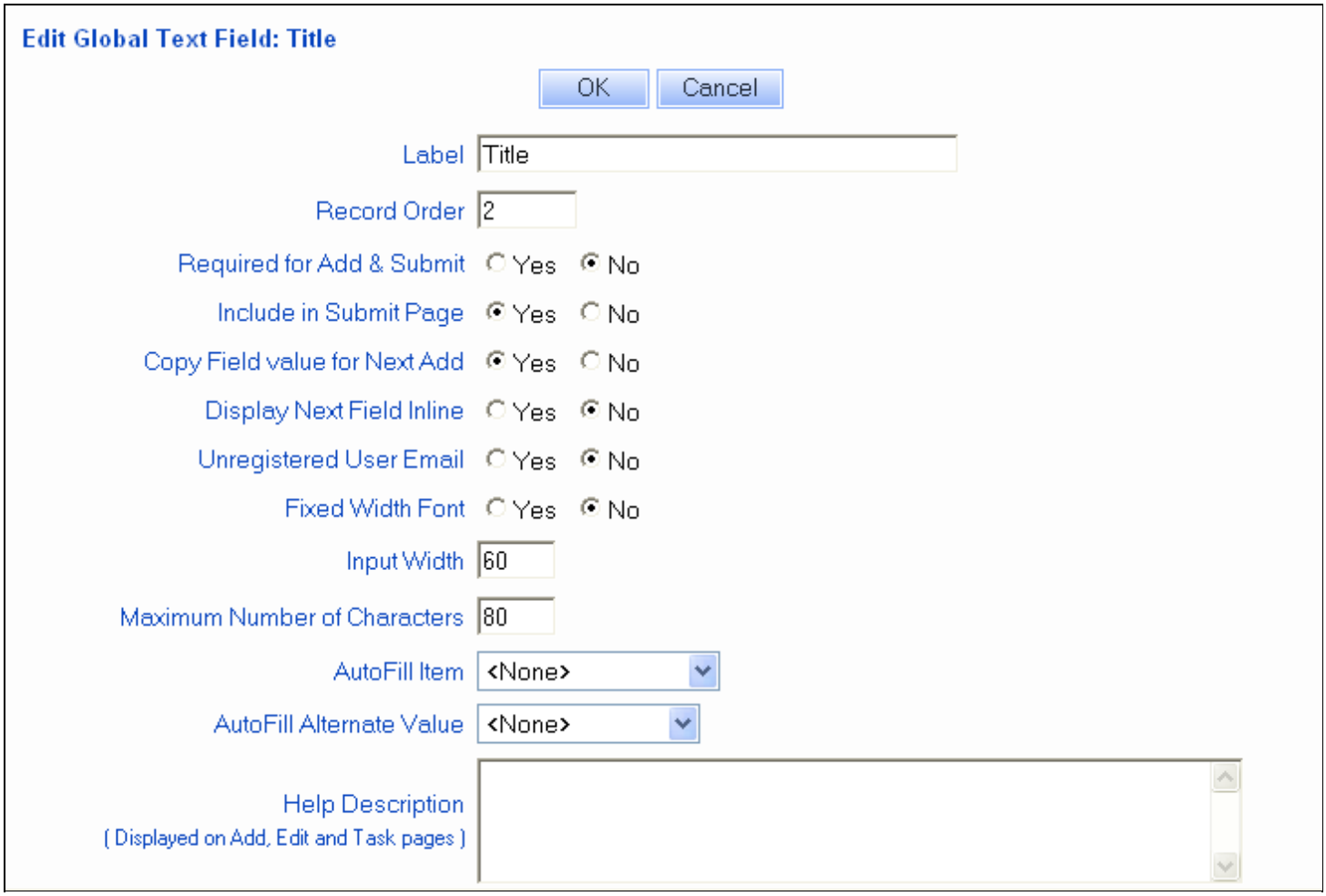
1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link

4. Click on the Forms button to the left of the field
5. The Forms Using This Field column displays any forms which include the selected field. Forms marked with a "*" indicate that the form uses the global field properties for the field. Click on a form in the Forms Using This Field column, then click on the Edit button.
6. The properties of the selected field will be displayed. When the box for the property Use Global Field Properties is checked, this indicates that the properties set for the field in the Fields section will be applied to this field on the selected form. Unchecking the box for the Use Global Fields Properties option will allow you to set the field's properties for the selected form. An explanation of the available properties for the fields by field type can be found in the Field Types section.
7. Click OK to save any changes to the field properties

Editing Field Attributes

To edit the attributes for a field:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Edit button to the left of the field you wish to modify
5. Make changes to the attributes (details of the available options are explained below)
6. Click on the OK button to save your changes



Editing Items for a Field

The Assigned To, Reported By, Status fields as well as the Pulldown and Release Number fields have an Items button available for modifying the options available in those fields. Details on editing items for Pulldown and Release Number fields are available in the Customizing Menu Items section.

The Items button for the Assigned To field will display the User Accounts section. Items listed in the Assigned To field are the users listed in the User Accounts section. For a user to be available in the Assigned To field on the Add Page, the user must be a member of a user group with the privilege "Can Be Assignee For Add". For a user to be available in the Assigned To field on the Edit Page, the user must be a member of a user group with the privilege "Can Be Assignee For Edit".

The Items button for the Reported By field will display the User Accounts section. Items listed in the Reported By field are the users listed in the User Accounts section.

The Items button for the Status field will display the Global States List. Items listed in the Status field are the states created in the Global States List.

Deleting Fields

Before you can delete a field, you must first remove it from any forms in which it is being used. Please review the Removing and Re-adding Fields to a Form section for background and instructions for removing a field from forms and subsequently deleting it from the workgroup.

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NetResults Tracker Help

Field Types and Properties

Field Types

Tracker has the following field types available. Click on the field type to see the description and the global field properties that can be set for each field type. Fields marked with * are system required fields that cannot be deleted and will be present in all forms. Only a limited number of fields can be used per form (see each field type below for the allowed number).

- Assignee *
- Date and Time
- Deleted *
- Float
- History *
- Integer
- Last Updated Date *
- Link
- PRN *
- Pulldown
- Release Number
- Reporter *
- Status *
- Text
- TextArea
- Url
- YesNo

Assignee

One Assignee field is available. This field cannot be deleted. Non-restricted users present in the User Administration section can be displayed as options in this field. Which users are available in this field when performing various operations depend on the workflow settings and user group privileges.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all of the fields on a form have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy button" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Date and Time

A string of the format MM/DD/YYYY HH:MM:SS AM/PM (US Default). Other formats can be used based on the end user's Preferences. The default value for this field type is controlled by the "Initialize On Add" option below. When using Access database, a maximum of 10 Date fields can be configured per form. When using SQL Server or Oracle database, a maximum of 40 Date fields can be configured per form.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Required for Add & Submit
Specifies whether the field is required to be modified by the user when it appears on the Add or Submit pages. For Date fields this means that a blank value will not be allowed. If the field is configured such that the Initialize on Add option is set to "Yes" and Required for Add & Submit set to "Yes", the user will not be forced to enter in a date value because the field has been initialized with a value.

You may wish to highlight required fields on the Add or Submit pages with a particular color, bold type or with a special character (e.g. "*"). This can be done by configuring the Required Field Highlights option in the General Preferences section. The fields "Title" and "Product" are set as Required in the Add Page Sample.

When this attribute is set to "Yes", the field visibility set for this field must be set such that the field is visible on the Add page to at least one user group.

Initialize on Add
Specifies that if the date field appears on the Add Page, it should be automatically initialized with the current date/time when the Add icon is clicked to display the Add Page. If the field is not displayed on the Add Page, the date field will be automatically initialized with the current date/time when the Add button is clicked to save the new record. Fields with this attribute set to Yes will also be initialized if Add Similar operation is used to create a new record.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy button" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. In the Query Page, Date fields will always be displayed on a separate line because of the additional options available for selecting date criteria. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Deleted

One Deleted (YesNo) type field called "Deleted" is available and it cannot be deleted. This field can be used to mark records as deleted by setting its value to "Yes" (soft delete).

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add

When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy button" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Display Style
This field determines how the choices within the field are displayed and has different options depending on the field type. For a Pulldown type field, the choices are "Pulldown", "Radio" and "Vertical Radio". For a YesNo type field, the choices are "Pulldown" and "Checkbox".

Default Value
Specifies the default value for a YesNo type field. The values that can be selected are "Yes" or "No".

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Float

A floating point number field that accepts up to 10 characters. This field type will accept positive and negative values. When using Access database, a maximum of 5 Float fields can be configured per form. When using SQL Server or Oracle database, a maximum of 20 Float fields can be configured per form.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Required for Add & Submit
Specifies whether the field is required to be modified by the user when it appears on the Add or Submit pages. For Float fields this means that

a blank value will not be allowed.

You may wish to highlight required fields on the Add or Submit pages with a particular color, bold type or with a special character (e.g. "*"). This can be done by configuring the Required Field Highlights option in the General Preferences section. The fields "Title" and "Product" are set as Required in the Add Page Sample.

When this attribute is set to "Yes", the field visibility set for this field must be set such that the field is visible on the Add page to at least one user group.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Initial Value
An initial value must be entered for a Float field. The default initial value is "0.0". The value entered will be displayed by default on the Add and Submit pages and can be changed by the user. The value entered must include a decimal point (for example "0.0") and it can be positive or negative. If the field is not visible on the Add Page, the Initial Value will still be saved in the field. The same is true if the field is not visible on the Submit Page (Include in Submit Page property is set to "No"). If the field is required on the Add or Submit pages (Required for Add & Submit is set to "Yes"), the user will be prompted to change the value of the field to something other than the Initial Value.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

History

One History Pulldown type field, which is called "Product" in some templates and may have another name in others, is available. This field is a pulldown field and it cannot be deleted. This is a key field since the contents of this field are included in the Record History. You should make this field something that is important since its value can be tracked in the History. Using this field for the "Based On" property for workflow settings, email rules and alerts would be a good choice so that you can see why/how a record was routed a certain way using the information in the history.

The option menu items available in the this field can be configured using the information in the Customizing Menu Items section.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

User Pulldown
Select "Yes" to configure this field as a User Pulldown. This type of field allows the members of a particular user group to be automatically configured as the pulldown's option menu items. For example, in a Product or Web Site Development environment, you may wish to note which user fixed an issue and have that saved in the issue for ease of generating reports, such as the number of issues fixed by Developer One last month. Or, you may wish to choose which user will be assigned to an issue before the issue reaches that step of the workflow.

User Group
This option will only be available when the User Pulldown option is set to "Yes". Select the user group which contains the users that should be displayed as option menu items in this pulldown. The members of the selected user group will automatically be configured as the items for this pulldown.

If the user group is changed at a later time, any items that were configured for this pulldown (users that were members of the previously selected group) will be marked as obsolete items. The users that are members of the newly selected group will be automatically configured as the items for this pulldown.

Display Style
This field determines how the choices within the field are displayed and has different options depending on the field type. The choices are "Pulldown", "Radio", "Vertical Radio" and "Search Pulldown". The "Product" field is set to use "Search Pulldown", "Platform" is set to use "Vertical Radio" and "Severity" is set to use "Pulldown" in the Add Page Sample.

The "Search Pulldown" style allows users to type in key words to find any option menu items that match the criteria. This style is recommended if you anticipate having a large number of option menu items in the field. When there is a large number of option menu items in the field and the display style is something other than "Search Pulldown", all of the option menu items are displayed in the field, which can impact performance as the browser loads all of the available option menu items. With the "Search Pulldown" style selected, only the items that match a search are loaded, minimizing the time needed for the browser to render the field.

Parent Pulldown
This option allows you to select a pulldown field to be a parent pulldown (in a Dependent Pulldowns relationship) to the field you are creating. Selecting "<No Pulldown>" for this option indicates that this field should not have a parent pulldown. User Pulldowns cannot have a Parent Pulldown configured.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section.

Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Integer

An integer numeric value. This field holds up to 10 characters or a maximum value of 2147483647. This field type will accept positive and negative values. When using Access database, a maximum of 5 Integer fields can be configured per form. When using SQL Server or Oracle database, a maximum of 20 Integer fields can be configured per form.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Required for Add & Submit
Specifies whether the field is required to be modified by the user when it appears on the Add or Submit pages. For Integer fields this means that a blank value will not be allowed.

You may wish to highlight required fields on the Add or Submit pages with a particular color, bold type or with a special character (e.g. "*"). This can be done by configuring the Required Field Highlights option in the General Preferences section. The fields "Title" and "Product" are set as Required in the Add Page Sample.

When this attribute is set to "Yes", the field visibility set for this field must be set such that the field is visible on the Add page to at least one user group.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in

the Add Page Sample.

Initial Value
An initial value must be entered for a Integer field. The default initial value is "0". The value entered will be displayed by default on the Add and Submit pages and can be changed by the user. The value entered must be an integer and can be positive or negative. If the field is not visible on the Add Page, the Initial Value will still be saved in the field. The same is true if the field is not visible on the Submit Page (Include in Submit Page property is set to "No"). If the field is required on the Add or Submit pages (Required for Add & Submit is set to "Yes"), the user will be prompted to change the value of the field to something other than the Initial Value.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Last Updated Date

One Last Updated Date field is available. This field tracks the last time a record was modified. For example, it will be updated with the date and time when the record is created via the Add or Submit pages or via email. It will then be updated whenever any other operation modifies the record resulting in a history entry such as the Task, Edit, Edit Results, Discussion, Attachment and Admin operations. The value of this field in a given record cannot be manually modified and this field cannot be deleted.

Label
The name displayed for this field.

API Field Name
The API Field Name is not available as data cannot be imported into this field.

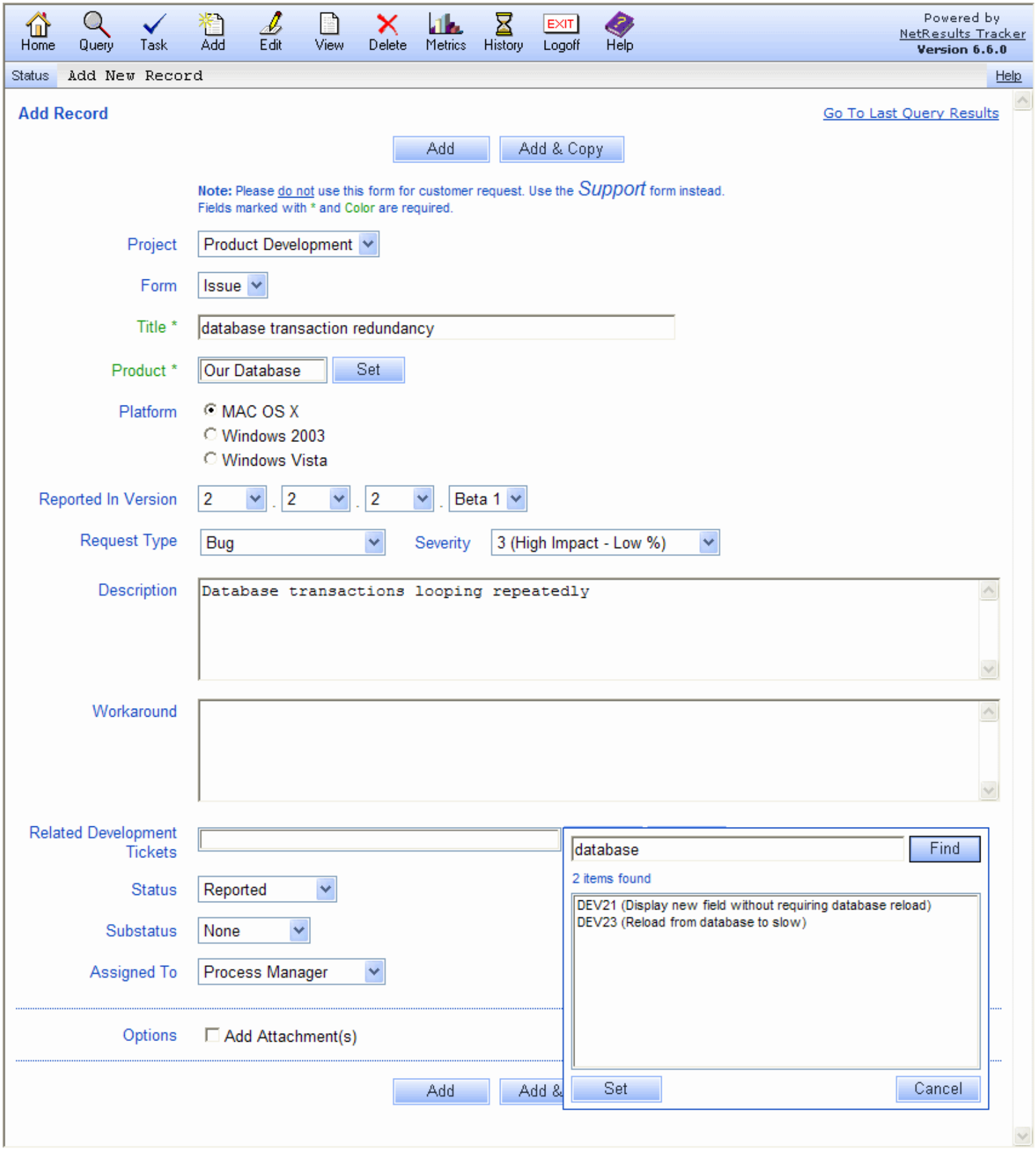
Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the View page with a value of 5 will be listed before a field with a value of 100.

View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Link

Link fields allow you to cross-reference records. For example, you could create a link field called "Related Records" that allows you to associate other records to a particular record (PRN) (e.g. if there are multiple records that report the same issue). Another way to use link fields is when you are using multiple forms. For example, if you have a form for product development issues and another form for support tickets, you can use a link field to reflect support tickets related to a particular product development issue and vice versa. The sample below shows a link field called "Related Support Tickets" to link Support tickets to Product Development Issues. With link fields a search can be done to narrow down the list of possible tickets to be linked. The list in the sample below are the Support Tickets with chart in the Title where Title and Product are the Secondary Key Fields for the form (as set in the form's properties). When using Access database, a maximum of 30 Link fields can be configured per form. When using SQL Server or Oracle database, a maximum of 40 Link fields can be configured per form.



Records can be added to a Link Field on the Add, Edit and Submit pages as well as during the Task operation. Link Fields can be viewed on the View Page, Email Notifications, Query and Home Page results as well as the Knowledge Base. Link Fields cannot be included as part of Query criteria, cannot be changed while editing a set of query results and cannot be used as a sort field for Query results. When searching for records in a Link Field, the key fields defined for the form are the fields you can search within to find potential matches. You can edit a form to define the key fields at any time to control which fields can be searched when you try to locate records using the Link Field search.

If Record Visibility is enabled, it will be applied when a search for or viewing items in a Link Field.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Required for Add & Submit
Specifies whether the field is required to be modified by the user when it appears on the Add or Submit pages. For Link fields this means that at least one item must be selected in the field.

You may wish to highlight required fields on the Add or Submit pages with a particular color, bold type or with a special character (e.g. "*"). This can be done by configuring the Required Field Highlights option in the General Preferences section. The fields "Title" and "Product" are set as Required in the Add Page Sample.

When this attribute is set to "Yes", the field visibility set for this field must be set such that the field is visible on the Add page to at least one user group.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

To Forms
Select the form(s) to which a PRN can be linked. The form selected will determine which items can be selected as links for a PRN on the Add, Edit and Task pages.

Maximum Allowed Link Items
Enter a number to determine the maximum number of items that can be linked to a PRN. Enter "0" to allow unlimited items to be linked. The value entered for this property will be displayed as "Max" below the Set and Remove buttons when the Link Field is displayed on the Add, Edit, Task and Submit pages.

Maximum Link Items Displayed
Enter a positive number to determine the maximum number of items (records) to be displayed when searching for possible items to link to a record. If a search returns more items than the maximum number entered for this option, the search box will display "X items found, first Y items displayed" where X is the actual number of items that matched the search (and X is greater than the maximum number of link items entered for this option) and Y is the maximum number of link items entered for this option.

Maximum Display Height in Rows
Enter a number between 1 and 50 to determine the height of the Link Field when it is displayed on the Add, Edit, Task and Submit pages. For example, if you enter "2" for this property, the Link Field will be 2 rows high when it is displayed on the Add, Edit, Task and Submit pages. This value will be ignored if it is more than the number entered for Maximum Allowed Link Items property.

Include Link Items From
This option determines whether the available items to be linked to a record should be from any project or should be limited to only those items within the same project selected for a record. Select "All Projects" to allow any item to be linked or select "Same Project" to limit the list of available items to only those that belong to the same project selected for the record.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

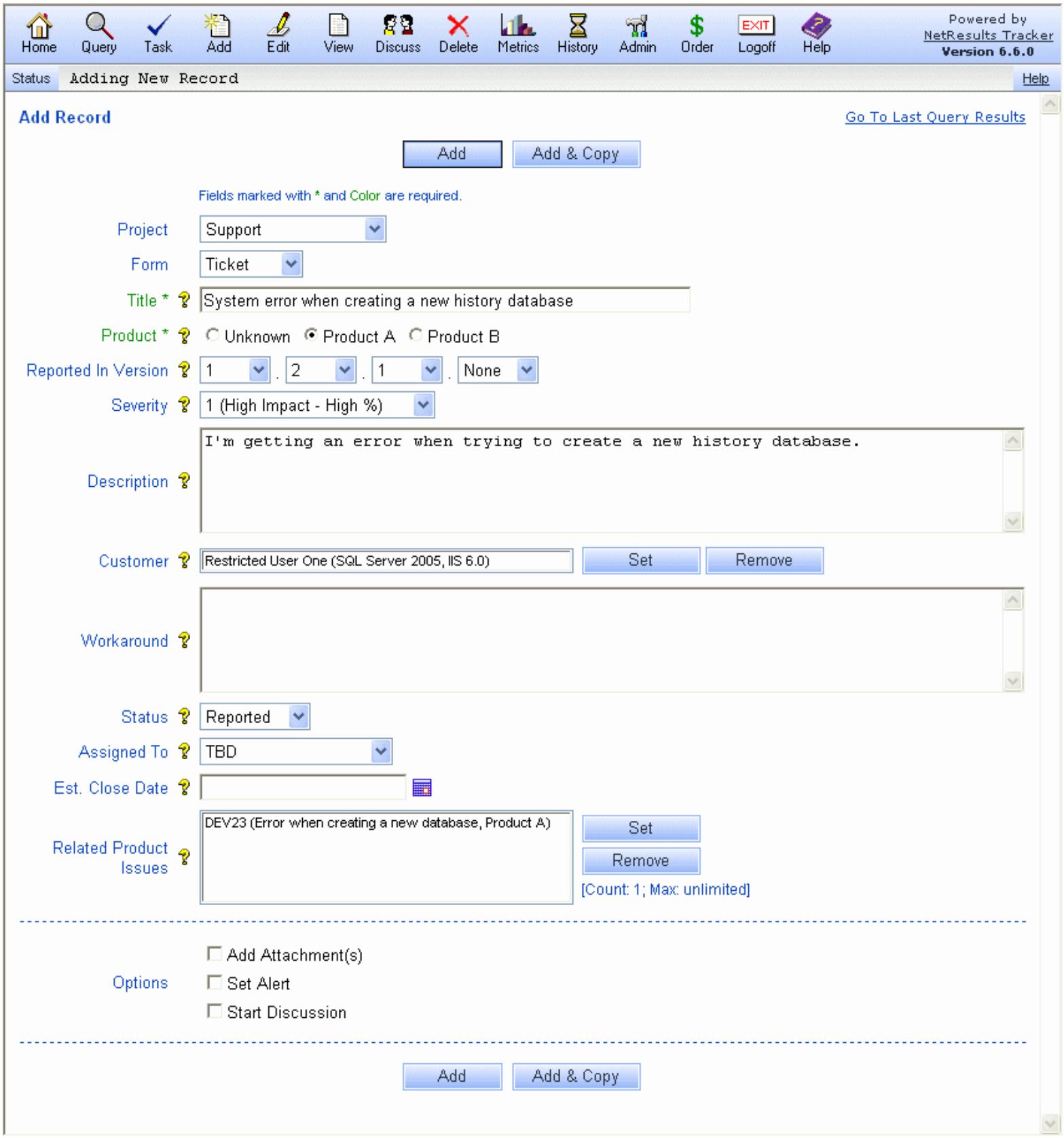
You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility and the Link Fields and Field Visibility sections for more information about configuring these options.

Return to Field Types List

Reverse Link Properties

After making selections, click on the Continue button to make selections for the Reverse Link Properties of the Link field. A reverse link is the link field that will be available in the form(s) selected in the To Forms property of the Link Field you created. Using the Link Sample, the Link Field is "Related Support Tickets" and is displayed on the form for submitting development issues. The Reverse Link is "Related Product Issues" and is displayed on the form for submitting support tickets as shown in the sample below.



Label
The name displayed for the reverse link field (e.g. the field available on the form(s) selected in the To Form property of the Link Field).

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin

2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Show this Reverse Link
Select whether the reverse link should be available on the form(s) selected in the To Form property of the Link Field.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Required for Add & Submit
Specifies whether the field is required to be modified by the user when it appears on the Add or Submit pages. For Reverse Link fields this means that at least one item (PRN) must be selected in the field.

You may wish to highlight required fields on the Add or Submit pages with a particular color, bold type or with a special character (e.g. "*"). This can be done by configuring the Required Field Highlights option in the General Preferences section. The fields "Title" and "Product" are set as Required in the Add Page Sample.

When this attribute is set to "Yes", the field visibility set for this field must be set such that the field is visible on the Add page to at least one user group.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

From Forms
This shows the form(s) in which the reverse link will be available.

Allow Link Items to be Set
Select "Yes" if link items can be selected for the reverse link field (e.g. can link items be added to the Support ticket displayed in the example above). If you wish for the reverse link to be read only (no link items can be set using the reverse link field), set this to "No". When this option is set to "No", the Edit Page (Update) visibility is automatically set to "<No Group>".

Maximum Link Items Displayed
This option will only be available if the Allow Link Items to be Set option is set to "Yes". Enter a positive number to determine the maximum number of items to be displayed when searching for possible items to link to a PRN. If a search returns more items than the maximum number entered for this option, the search box will display "X items found, first Y items displayed" where X is the actual number of items that matched the search (and X is greater than the maximum number of link items entered for this option) and Y is the maximum number of link items entered for this option.

Maximum Display Height in Rows
This option will only be available if the Allow Link Items to be Set option is set to "Yes". Enter a number between 1 and 50 to determine the height of the Link Field when it is displayed on the Add, Edit, Task and Submit pages. For example, if you enter "2" for this property, the Link Field will be 2 rows high when it is displayed on the Add, Edit, Task and Submit pages.

Include Link Items From
This option determines whether the available items to be linked to a record should be from any project or should be limited to only those items within the same project selected for a record. Select "All Projects" to allow any item to be linked or select "Same Project" to limit the list of available items to only those that belong to the same project selected for the record.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field

Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility and the Link Fields and Field Visibility sections for more information about configuring these options.

Return to Field Types List

PRN

One Record ID (Integer) type field called "PRN" is available and it cannot be deleted. This field is the unique numerical identifier for each record in the database.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Return to Field Types List

Pulldown

A pulldown menu. You can customize the style (pulldown, radio, vertical radio). The option menu items and default item available in a Pulldown field can be configured using the information in the Customizing Menu Items section. When using Access database, a maximum of 40 Pulldown fields can be configured per form. When using SQL Server or Oracle database, a maximum of 60 Pulldown fields can be configured per form.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Required for Add & Submit
Specifies whether the field is required to be modified by the user when it appears on the Add or Submit pages. For pulldown fields, this means that the user must select a value other than the default value displayed on the form. You may wish to define the first element of a required pulldown with a value like "Please Select A Value" to indicate to the user that a non-default value must be selected before saving the new record.

You may wish to highlight required fields on the Add or Submit pages with a particular color, bold type or with a special character (e.g. "*"). This can be done by configuring the Required Field Highlights option in the General Preferences section. The fields "Title" and "Product" are set as Required in the Add Page Sample.

When this attribute is set to "Yes", the field visibility set for this field must be set such that the field is visible on the Add page to at least one user group.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

User Pulldown
Select "Yes" to configure this field as a User Pulldown. This type of field allows the members of a particular user group to be automatically configured as the pulldown's option menu items. For example, in a Product or Web Site Development environment, you may wish to note which user fixed an issue and have that saved in the issue for ease of generating reports, such as the number of issues fixed by Developer One last month. Or, you may wish to choose which user will be assigned to an issue before the issue reaches that step of the workflow.

User Group
This option will only be available when the User Pulldown option is set to "Yes". Select the user group which contains the users that should be displayed as option menu items in this pulldown. The members of the selected user group will automatically be configured as the items for this pulldown.

If the user group is changed at a later time, any items that were configured for this pulldown (users that were members of the previously selected group) will be marked as obsolete items. The users that are members of the newly selected group will be automatically configured as the items for this pulldown.

Display Style
This field determines how the choices within the field are displayed and has different options depending on the field type. The choices are "Pulldown", "Radio", "Vertical Radio" and "Search Pulldown". The "Product" field is set to use "Search Pulldown", "Platform" is set to use "Vertical Radio" and "Severity" is set to use "Pulldown" in the Add Page Sample.

The "Search Pulldown" style allows users to type in key words to find any option menu items that match the criteria. This style is recommended if you anticipate having a large number of option menu items in the field. When there is a large number of option menu items in the field and

the display style is something other than "Search Pulldown", all of the option menu items are displayed in the field, which can impact performance as the browser loads all of the available option menu items. With the "Search Pulldown" style selected, only the items that match a search are loaded, minimizing the time needed for the browser to render the field.

Parent Pulldown
This option allows you to select a pulldown field to be a parent pulldown (in a Dependent Pulldowns relationship) to the field you are creating. Selecting "<No Pulldown>" for this option indicates that this field should not have a parent pulldown. This option is only available for Pulldown type fields.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Reported By

One Reporter field is available. This field cannot be deleted. All users present in the User Administration section are displayed as options in this field. "Unregistered User" is selected in this field when a record is reported via the Submit Page or Email.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page. Since the Reported By field is always set to "Unregistered User" for records added via the Submit Page, this option is disabled and always set to "No".

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all of the fields on a form have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is

determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Release Number

A combination of four pulldown menus. You can customize all values in the menu using the information in the Customizing Menu Items section. The default value for this field is determined in the Customizing Menu Items section. A maximum of 5 Release Number fields can be configured per form.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Help Description

Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Status

One Status type field is available. This field cannot be deleted. States created in the Workflows section are displayed in this field. Which states are available in this field when performing various operations depend on the workflow settings.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Include in Submit Page
Specifies whether the field should be presented on the Submit via Web form (also known as the Submit Page).

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Text

A text string up to 80 characters for Access database or 160 characters for SQL Server or Oracle database. By default, this field is blank unless Autofill is enabled or an initial value is defined. When using Access database, a maximum of 20 Text fields can be configured per form. When using SQL Server or Oracle database, a maximum of 40 Text fields can be configured per form.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Required for Add & Submit
Specifies whether the field is required to be modified by the user when it appears on the Add or Submit pages. For Text fields this means that a blank value will not be allowed.

You may wish to highlight required fields on the Add or Submit pages with a particular color, bold type or with a special character (e.g. "*"). This can be done by configuring the Required Field Highlights option in the General Preferences section. The fields "Title" and "Product" are set as Required in the Add Page Sample.

When this attribute is set to "Yes", the field visibility set for this field must be set such that the field is visible on the Add page to at least one user group.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Unregistered User Email

Specifies whether a Text type field will be used to collect the email address of an unregistered user. Only one Text type field can have this attribute set to "Yes" per workgroup. This option allows email notification messages to be sent automatically to users who have submitted issues from outside of Tracker using the Submit Page or Submit via Email features.

When this feature is set to "Yes" an option to Validate User Email Address will appear. If the option for Validate User Email Address is set to "Yes" the information collected in this field on the Add, Edit, Task and Submit pages will be checked to ensure that it is in the form of a standard email address.

If you are using the Submit Page, also set the option Include in Submit Page to "Yes" for the field you have designated as the Unregistered User Email so the end users can enter their email address on the form when submitting a record.

Fixed Width Font

This option determines whether the data entered into a Text type field will be entered using a fixed width font. Selecting "Yes" will use a fixed width font such that each character is displayed with a uniform width. Selecting "No" will not use a fixed width font (characters have varying widths).

Input Width

Enter the number of characters to be used as the display width for Text type fields. This affects the width of the field on Add, Edit, Task, View and Query pages. This does not affect the maximum number of characters that can be entered into the field. The minimum value for this option is 1 and the maximum value for this option is 80 for Access database and 160 for SQL Server or Oracle database.

Maximum Number of Characters

This option determines the maximum number of characters that can be entered into the field. For Text fields, this can be set to a maximum of 80 characters for Access database or 160 for SQL Server or Oracle database. When the Autofill option is set to something other than "<None>", this property will be set to 80 characters for Access database and 160 characters for SQL Server or Oracle database and cannot be changed.

AutoFill Item

The AutoFill feature is a method of automatically collecting information about a user's system (operating system, browser type and version, IP Address, etc.) and saving it within a newly added record. The information collected about the user's environment could be useful in resolving or processing the issue reported in the record. Text type fields can be used to collect the information from a user's machine when the user submits a record using the Add or Submit pages.

By default, AutoFill is disabled for Text type fields (the AutoFill fields are set to "<None>" when disabled).

To enable the AutoFill feature for a Text field:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Edit button to the left of a Text type field. Or, click on the Add button and select "Text" as the field type and click OK
5. Select a parameter to be collected in the AutoFill Item field. The parameters available for Text and Url type fields are described below.
6. Select an option in the AutoFill Alternate Value field to be used in cases where the value of the AutoFill item cannot be retrieved from the user's machine. AutoFill Alternate Value can be one of the following:
    - 1 - <No Value>
      If the value of the AutoFill Item cannot be found, no value should be saved in this field as a replacement. The field will be blank in the newly saved record.
    - 2 - "Unknown"
      If the value of the AutoFill Item cannot be found, the string "Unknown" should be saved in this field for the newly added record.
    - 3 - <Raw Value>
      If the value of the AutoFill Item cannot be found, the raw data found in the location checked to retrieve the AutoFill Item.
7. Click OK to save the changes

When a field with AutoFill enabled is visible on the Add or Submit pages, the user creating the new record has the ability to overwrite the values automatically filled in these fields. Information on setting a field's visibility on the Add page can be found in the Field Visibility section.

Available AutoFill Items

The following parameters can be collected to automatically fill a Text type field.

- Host Name
  The TCP / IP host name of the machine the user is logged into when accessing Tracker. Note: By default, the IIS web server will return the IP Address instead of the Host Name to increase performance for web hosting. If you wish to get the Host Name, please follow the steps in this Microsoft article, which would configure IIS to do a reverse DNS lookup. For more information, please review your IIS documentation.

- IP Address

The IP Address of the machine the user is logged into when accessing Tracker.

- Operating System
  The Operating System installed on the machine the user is logged into when accessing Tracker.

- Screen Size
  The value of Screen Area in the user's Monitor Display settings.

- Web Browser
  The type and version of the browser(s) installed on the machine the user is logged into when accessing Tracker.

Initial Value
This property will only be displayed if AutoFill Item is set to "<None>".

You can enter an initial value for the Text field or it can be left blank. The value entered will be displayed by default on the Add and Submit pages and can be changed by the user. The number of characters set for the Maximum Number of Characters property is the also the maximum number of characters that can be set for the Initial Value of the field. By default, this is up to 80 characters for Access database and 160 characters for SQL Server or Oracle database. If the field is not visible on the Add Page, the Initial Value will still be saved in the field. The same is true if the field is not visible on the Submit Page (Include in Submit Page property is set to "No"). If the field is required on the Add or Submit pages (Required for Add & Submit is set to "Yes"), the user will be prompted to either add information to the Initial Value or overwrite it before the record can be saved.

If the field is configured with the options Unregistered User Email and "Validate User Email Address" set to "Yes", the initial value must be in the form of a standard email address.

Instruction Text
This property will only be displayed if AutoFill Item is set to "<None>".

You can enter text that will be displayed in the Text field by default on the Add and Submit pages as instructions for the user filling out the field. Up to 80 characters for Access database and 160 for SQL Server or Oracle database can be entered or it can be left blank. The Description field has "Describe the issue in detail..." configured as the Instruction Text in the Add Page Sample.

Clear Instruction Text on Focus
This property will only be displayed if AutoFill Item is set to "<None>". Setting this option to "Yes" will remove the text entered in the Instruction Text option when the user puts their cursor on the Text field. Setting this option to "No" indicates that the Instruction Text should remain in the Text field when the user puts their cursor on it. This option cannot be set to "Yes" if no value has been entered for Instruction Text.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

TextArea

A very large text string. The maximum size determined by the amount of data supported by the TextArea type on your web browser, and the particular database in use. By default, this field is blank unless an Initial Value is defined. When using Access database, a maximum of 10 TextArea fields can be configured per form. When using SQL Server or Oracle database, a maximum of 40 TextArea fields can be configured per form.

Label

The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Required for Add & Submit
Specifies whether the field is required to be modified by the user when it appears on the Add or Submit pages. For TextArea fields this means that a blank value will not be allowed.

You may wish to highlight required fields on the Add or Submit pages with a particular color, bold type or with a special character (e.g. "*"). This can be done by configuring the Required Field Highlights option in the General Preferences section. The fields "Title" and "Product" are set as Required in the Add Page Sample.

When this attribute is set to "Yes", the field visibility set for this field must be set such that the field is visible on the Add page to at least one user group.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Annotate in Add Page
This option determines whether any additions to the TextArea field will be preceded with an annotation when the field is modified on the Add Page. The annotation includes a date and time stamp when the field was modified and the User ID of the user who modified the field. Select "Optional" if you wish to have the annotation be included in the field only when the user clicks on the Annotate button. Select "Automatic" if you wish to have the annotation included automatically when the field is modified. When selecting Automatic, the Annotate button will not be displayed. The annotation will be applied to the field (only if it was modified) when the record is submitted either using the Add or Add & Copy buttons. Select "Unavailable" if you do not wish to have the field annotated when it is modified.

Annotate in Edit Page
This option determines whether any additions to the TextArea field will be preceded with an annotation when the field is modified on the Edit Page. The annotation includes a date and time stamp when the field was modified and the User ID of the user who modified the field. Select "Optional" if you wish to have the annotation be included in the field only when the user clicks on the Annotate button. Select "Unavailable" if you do not wish to have the field annotated when it is modified.

Annotate in Submit Page
This option determines whether any additions to the TextArea field will be preceded with an annotation when the field is modified on the Submit Page. The annotation includes a date and time stamp when the field was modified. Select "Optional" if you wish to have the annotation be included in the field only when the user clicks on the Annotate button. Select "Automatic" if you wish to have the annotation included automatically when the field is modified. When selecting Automatic, the Annotate button will not be displayed. The annotation will be applied to the field (only if it was modified) when the record is saved when the Submit button is clicked. Select "Unavailable" if you do not wish to have the field annotated when it is modified.

Annotate Button Label

Enter the label for the Annotate button which is displayed to the left of the TextArea field when "Optional" is selected for the options Annotate in Add Page, Annotate in Edit Page or Annotate in Submit Page. By default the button label is "Annotate >>".

Initial Value
You can enter an initial value for the TextArea field. The value entered will be displayed by default on the Add and Submit pages and can be changed by the user. Up to 255 characters can be entered as the Initial Value or it can be left blank. If the field is not visible on the Add Page, the Initial Value will still be saved in the field. The same is true if the field is not visible on the Submit Page (Include in Submit Page property is set to "No"). If the field is required on the Add or Submit pages (Required for Add & Submit is set to "Yes"), the user will be prompted to either add information to the Initial Value or overwrite it before the record can be saved.

Instruction Text
You can enter text that will be displayed in the TextArea field by default on the Add and Submit pages as instructions for the user filling out the field. Up to 255 characters can be entered or it can be left blank. The Description field has "Describe the issue in detail..." configured as the Instruction Text in the Add Page Sample.

Clear Instruction Text on Focus
Setting this option to "Yes" will remove the text entered in the Instruction Text option when the user puts their cursor on the TextArea field. Setting this option to "No" indicates that the Instruction Text should remain in the TextArea field when the user puts their cursor on it. This option cannot be set to "Yes" if no value has been entered for Instruction Text.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Url

A string that is a valid formatted URL with a maximum of 255 characters. By default, this field is blank unless Autofill is enabled or an Initial Value is defined. When using Access database, a maximum of 5 Url fields can be configured per form. When using SQL Server or Oracle database, a maximum of 10 Url fields can be configured per form.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Required for Add & Submit
Specifies whether the field is required to be modified by the user when it appears on the Add or Submit pages. For Url fields this means that a blank value will not be allowed.

You may wish to highlight required fields on the Add or Submit pages with a particular color, bold type or with a special character (e.g. "*"). This can be done by configuring the Required Field Highlights option in the General Preferences section. The fields "Title" and "Product" are set as Required in the Add Page Sample.

When this attribute is set to "Yes", the field visibility set for this field must be set such that the field is visible on the Add page to at least one user group.

Include in Submit Page
Specifies whether the field should be presented on the Submit Page.

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Fixed Width Font
This option determines whether the data entered into a Url type field will be entered using a fixed width font. Selecting "Yes" will use a fixed width font such that each character is displayed with a uniform width. Selecting "No" will not use a fixed width font (characters have varying widths).

Input Width
Enter the number of characters to be used as the display width for Url type fields. This affects the width of the field on Add, Edit, Task, View and Query pages. This does not affect the maximum number of characters that can be entered into the field. The minimum value for this option is 1 and the maximum value for this option is 80.

Maximum Number of Characters
This option determines the maximum number of characters that can be entered into the field. For Url fields, this can be set to a maximum of 255 characters. When the Autofill option is set to something other than "<None>", this property will be set to 80 characters and cannot be changed.

AutoFill Item
The AutoFill feature is a method of automatically collecting information about a user's system and saving it within a newly added record. The information collected about the user's environment could be useful in resolving or processing the issue reported in the record. A Url type field can be used to collect the last browsed URL from a user's machine when the user submits a record using the Add or Submit pages.

By default, AutoFill is disabled for Url type fields (the AutoFill fields are set to "<None>" when disabled).

To enable the AutoFill feature for a Url field:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Edit button to the left of a Text or Url type field. Or, click on the Add button and select "Url" as the field type and click OK
5. Select the "Last Browsed URL" parameter to be collected in the AutoFill Item field. The Last Browsed URL is the last URL the user visited before browsing to the Tracker Login Page. The Last Browsed URL will only be set if the user clicks on a link to reach the Tracker Login Page. If the user reaches the Login Page by using a bookmark or manually typing in the URL of the Login Page, the value of the Last Browsed URL field will be blank.
6. Select an option in the AutoFill Alternate Value field to be used in cases where the value of the AutoFill item cannot be retrieved from the user's machine. AutoFill Alternate Value can be one of the following:
   - 1 - <No Value>
     If the value of the AutoFill Item cannot be found, no value should be saved in this field as a replacement. The field will be blank in the newly saved record.
   - 2 - "Unknown"
     If the value of the AutoFill Item cannot be found, the string "Unknown" should be saved in this field for the newly added record.
   - 3 - <Raw Value>
     If the value of the AutoFill Item cannot be found, the raw data found in the location checked to retrieve the AutoFill Item.

7. Click OK to save the changes

When a field with AutoFill enabled is visible on the Add or Submit pages, the user creating the new record has the ability to overwrite the values automatically filled in these fields. Information on setting a field's visibility on the Add page can be found in the Field Visibility section.

Initial Value
This property will only be displayed if AutoFill Item is set to "<None>".

You can enter an initial value for the Url field. The value entered will be displayed by default on the Add and Submit pages and can be changed by the user. Up to 255 characters can be entered as the Initial Value or it can be left blank. If the field is not visible on the Add Page, the Initial Value will still be saved in the field. The same is true if the field is not visible on the Submit Page (Include in Submit Page property is set to "No"). If the field is required on the Add or Submit pages (Required for Add & Submit is set to "Yes"), the user will be prompted to either add information to the Initial Value or overwrite it before the record can be saved.

Instruction Text
This property will only be displayed if AutoFill Item is set to "<None>".

You can enter text that will be displayed in the Text field by default on the Add and Submit pages as instructions for the user filling out the field. Up to 255 characters can be entered or it can be left blank. The Description field has "Describe the issue in detail..." configured as the Instruction Text in the Add Page Sample.

Clear Instruction Text on Focus
This property will only be displayed if AutoFill Item is set to "<None>". Setting this option to "Yes" will remove the text entered in the Instruction Text option when the user puts their cursor on the Text field. Setting this option to "No" indicates that the Instruction Text should remain in the Text field when the user puts their cursor on it. This option cannot be set to "Yes" if no value has been entered for Instruction Text.

Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
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Return to Field Types List

YesNo

A pulldown with the items Yes and No. The default value for this field is determined by the Default Value property. When using Access database, a maximum of 5 YesNo fields can be configured per form. When using SQL Server or Oracle database, a maximum of 20 YesNo fields can be configured per form.

Label
The name displayed for this field.

API Field Name
The name of the field in the database. This property will only be displayed when editing a field in the Forms section.

To see a field's API Field Name:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the desired field, then click on the Edit button.

Record Order
Integer specifying the order that the record should be presented relative to the other fields on the pages on which the field is displayed. For example, a field displayed on the Add page with a value of 5 will be listed before a field with a value of 100.

Include in Submit Page
Specifies whether the field should be presented on the Submit via Web form (also known as the Submit Page).

Copy Field Value for Next Add
When adding a new record using the Add page, a user has the option to click Add or Add & Copy to save the new record. Clicking on the Add button will save the new record, then return to the Add page with a "blank" form (all fields returned to default or blank values). Clicking on the Add & Copy button will save the new record, then return to the Add page with the values of the fields "copied" from the last record added. This allows the user to add another record with similar information as the last record added without having to re-type information into the fields. In order to have a field's value copied into the Add form after clicking on the Add & Copy button, the attribute Copy Field Value For Next Add must be set to Yes. Note: If all the fields that are active (present in the "In Use" column) have the "Copy Field Value For Next Add" attribute set to No, then the "Add & Copy" button will not be displayed on the Add page.

Display Next Field Inline
Select "Yes" if you would like the next field in the record to be displayed on the same line as the field you are editing. The next field is determined by value of Record Order attribute for each field. This attribute will be applied to the fields on the Add, Edit, Query, Task, Edit Query Results, and Submit pages and is only applied to fields that are visible to the user. The field "Severity" has this property set to "Yes" in the Add Page Sample.

Display Style
This field determines how the choices within the field are displayed and has different options depending on the field type. The choices are "Pulldown" and "Checkbox".

Default Value
Specifies the default value for a YesNo type field. The items that can be selected are "Yes" or "No".

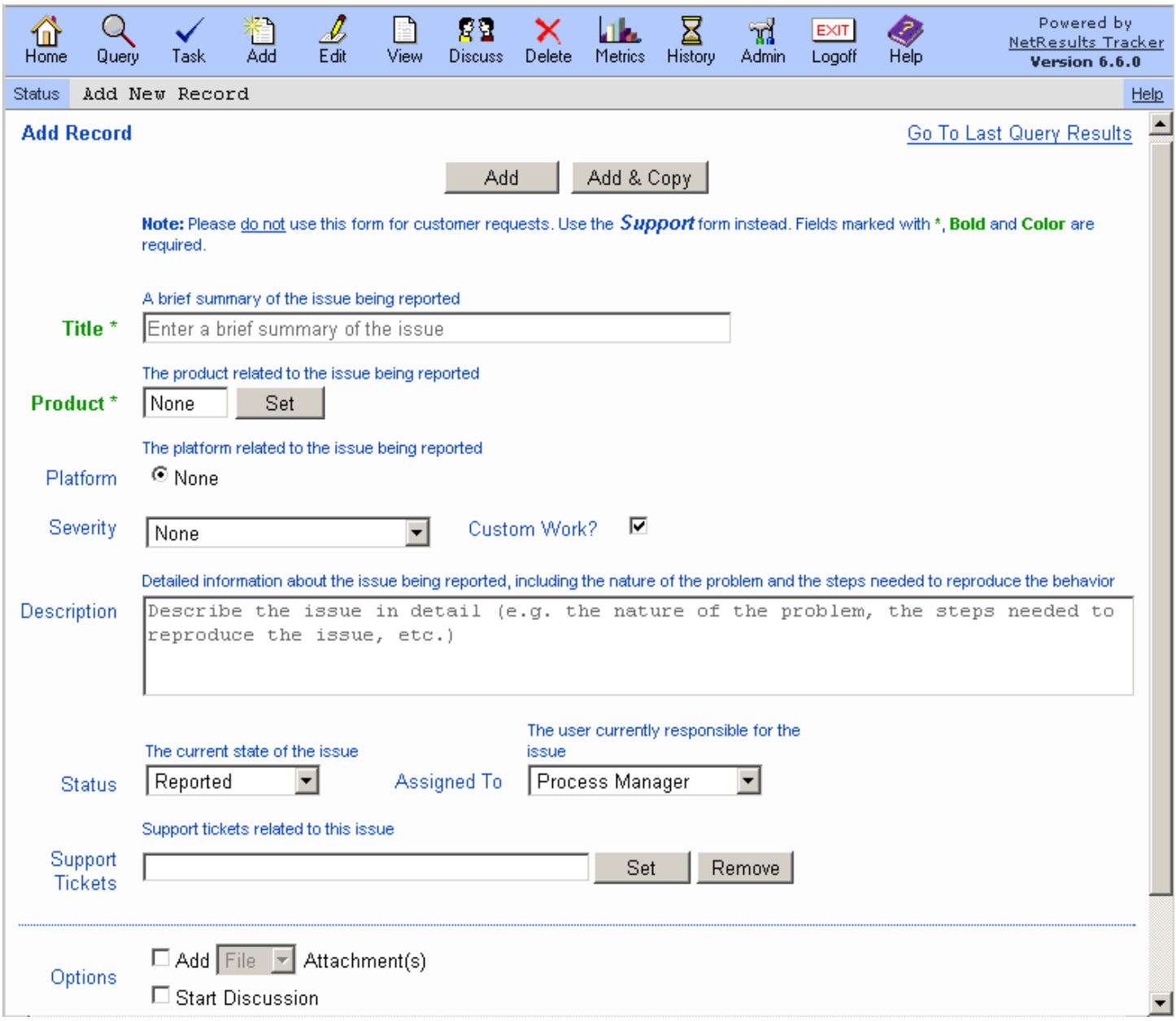
Help Description
Enter a description of the field to be displayed on the Add, Edit, Task, and Submit pages of Tracker (in the cases where the field is set to be visible on these pages). Field help will be displayed next to fields on the Add, Edit and Task pages when a user has the option Display Field Help enabled in their preferences settings. This option can also be enabled in the default preferences set in the User Preferences section. Field Help can be displayed as a field help icon next to the field or as text above or below the field. How the field help is displayed on the Add, Edit and Task pages is determined by the Display Field Help options in the General Preferences section and how it is displayed on the Submit Page is determined by the Display Field Help option in the Submit Page Settings.

You can utilize format tags such as bold, *italics* and others as part of the Help Description. A complete list of available tags can be found here.

Add Page Visibility
Edit Page (Update) Visibility
Edit Page (Read Only) Visibility
View Page Visibility
Home/Query Page Visibility
Email Message Visibility
These options are for the Field Visibility feature; they determine whether a field is available for each user group in the various areas of Tracker. Review the Field Visibility section for more information about configuring these options.

Return to Field Types List

Sample Add Page



Custom Format Tags for Instructional Messages

In various pages in Tracker, Instructional Messages can be customized. These messages can utilize formatting tags as listed in the table below:

Name	Tag Start	Tag End	Example of how to enter this tag
Bold	Starts with [b]	Ends with [/b]	This is [b]bold[/b]
Italics	Starts with [i]	Ends with [/i]	This is in [i]italics[/i]
Underline	Starts with [u]	Ends with [/u]	This is [u]underlined[/u]
Small Font	Starts with [sf]	Ends with [/sf]	This is [sf]small font[/sf]
Medium Font	Starts with [mf]	Ends with [/mf]	This is [mf]medium font[/mf]
Large Font	Starts with [lf]	Ends with [/lf]	This is [lf]large font[/lf]
Anchor (Link)*	Starts with [a]	Ends with [/a]	Here is [a http://kb.nrtracker.com]http://kb.nrtracker.com[/a]

*Please note: For Anchor (Link), only the link itself can be supplied between the tag. The provided link should only start with the following (otherwise, the tag won't be applied to the content): http://, https://, ftp://, mailto:. Clicking on the link will open the content in a new browser window.

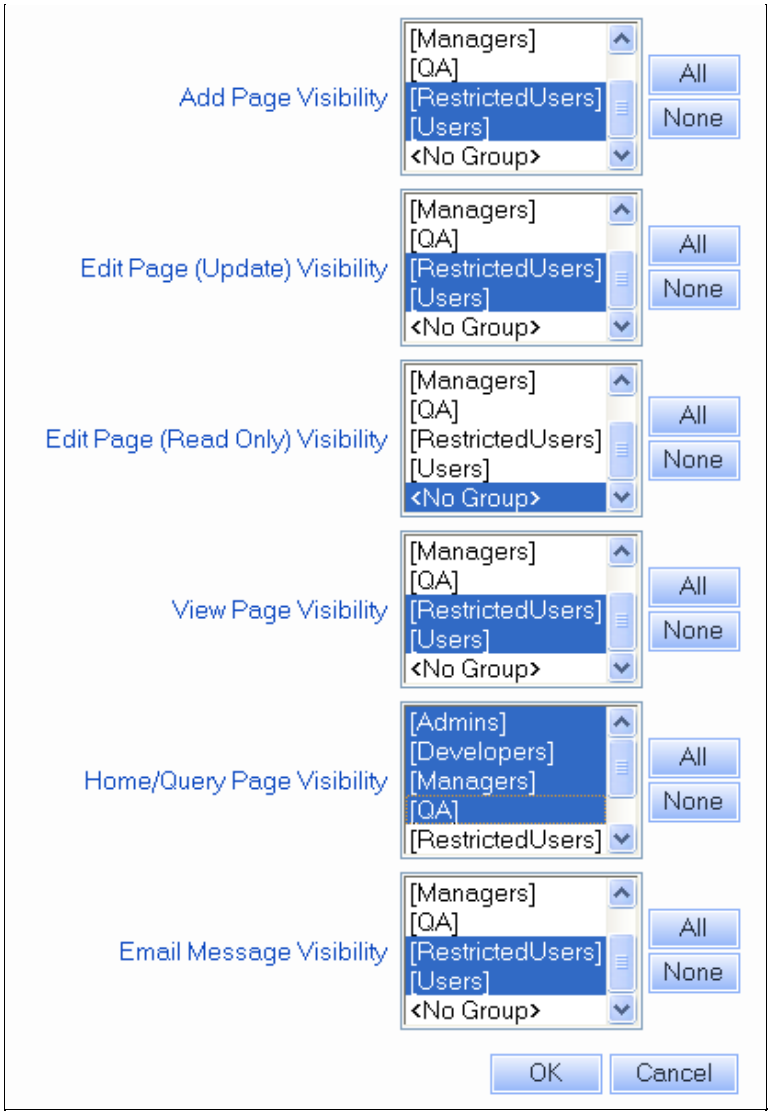
The following image shows examples of the tags in use:

Field Visibility

Field Visibility provides the ability to limit the fields that are visible to a particular user group in different areas such as the Add Page, Edit Page, View Page, running reports on the Query and Home Pages and the email notification messages sent from Tracker. In some circumstances, it is necessary to restrict access to a field while performing certain operations to protect sensitive information or to prevent unauthorized changes to particular fields in a record.

A field's visibility can be configured by user group for the following areas in Tracker:

- Add Page - determines which fields are available for each user group on the Add Page
- Edit Page (Update) - determines which fields are available to be modified by each user group on the Edit Page
- Edit Page (Read Only) - determines which fields are displayed as Read Only fields for each user group on the Edit Page
- View Page - determines which fields are displayed in the Fields section on the View Page for each user group. When View Page Visibility is restricted for the Product, Status or Assigned To fields, these fields will only be included in the Record History section of the View Page for user groups selected in the View Page Visibility option for each field.
- Home/Query Pages - determines which fields are available to be used as part of search criteria or report results for reports displayed on the Query and Home Pages
- Email Notification Message - determines which fields are available as part of the email notification messages sent from Tracker



If you wish to restrict the fields which are made visible in the Task operation, this is done while configuring task fields for a transition. The Customizing Transitions Help section provides details on configuring task fields.

Please note that when records are created using the Submit via Email feature, the field visibility settings for the Add page are not enforced on these records when they are created in Tracker.

To configure field visibility options for each field:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Edit button to the left of the field you wish to modify
5. The Field Visibility fields (Add Page Visibility, Edit Page (Update) Visibility, Edit Page (Read Only) Visibility, View Page Visibility Home/Query Page Visibility and Email Message Visibility) display a list of the user groups in the workgroup. To set a Field Visibility field, select the user group(s) to whom the field should be visible when performing the related operation(s) (viewing reports on the Home/Query pages, submitting records using the Add form, editing records, etc.). To make a field visible to all groups, click on the All button. A field can be made visible to all non-Restricted users by selecting the user group "Users" (since all non-Restricted users are members of this group). Similarly, a field can be made visible to all Restricted users by selecting the user group "RestrictedUsers". To make a field such that it will not be visible to any groups, click on the None button or select the option <No Group>.

   A user group can be selected for either Edit Page (Update) or Edit Page (Read Only), but cannot be selected for both of these areas.

6. Click OK to save the changes

Field Visibility Exceptions for Required fields

When a field has the attribute Required on Add set to "Yes", but the field is not visible on the Add page for certain user groups, the newly

added record will be saved with the field's default value. The defaults for each field type are listed in the Field Types section.

Certain fields are required for all forms, meaning that they cannot be removed from Tracker. Some field visibility settings cannot be applied to these required fields.

PRN
This field is the record number assigned when a record is added to the database. Field visibility restrictions cannot be set for this field as it is a field that is displayed on Tracker pages to distinguish the identity of each record.

Deleted
This field denotes whether a record has been deleted. By design, it does not appear on the Add page, and thus, field visibility for this field on the Add page cannot be set.

Effects of Field Visibility Restrictions on Tracker operations

Add page
When a field is not visible to a user group on the Add page, the default value will be applied to each invisible field when a member of this user group adds a record. The default values for each field type are listed in the Field Types section.

Query and Home pages
When a field is not visible to a user group on the Query and Home pages, the field is also not visible in the personal or group Report Layouts for that user group. If a field is made Invisible for a user group and this field is already in use in a report layout for this user group, the field will be replaced with the value "Do Not Use This Column" in the report layout.

Similar actions will occur with respect to personal or group saved queries and advanced saved queries. In this case, the restricted field will not be displayed in the saved query or advanced saved query. Any fields that are not visible to the user group will have a default value applied when the query is run. In most cases, this default value is "*", which indicates that all possible values for the field will be included in the query results even though this field will not be displayed on the query page or its results. In the case of the "Deleted" field, the default is "No", thus, all records that have not been marked deleted will be included in the query results. If the restricted field was being used as a "Sort By" field, the field will be replaced with "*" for the Sort by value.

Additionally, with respect to personal or group saved advanced queries that were created before a field was made invisible to a user group, any clause in the Query Phrase section containing a restricted field will be automatically removed from the advanced saved query.

Link Fields and Field Visibility

For Link fields, the fields that are selected as Primary and Secondary Key fields for the form in which the Link Field is available will not be subject to Field Visibility settings. In other words, if you have set a field such that it is not visible to certain user groups in certain areas (Add/Edit/Task pages, Query/Home reports, etc.), but the field is either a Primary or Secondary Key Field, the field will be visible to users when they use the Link field. To prevent users from seeing the field, you can either not use the field as a Primary or Secondary Key Field for the form (by changing the form's properties) or you can configure the entire Link field so that it is not visible to certain user groups using the information in the Field Visibility section above.

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Selecting Forms for a Field

A field must be added to at least one form in order to be in use in Tracker. The fields PRN, Status, Reported By, Assigned To, Deleted and Product are required for all forms. The Forms option is not available for these fields in the Fields section.

To set the forms for a field:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Forms button to the left of the field
5. Any forms in which the field is already included will be listed in the Forms Using This Field column. Any forms in which the field is not yet included will be listed in the Available Forms column. The forms which are listed in the Available Forms column for selection are determined by the forms created in the Forms section.

   To add the field to a form, click on the form in the Available Forms column, then click on the Add button. To remove a field from a form, click on the form in the Forms Using This Field column and click on the Remove button.

6. Click OK to return to the Fields section

Removing and Re-adding Fields to a Form

When a field is removed from a form, all values in that field in the records created using that form will be removed. If later the field is re-added to the form, the field's value in all records created using the form will be set to its default (the old values from before the field was removed will not be preserved). Values of the field in records created using other forms will not be affected.

Effects on Existing Records when Adding and Removing Fields

When you add a field, all existing records will be given an initial value. For pulldown menus and release numbers, the current default value (refer to the Customizing Menu Items Help section) for the pulldown or release number is used as the initial value. For a pulldown field configured as a user pulldown, existing records can be set to a particular user. Review the Set User Pulldown Values for Existing Records section. For Date, Text, TextArea, and URL fields, the initial value is blank (no value). For integer and float fields, it is zero. For YesNo fields, it is the current default value (see Editing Field Attributes).

If you wish to have all records in the system start with the same value for this newly added field (for example, you have a special value to note that the value wasn't actually set when the record was first created), you can use the Edit Results function to update all records after you add the field. The Query Results Help section of the User Help Guide has for more information on the Edit Results function.

If a field is renamed (the Label property for the field is changed), the label for the field on the various pages (Add, Edit, Task, View, Query, etc.) will change to use the new label.

Fields that are removed from Tracker are no longer displayed, but they actually remain in the database. Additionally, when a field is removed, any references to the field (in Saved Queries, Report Layouts, and Task Fields) are removed. Records which are added after you have removed a field do not get a value for the removed (inactive) field.

If you have configured Dependent Pulldowns, removing one of the pulldowns removes the relationship between the two pulldown fields. If a parent pulldown is removed, the child option menu items become independent, and thus, are no longer limited by the value entered in the parent pulldown.

If the field you are removing is part of the criteria in a saved chart, you must edit the saved chart to remove the field from the criteria (or delete the chart, if allowed) before you can remove the field from the form.

Set User Pulldown Values for Existing Records

When a user pulldown is added to a form that has existing records, you will be prompted to set the value of the user pulldown in these records. The value selected will be applied to all records for that form across all projects. If you wish to set the values differently based on project or some other criteria, select "TBD", then use the Edit Results operation to make changes to a set of records. You can select from the following options:

TBD - a built-in user that can be used to represent "to be determined" if the field will be set in the future or "no one" if you do not wish to select a particular user for this field in existing records.

A specific user that is currently a member of the user group associated with the field

<User who was the...> - This option allows you to choose a role-based user for the field's value according to each record's history. Tracker will locate the history entry in each individual record to find the appropriate user based on the conditions selected in the options below. If the selected user is not a member of the user group associated with the user pulldown, the user will be added to the user pulldown as an obsolete menu item. If a record does not have an entry that fits the selected conditions, "TBD" will be set as the value of the user pulldown.

Example 1: Testing Scenario A user pulldown field called "Tested By" was created to capture the QA Engineer who tested the fix for an issue.
When adding the field to a form with existing records, the records could be set by choosing:
"<User who was the>Most Recent<Previous Assignee> when the Status changed to 'Tested' coming from 'In Test'" where In Test is the state where issues are tested and Tested is the state where issues are moved after they are tested. Records that have not yet been tested (have not yet moved to the Tested state from In Test), will have the user pulldown set to "TBD".

Example 2: Development Scenario A user pulldown called "Fixed By" was created to capture the Developer who fixed an issue.
When adding the field to a form with existing records, the records could be set by choosing:
"<User who was the>Oldest<Assignee> when the Status changed to 'Fixed' coming from 'In Development'" where In Development is the state where issues are fixed and Fixed is the state where issues are moved after they are fixed. If a record went through the In Development state multiple times (e.g. the issue failed testing, was sent back to development and perhaps fixed by another developer), you may want the field to note the user who originally fixed the issue, which is accomplished by choosing "Oldest".

Example 3: Support/Help Desk Scenario A user pulldown called "Closed By" was created to capture the Support or Help Desk Engineer who worked on a ticket. When adding the field to a form with existing records, the records could be set by choosing:
"<User who was the> <Most Recent> <Action User> when the Status changed to 'Closed' coming from <Any State>" where Closed is the state where tickets are moved after they are closed. <Any State> is selected since there are multiple states in the Support and Help Desk workflow processes where tickets can be closed. <Action User> is useful in the case of the Support workflow where tickets are placed in a queue and may be closed without being assigned to the user who is closing the ticket.

When selecting this option, the following additional options will be displayed:

- Most Recent / Oldest - Choose whether the user you select is the newest or oldest entry in the record's history
- User Role - Select the user who should be set in the user pulldown field based on the record's history.

  Selecting "<Previous Assignee>" indicates that the user who was assigned to the record prior to the state selected in the when Status changed to option should be set as the value in the user pulldown field.

  Selecting "<Assignee>" indicates that the user who was assigned to the record in the state selected in the when Status changed to option should be set as the value in the user pulldown field.

  Selecting "<Action User>" indicates that the user who performed the operation that moved the record to the state selected in the when Status changed to option should be set as the value in the user pulldown field. This option is useful in cases where the action relevant to setting the user pulldown is done by a user who is not actually assigned to the record.
- when Status changed to - Choose the state that is relevant to setting the desired user as the value for the pulldown. If the form is associated with more than one workflow in the Projects section, all of the states in those workflows will be available for selection.
- coming from - Choose the previous state where the record was prior to moving to the state selected in the when Status changed to option. A specific state can be selected. Selecting "<Any Other State>" indicates that the action relevant to setting the desired user was an action where the record moved from a state other than the one selected in the

when Status changed to option. Selecting "<Any State>" indicates that the action relevant to setting the desired user can be an action where the record moved from any state to the one selected in the when Status changed to option.

Deleting Fields

Before you can delete a field, you must first remove it from any forms in which it is being used.

To delete a field:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Forms button
5. Click on a form in the "Forms Using This Field" column, then click on the Remove button
6. Click OK to confirm this operation. Click OK again to confirm.
7. Click OK when the confirmation is displayed. Click OK again to return to Field list
8. Click on the Delete button to the left field you wish to remove. Click OK to confirm, click OK again to confirm, click OK when the confirmation page is displayed.

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NetResults Tracker Help

Customizing Menu Items

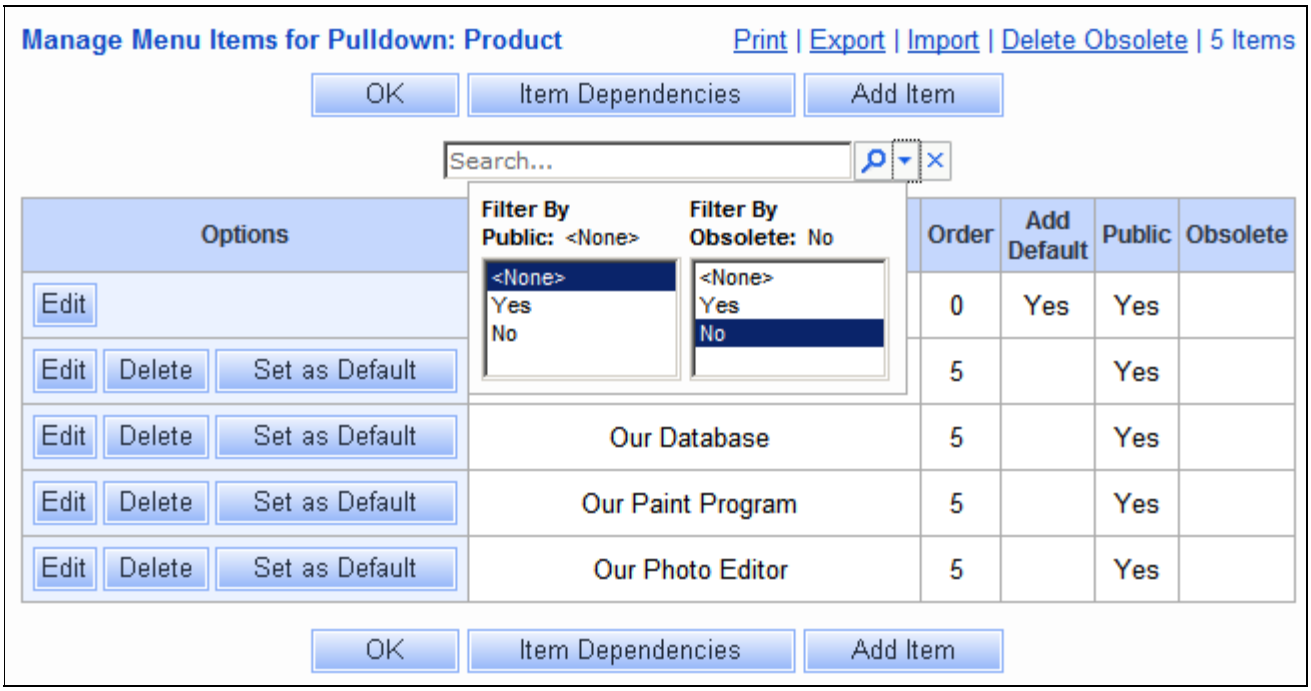
Overview

Tracker allows you to define the option menu items of any Pulldown or Release Number field. Option menu items can be added, edited and marked obsolete or deleted at any time.

Option Menu Item List

Each Pulldown or Release Number type field has an option menu item list. To get to this list:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the field for which you want to see the Item List



By default, the Option Menu Item list shows the option menu items currently available in the pulldown. The items are sorted by the value of the order property. By default, if there are more than 50 option menu items for a pulldown field, the item list will be broken up into pages. Click on the page pulldown to select a page or click on the Previous or Next arrows to move to another page. You can change how many items are displayed per page via the Maximum Menu Items option in the General Preferences section.

The top right of the page shows a total number of option menu items configured for the field. This count only includes the items currently being displayed on the list. For example, when you first browse to the Item List, the count will include all non-obsolete items. If you search for a list of items, the count will reflect the number of items which matched the search criteria.

For RelNum (Release Number) fields, the pulldown RelNumType will be displayed at the top with four choices "<RelNum Field Name>", "<RelNum Field Name> - B" "<RelNum Field Name> - C" and "<RelNum Field Name> - D". Each of these represents one of the 4 digits in the Release Number field. To see the option menu items for a particular digit, choose that digit. The page will be refreshed to show the items for that digit.

For each option menu item the following properties are displayed:

- Menu Item Name
  The label of the option menu item

- Order
  The order of the option menu item with respect to other items

- Add Default
  A value of "Yes" in this column indicates that the item is the default option menu item for the pulldown field

- Public
  A value of "Yes" indicates the option menu item is available on external pages such as the Submit Page and Knowledge Base

- Obsolete
  A value of "Yes" indicates that the option menu item has been marked as obsolete so it will not be available as a selection on various Tracker pages

Printing the Item List

The items displayed on the Item List can be printed using the Print link in the upper right corner of the Item List pages. Only the items currently displayed on the list will be printed (e.g. if you have run a search for a particular set of items, only those items will be printed as opposed to the full set of items).

Exporting the Item List

The items displayed on the Item List can be exported to *.csv format (comma separated values) using the Export link in the upper right corner of the Item List pages. You can then open this file in another tool such as Microsoft Excel or Crystal Reports. Only the items currently displayed on the list will be exported (e.g. if you have run a search for a particular set of items, only those items will be exported as opposed to the full set of items).

Importing Option Menu Items

Option menu items can be imported into a pulldown field unless it is configured as a user pulldown. Details for importing option menu items can be found in the Importing Pulldown Items into Tracker section.

Delete Obsolete

All obsolete option menu items in a pulldown field can be deleted via the Delete Obsolete link. This operation is not available for Release Number fields. Obsolete items can only be deleted if they are not referenced in any records or saved queries (including query criteria for ad-hoc queries). This operation will permanently delete these items and they cannot be restored later.

To delete obsolete menu items:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the field that contains the obsolete items you wish to delete
5. Click on the Delete Obsolete link in the upper right of the Item List page
6. A confirmation page will be displayed to note how many obsolete items will be deleted. Click on the OK to continue. Doing so will permanently delete the obsolete items and they cannot be restored later.
7. Click OK after the operation has been completed

If there are obsolete items that cannot be deleted because they are referenced in records and/or saved queries when trying to use the Delete Obsolete operation, a message will be displayed to mention that none of the obsolete items can be deleted.

To remove references to an option menu item from records:

1. Login to the workgroup
2. Enable the Include Obsolete Items option in the Preferences section so that obsolete items will be available for selection on the Query Page

3. Run a query with a single form selected to return all records that contain the obsolete option menu item(s) you wish to delete
4. Click on the Edit Records link to choose a replacement value in the records for the item(s) you wish to delete. Please review the information about the Editing or Deleting a Set of Query Results section for details about using this operation. It is critical that you review that section because the Edit Records operation cannot be undone except by restoring to a backup copy of your database.
5. Click on the Query icon
6. If desired, disable the Include Obsolete Items option in the Preferences section

To remove references to an option menu item from saved queries, refer to the Edit a Saved Query section to remove the obsolete item(s) from report criteria.

To remove references to an option menu item from ad-hoc query criteria, click on the Query icon, click on the Clear button, then click on the Run Query button.

Item Search

A search function is available to help you quickly locate an option menu item or set of items that match certain criteria.

To search for an option menu item or set of items:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the pulldown field in which you want to search
5. Type in any desired criteria into the Search... box
6. If you wish to filter the search results to include or exclude public and/or obsolete items, click on the icon to show the multiple selection boxes for Public and Obsolete.

   In the Public field, selecting "<None>" will include public and non-public items in the search results (this is the default selection). Selecting "Yes" indicates the search results should be filtered to show only public items, selecting "No" will filter the search results to exclude public items.

   In the Obsolete field, selecting "<None>" will include obsolete and non-obsolete items in the search results. Selecting "Yes" indicates that the search results should be filtered to show only obsolete items, selecting "No" will filter the search results to exclude obsolete items.

   To make multiple selections in the list boxes, hold down the Ctrl button on your keyboard as you click on the items you wish to select.

7. Click on the Search icon to return the results that match the selected criteria

Click on the Remove icon to remove the search criteria and reset to the defaults (no key word(s) or phrase in Search... box, "<None>" selected for Public, "No" selected for Obsolete).

Defining Option Menu Items

It is often a good idea to create a backup of your database before making major changes such as modifying your pulldown menus as some modifications are irreversible other than by restoring a backup copy of your database.

The Items button for the Assigned To field will display the User Accounts section. Items listed in the Assigned To field are the users listed in the User Accounts section. For a user to be available in the Assigned To field on the Add Page, the user must be a member of a user group with the privilege "Can Be Assignee For Add". For a user to be available in the Assigned To field on the Edit Page, the user must be a member of a user group with the privilege "Can Be Assignee For Edit".

The Items button for the Reported By field will display the User Accounts section. Items listed in the Reported By field are the users listed in the User Accounts section.

The Items button for the Status field will display the Global States List. Items listed in the Status field are the states created in the Global States List.

If you anticipate having a large number of option menu items in a pulldown, it is recommended that you choose "Search Pulldown" as the Display Style for the field. This style allows users to type in key words to find any option menu items that match the criteria. When there is a large number of option menu items in the field and the display style is something other than "Search Pulldown", all of the option menu items are displayed in the field, which can impact performance as the browser loads all of the available option menu items. With the "Search Pulldown" style selected, only the items that match a search are loaded, minimizing the time needed for the browser to render the field.

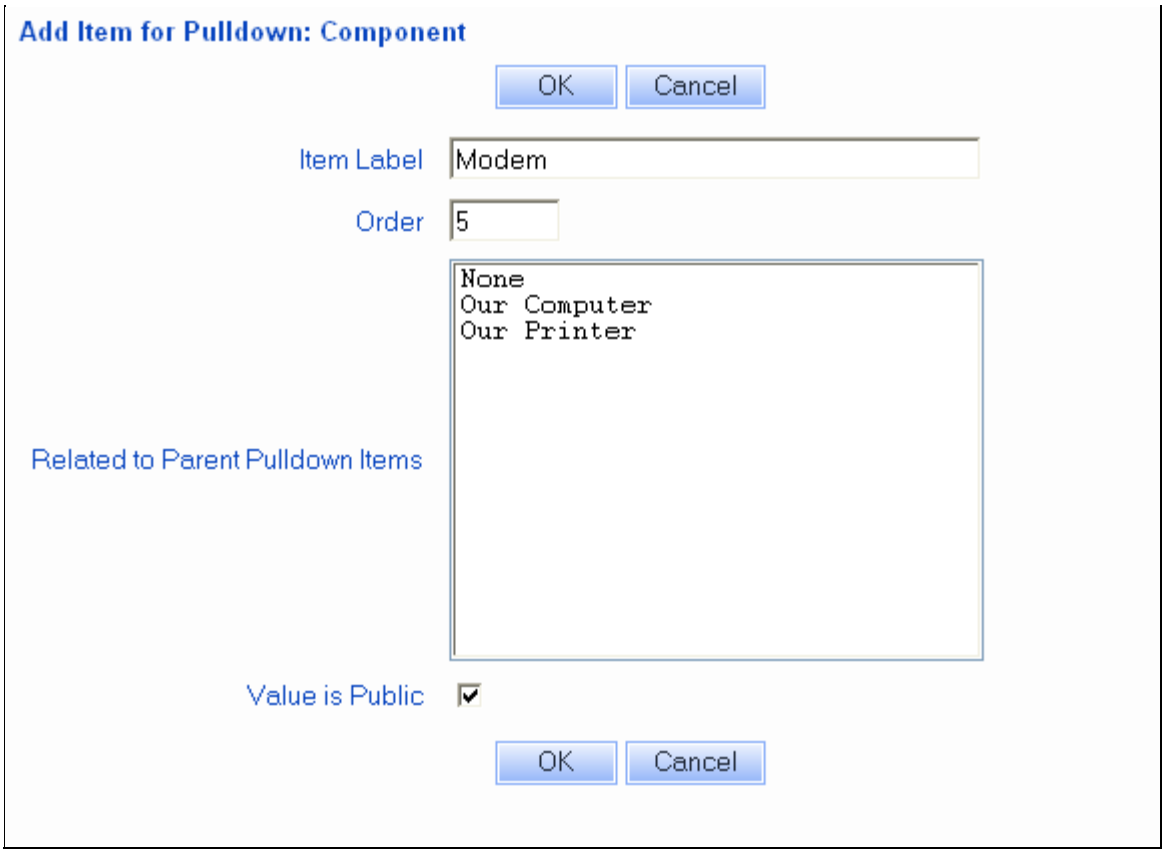
To add option menu items to a pulldown use the following steps. To add option menu items to a pulldown configured as a user pulldown, review the User Pulldown section.

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the pulldown field or release number field you wish to modify
5. You will be presented with a page listing all of the current items. To add a value, click on the Add Item button. If you clicked on the Items button for a release number (RelNum) type field, the items for the first digit will be displayed. To select another digit, make a selection in the RelNum Type pulldown at the top.

   When adding an item you can specify:

   - Name for the menu item in the Item Label field
   - Relative order in which the item should appear in the Order field (all entries with the same relative order are listed alphabetically)
   - Which option menu items in the parent field will be associated with this value can be selected in the Related to Parent Pulldown Items field. This field will only be displayed if the pulldown field to which this option menu item belongs has a "Parent Pulldown" defined in the Fields section.
   - Whether the value should be displayed if the field appears on the Submit Page and the Knowledge Base Search Page. Checking the box marked Value is Public indicates the choice should appear on the Submit Page and Knowledge Base pages.

The figure below displays the attributes that can configured when an option menu item is added. The field Related to Parent Pulldown Items will only appear if the pulldown field is configured as a dependent pulldown.



To edit an option menu item:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the pulldown or release number field you wish to modify
5. You will be presented with a page listing all of the current items. If you clicked on the Items button for a release number (RelNum) type field, the items for the first digit will be displayed. To select another digit, make a selection in the RelNum Type pulldown at the top. Locate row for the option menu item you wish to modify, then click on the Edit button.

   If you change the Item Label field for an option menu item, any records with this value selected will display the updated Item Label.

   Changing the order field will change the order of the option menu item relative to other option menu items for this field.

   Checking the box for the Value is Public option will enable an option menu item to be displayed on the Submit Page and the Knowledge Base Search Page. Unchecking the option prevents the option menu item from being displayed on those pages. This option cannot be unchecked for the option menu item set as the default value for the pulldown.

   Checking the box for the option Value is Obsolete allows you to mark an option menu item so that it is no longer a valid value (e.g. the "obsolete" option menu item won't be available for selection on the Add, Edit, Task, and Submit pages or when using the Edit Results operation) while still allowing existing records to have the option menu item selected. For more information about marking records obsolete, review the Maintaining Option Menu Items section.

6. Click OK to save the changes

To delete an option menu item:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the pulldown or release number field you wish to modify
5. You will be presented with a page listing all of the current items. If you clicked on the Items button for a release number

(RelNum) type field, the items for the first digit will be displayed. To select another digit, make a selection in the RelNum Type pulldown at the top. Locate row for the option menu item you wish to modify, then click on the Delete button. If any records contain the option menu item you are deleting, you will be prompted to make a selection from one of the following choices:

- Choose a Replacement
  You can choose another option menu item configured for the pulldown field to replace the option menu item you are deleting in any records that contain it
- Mark Obsolete
  Selecting this option allows any records that contain the option menu item you are deleting to continue to have this value. New records cannot have this option menu item selected, nor can this option menu item be selected for records that don't already have it while editing or performing the Task operation on records. If the pulldown field is part of a dependency with another pulldown, any dependencies for the option menu item you are deleting will be removed.

If any saved queries contain the obsolete value, you will be prompted to select a replacement from the list of option menu items configured for the pulldown field.

6. Click OK to complete the operation

To restore a option menu item that was previously deleted or marked obsolete:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the pulldown or release number field you wish to modify
5. You will be presented with a page listing all of the current items. If you clicked on the Items button for a release number (RelNum) type field, the items for the first digit will be displayed. To select another digit, make a selection in the RelNum Type pulldown at the top. Click on the Add Item button
6. Enter the "Item Label" for the value you wish to restore and click on the OK button
7. You will be prompted that the item you are attempting to add was previously deleted or marked obsolete. Click on the Restore Item button. If the item was previously marked as obsolete, the "Value is Obsolete" property will be unchecked for the item. Any records that had the obsolete item selected will remain unchanged.

Configuring Items for User Pulldowns

The items in user pulldowns are members of the user group configured in the "User Group" option of the field's properties. TBD is also included as an option menu item and is set as the default value. Another user can be selected as the default value, if desired.

To add a user to be displayed as an option in a user pulldown, you must add the user to the appropriate user group.

To edit a user displayed as an option in a user pulldown:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the user pulldown field you wish to modify
5. Click on the Edit button to the left of the user (item) you wish to modify

   User Group indicates which user group is associated with this user pulldown. This can be changed in the field's properties.

   The Item Label is the user's name as it is configured in the User Accounts section. It can only be modified by editing the user's profile information.

   Changing the Order field will change the order of the option menu item relative to other option menu items configured.

   Checking the box for the Value is Public option will enable an option menu item to be displayed on the Submit Page and the Knowledge Base Search Page. Unchecking the option prevents the option menu item from being displayed on those pages.

A "No" value in the Value is Obsolete option indicates that the user is a member of the user group associated with this field. A "Yes" value indicates the user is no longer a member of the user group. An obsolete user is no longer a valid value for the field (e.g. the "obsolete" user won't be available for selection on the Add, Edit, Task, and Submit pages or when using the Edit Results operation). However, existing records can have the obsolete user selected. For more information about obsolete items (users), review the Maintaining Option Menu Items section.

6. Click OK to save the changes

To remove a user so that it is not displayed as an option in a user pulldown, you must remove the user from the appropriate user group. This will mark the user as obsolete. Existing records that have this user selected for the pulldown will remain unchanged, but this user will no longer be available for selection in any other records.

To delete a user so that it is no longer listed in the Items list for the field:

1. Remove the user from the appropriate user group in the User Accounts section. This step will mark the user as obsolete. Existing records that have this user selected for the pulldown will remain unchanged, but this user will no longer be available for selection in any other records.
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the user pulldown field that contains the user you wish to delete from the pulldown
5. Click on the icon in the Search bar to show the multiple selection box for Obsolete. Click on "Yes". If desired, enter a key word(d) into the Search... box to narrow down the search results, then click on the Search icon to return the results that match the selected criteria.
6. Click on the Delete button to the left of the user you wish to delete. Click OK to confirm.
7. If the user is selected for the pulldown in any existing records, you will be prompted to select a replacement for the user. If you do not wish to replace the user in the existing records, select the option Mark Obsolete instead.

Selecting the Default Value for a Field

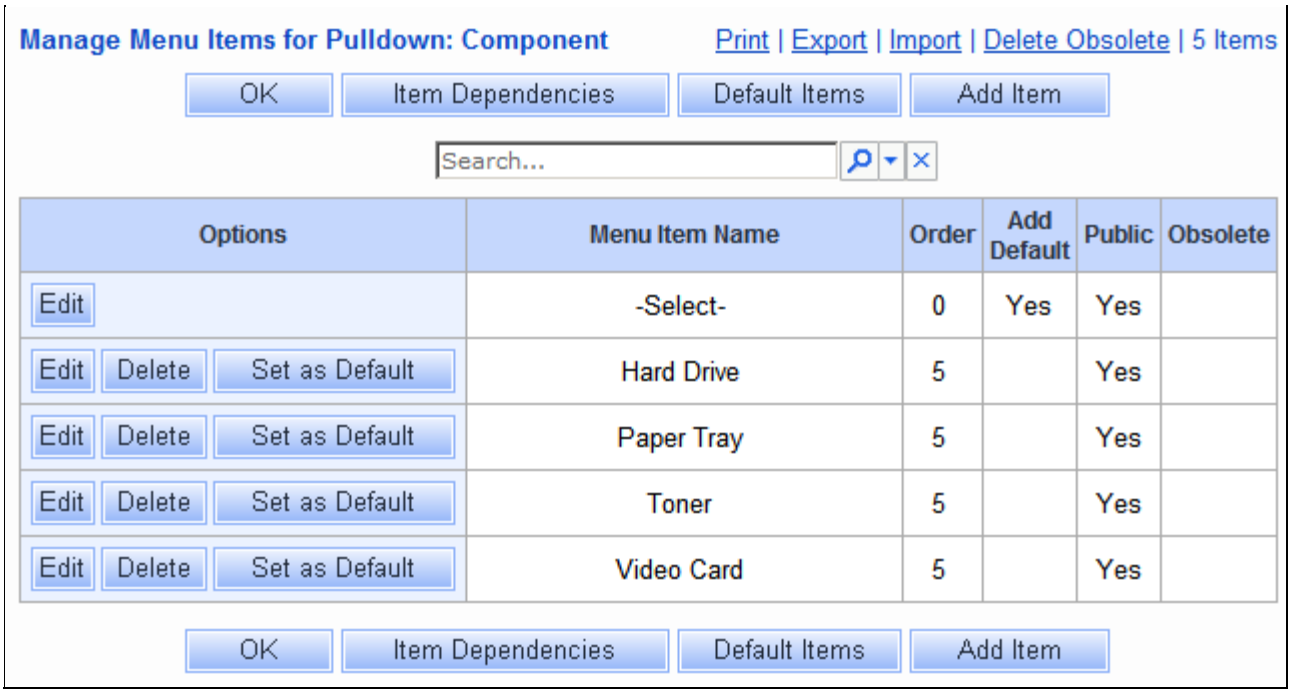
You can set which value is used as the default when a new record is added or when a field is initialized during the Task operation. You cannot delete a value if it is currently the default value. You must first set another value as the default, and then delete the value. Only non-obsolete items can be selected as the default value.

To change which option menu item is set as the default:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the pulldown or release number field you wish to modify
5. You will be presented with a page listing all of the current items. If you clicked on the Items button for a release number (RelNum) type field, the items for the first digit will be displayed. To select another digit, make a selection in the RelNum Type pulldown at the top. Locate row for the option menu item you wish to set as the default value, then click on the Set Default button

Item Dependencies and Default items

If a pulldown field is configured to be either the child pulldown or the parent pulldown in a Dependent Pulldowns Relationship, the Item Dependencies and Default Items buttons will be displayed above the option menu item list as shown in the figure below.



In the Item Dependencies page for a pulldown menu, you can map parent pulldown option menu items to each option menu item in the child pulldown and vice versa. Instructions on mapping pulldown option menu items can be found in the Dependent Pulldowns Help section.

In the Default Items page, you can select which option menu item in the child pulldown should appear as the default value for each possible option menu item in the parent pulldown. Instructions for selecting defaults for dependencies can be found in the Dependent Pulldowns Help section.

Maintaining Option Menu Items

When Option Menu Items become inactive, you need to decide how to reflect this in Tracker. To deactivate an option menu item, you can either mark it as obsolete or delete it.

Obsolete Option Menu Items

Marking an option menu item as obsolete allows records in Tracker to contain the obsolete value. This is useful in cases where you want to be able to perform searches in the Query or Metrics sections which include any obsolete option menu items as part of the search criteria or results. A preference is available to allow obsolete option menu items to be used on the Query Page. This preference can be set by default when new users are added to the workgroup in the User Preferences section or can be set by each individual user using the Preferences link available on the Home Page.

Items in User Pulldowns are marked obsolete when:

- a user is removed from the user group configured for the field
- the user group configured for the field is changed in the Fields section
- a user pulldown is set as a task field and the properties are configured such that a user that is not a member of the user group associated with the user pulldown is set as the value of the pulldown.

When an option menu item is marked obsolete, it cannot be selected when new records are added via the Add or Submit pages or using the Submit via Email feature. The obsolete option menu item will not be displayed as an option on the Edit or Edit Records pages or during the Task operation unless a record already has the obsolete item selected. If the original record contains an obsolete item when using the Add Similar operation to add a record, the newly added record will have the obsolete item replaced with the default value for the pulldown. If the original record contains an obsolete item when using the Cloning operation to copy a record, the clone record will also contain the obsolete item.

If the pulldown field is part of a dependency with another pulldown, when an option menu item is marked as obsolete, any dependencies involving the obsolete item will be removed. For example, let's say that Component is a parent to Sub-Component. The Component field has an option menu item called "Printer", which is related to the option menu items "Paper Tray" and "Toner" in the Sub-Component field. If the option menu item "Printer" is marked obsolete, the items "Paper Tray" and "Toner" will no

longer be associated with "Printer".

When an option menu item is marked obsolete, it will still be displayed as part of Knowledge Base articles. Whether the obsolete item is available when the pulldown field is available as a filter on the Search Page depends on what is set for the "Include Obsolete Items" option in the Search Filters properties page.

All obsolete option menu items can be deleted from a pulldown using the Delete Obsolete operation available on the Option Menu Item List page for each pulldown field.

Deleted Option Menu Items

Deleting an option menu item will remove all references to the item: the deleted item will no longer be displayed on the Add, Edit, Task, View, Query, Home, Metrics pages. If there are any existing records that have the item selected, you will have the option to select a replacement for the item being deleted.

If the pulldown field is part of a dependency with another pulldown, when an option menu item is deleted, any dependencies involving the obsolete item will be removed. For example, let's say that Component is a parent to Sub-Component. The Component field has an option menu item called "Printer", which is related to the option menu items "Paper Tray" and "Toner" in the Sub-Component field. If the option menu item "Printer" is deleted, the items "Paper Tray" and "Toner" will no longer be associated with "Printer".

Deleted items can be restored using the steps in the Restore steps above.

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NetResults Tracker Help

Customizing Pulldown Menu Dependencies

Overview

Dependencies can be configured between pulldown menu fields in Tracker such that the option menu values displayed in one pulldown menu can be dependent on the option menu value selected in another pulldown menu. Pulldown B is dependent on Pulldown A. When a user selects a value in Pulldown A, the values displayed in Pulldown B are changed. Pulldown A is the parent pulldown and Pulldown B is the child pulldown. A simple example to illustrate this functionality:

A system has the pulldown fields called Product and Component with the option menu values listed below.

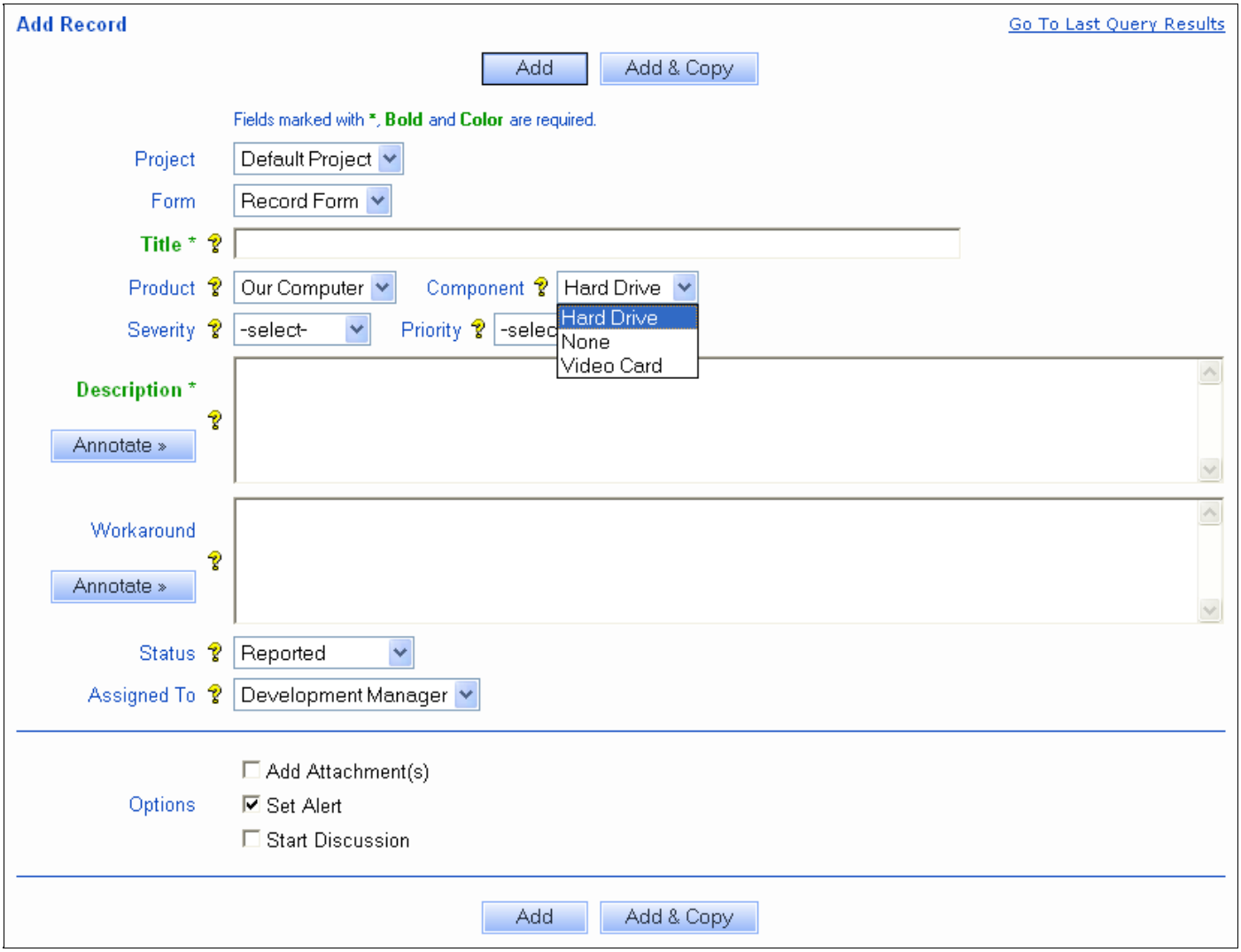
Product
Our Computer, Our Printer

Component
None (default), Hard Drive, Video Card, Toner, Paper Tray

The Component field is dependent on the Product field, which results in the following behavior:

- When Our Computer is selected as the Product, the values available to be selected in the Component field are None (the default value), Hard Drive, and Video Card. This relationship is illustrated in the figure below.
- When Our Printer is selected as the Product, the values available to be selected in the Component fields are None (the default value), Toner, and Paper Tray

This behavior is achieved by configuring dependencies between the Product and Component pulldown fields.



Configuring a Pulldown to be Dependent on Another

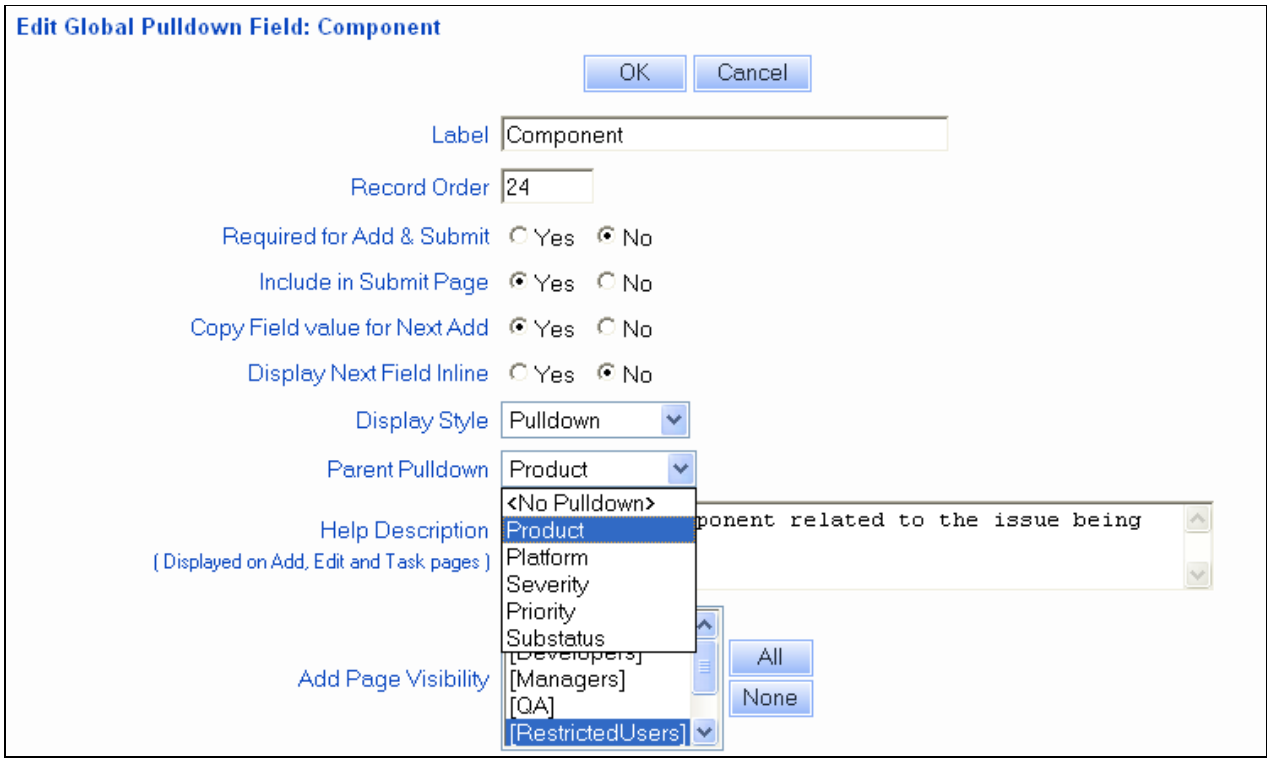
Selecting Fields

Select a pulldown field to be the parent pulldown, then select a pulldown field to be the child pulldown menu. Multiple dependencies on a single parent pulldown can be configured. For example, Pulldowns B, C, and D are all dependent on Pulldown A, that is to say, Pulldowns B, C, and D are all children of Pulldown A. Dependencies can be configured to span multiple levels as well. For instance, Pulldown C is dependent on Pulldown B and Pulldown B is dependent on Pulldown A.

Set up the Child Pulldown Menu to select a Parent Pulldown

To configure the child pulldown menu so that a particular pulldown is selected to be the parent pulldown,

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Edit button to the left of the pulldown field that will act as the child pulldown menu
5. In the Edit Pulldown Attributes section, select the field that will act as the parent pulldown in the Parent Pulldown field (as shown in the figure below).
6. Click on the OK button to save this change.



Special Cases

Please note that the fields Status, Assigned To, or Reported By cannot be involved in a dependent relationship. The only dependencies that can be created based on these fields is via the Workflows section.

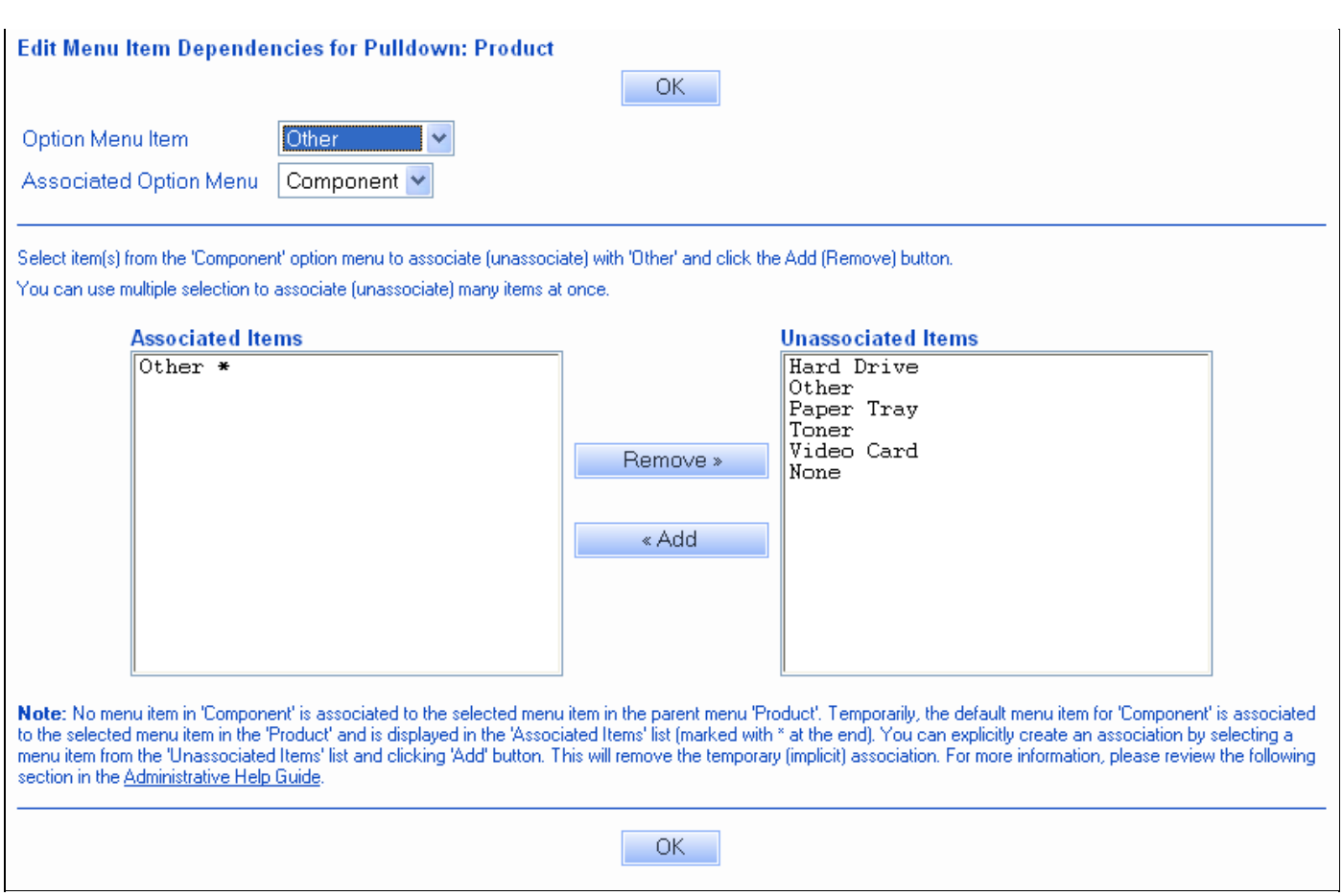
Pulldown fields configured as User Pulldowns can be a parent to another pulldown, but cannot be a child of any pulldown.

The "Search Pulldown" style allows users to type in key words to find any option menu items that match the criteria. This style is recommended if you anticipate having a large number of option menu items in a pulldown field. When there is a large number of option menu items in the field and the display style is something other than "Search Pulldown", all of the option menu items are displayed in the field, which can impact performance as the browser loads all of the available option menu items. With the "Search Pulldown" style selected, only the items that match a search are loaded, minimizing the time needed for the browser to render the field.

Configure relationships between option menu values in the parent pulldown and the child pulldown

Tracker must be configured to show which option menu values in the child pulldown correspond to each option menu value in the parent pulldown. This configuration will determine which values should be displayed in the child pulldown when a particular value is selected in the parent pulldown field.

When specifying a parent pulldown field for the child pulldown field, Tracker will automatically create implicit relationships to relate the option menu items in the parent pulldown menu with the option menu items in the child pulldown menu. This is done to ensure that each parent option menu item is related to at least one option menu item from the child pulldown menu. The following example shows a temporary (implicit) relationship created automatically for a parent pulldown menu. The item "Other * " listed in the "Associated" column is an implicit relationship.



These temporary (implicit) relationship(s) are just a starting point after configuring a dependent relationship. In this section, you will have the opportunity to change the implicit relationships created by Tracker. Once you create an explicit relationship as mentioned in the steps below, the implicit relationship(s) will be removed.

There are 2 ways to configure the relationships between the option menu items in the parent and child pulldown fields:

- By mapping child option menu values to corresponding parent option menu values
  OR
- By mapping parent option menu values to corresponding child option menu values

To map the values with respect to the parent pulldown menu,

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the parent pulldown menu
5. Click on the Item Dependencies button
6. The Option Menu Item field will contain the option menu items configured for the parent pulldown menu. Make a selection in this field so that you can configure option menu items from the child pulldown to be associated to this option menu item from the parent pulldown.
7. The Associated Option Menu field will contain all option menus that are associated with the parent pulldown. The option menu items of the pulldown that you select in this field will be displayed in the columns below to be associated or unassociated to the parent option menu item selected in the Option Menu Item field.
8. Any child option menu items already associated with the parent option menu item will be displayed in the left column called Associated. Any child option menu items in the Associated column proceeded by "*" are implicit relationships (these relationships were made when the parent pulldown was selected for the child pulldown field in the Edit Attributes section of the Fields page).

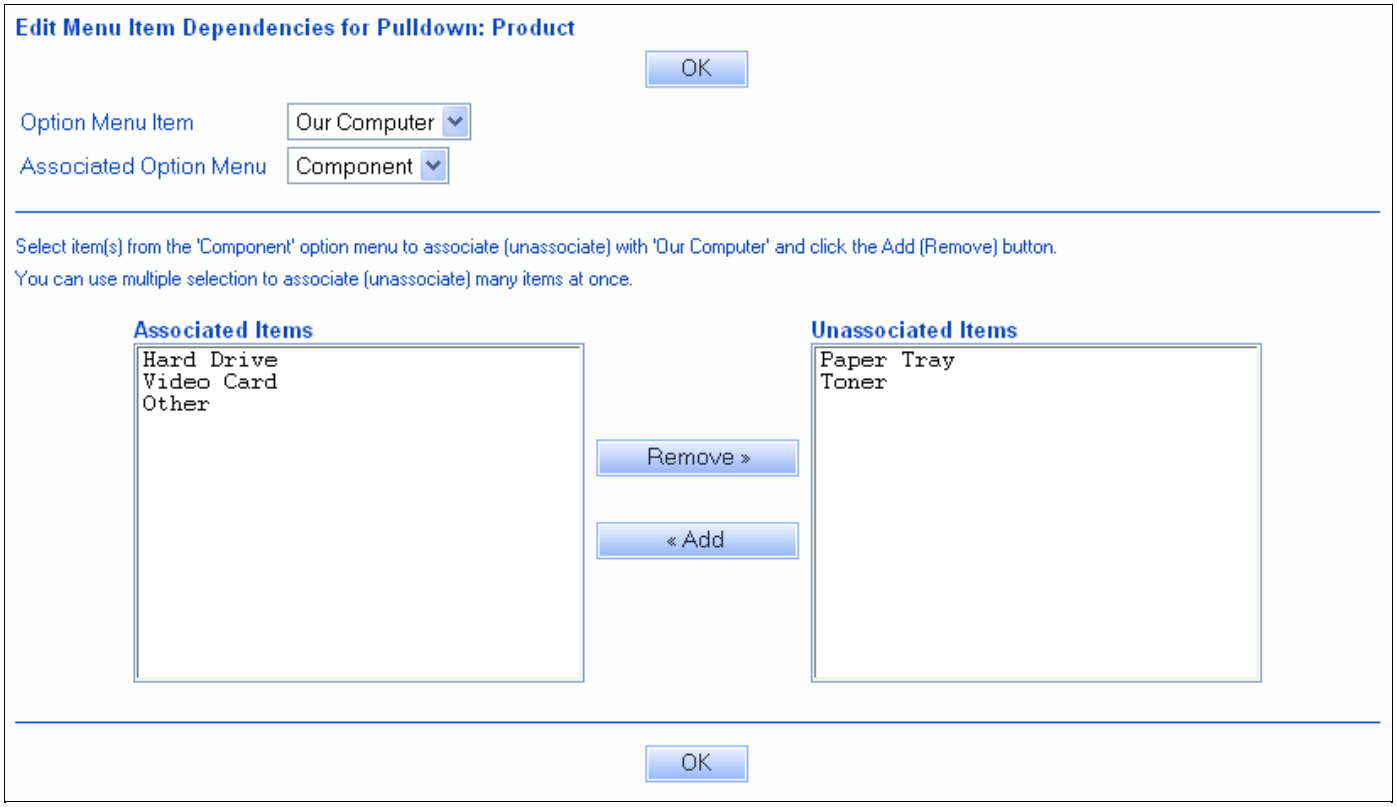
   Any child option menu items not associated with the parent option menu item will be displayed in the right column called Not Associated. A child option menu item temporarily associated to the parent (proceeded by "*") will also be listed in the Not Associated column without "*".

   To select a pulldown menu value to be associated to the parent pulldown menu value, click on the child option menu item in the Not Associated column, then click on the Add button. The child option menu item will be moved to the Associated column. To select multiple child option menu items, hold the Shift key on your keyboard while clicking on multiple values.

   As soon as ANY child option menu item from the Not Associated column is added to the Associated column, any implicitly associated child option menu item (proceeded by "*") will be removed from the Associated column. When you choose to associate a child option menu item to a parent option menu item manually, you are creating an explicit relationship. Any explicit relationship removes the implicit (temporary) relationship created automatically by Tracker.

9. Select another parent option menu item in the Option Menu Item field, then choose the corresponding child option menu items to be associated.
10. After assigning child option menu items to each parent option menu item listed in the Option Menu Item field, click on the OK button to return to the Manage Menu Items section.

The following figure shows the result of associating option menu items from one pulldown to another. "Our Computer" is an option menu item of the "Product" field. The "Product" field is a parent to the "Component" field. The "Component" field has the option menu items "Other", "Video Card", and "Hard Drive", which have been associated to the "Our Computer" option menu item. "Component" also has the option menu items "Paper Tray" and "Toner", which are unassociated with the "Our Computer" option menu item.



To map the values with respect to the child pulldown menu,

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the child pulldown menu
5. Click on the Item Dependencies button
6. The Option Menu Item field will contain the option menu items configured for the child pulldown. Make a selection in this field so that you can configure option menu items from the parent pulldown to be associated to this option menu item from the child pulldown.
7. The Associated Option Menu field will contain all option menus that are associated with the child pulldown. The option menu items of the pulldown that you select in this field will be displayed in the columns below to be associated or unassociated to the child option menu item selected in the Option Menu Item field.
8. Any parent option menu items already associated with the child option menu item will be displayed in the left column called Associated. Any parent option menu items in the Associated column proceeded by "*" are implicit relationships (these relationships were made when the parent pulldown was selected for the child pulldown field in the Edit Attributes section of the Fields page).

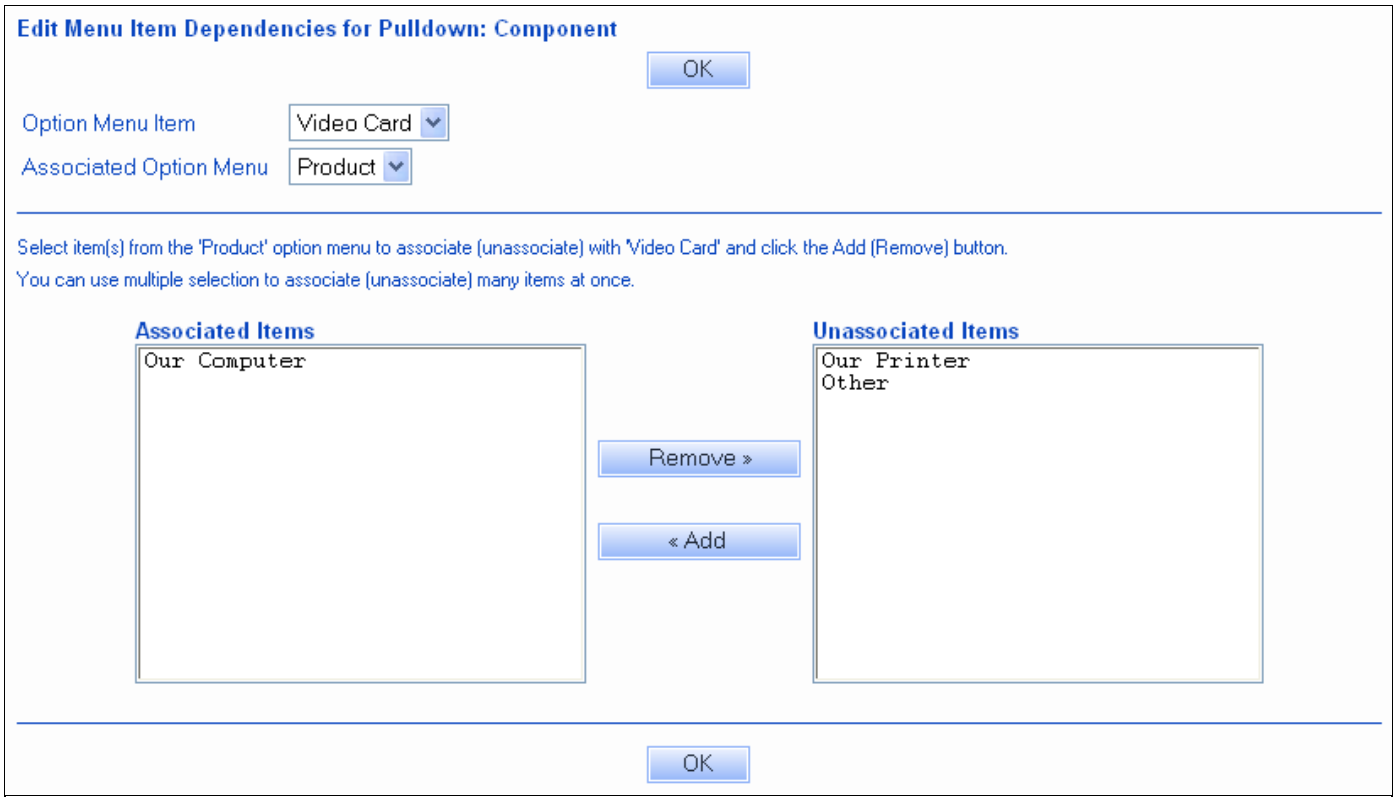
   Any parent option menu items not associated with the child option menu item will be displayed in the right column called Not Associated. A parent option menu item temporarily associated to the child (proceeded by "*") will also be listed in the Not Associated column without "*".

   To select a option menu value to be associated to the child option menu value, click on the parent option menu item, then click on the Add button. The parent option menu item will be moved to the Associated column. To select multiple parent option menu items, hold the Shift key on your keyboard while clicking on multiple values.

   As soon as ANY parent option menu item from the Not Associated column is added to the Associated column, any implicitly associated parent option menu item (proceeded by "*") will be removed from the Associated column. When you choose to associate a parent option menu item to a child option menu item manually, you are creating an explicit relationship. Any explicit relationship removes the temporary (implicit) relationship created automatically by Tracker.

9. Select another child pulldown menu item in the Option Menu Item field, then choose the corresponding parent pulldown menu items to be associated.
10. After assigning parent menu items to each child menu item listed in Option Menu Item field, click on the OK button to return to the Manage Menu Items section.

The following figure shows the result of associating option menu items from one pulldown to another. "Video Card" is an option menu item of the "Component" field. The "Component" field is a child of the "Product" field. The "Product" field has the option menu item "Our Computer", which has been associated to the "Video Card" option menu item. "Product" also has the option menu items "None" and "Our Printer", which are unassociated with the "Video Card" option menu item.



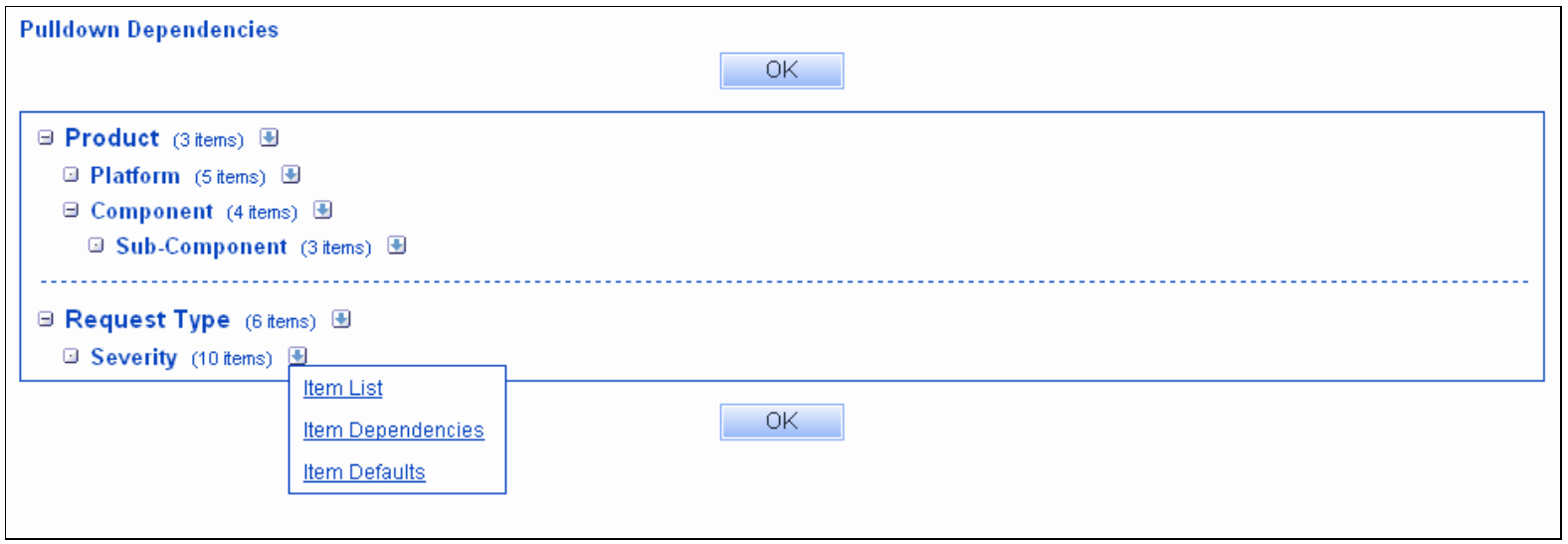
Pulldown Dependencies List

To see a list of which pulldown fields are involved in dependent relationships:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Pulldown Dependencies link in the upper right
5. Any pulldowns involved in a dependency will be displayed as in the Pulldown Dependencies Sample

Pulldown Dependencies Sample

The sample below shows the various pulldown fields that are involved in dependent relationships.



- The Product field is parent to 2 pulldowns: Platform and Component

- The Component field is parent to the Sub-Component field
- The Request Type field is parent to the Severity field

To the right of each pulldown is the number of non-obsolete option menu items that exist within that pulldown.

Click on the down arrow to the right of each field to browse to:

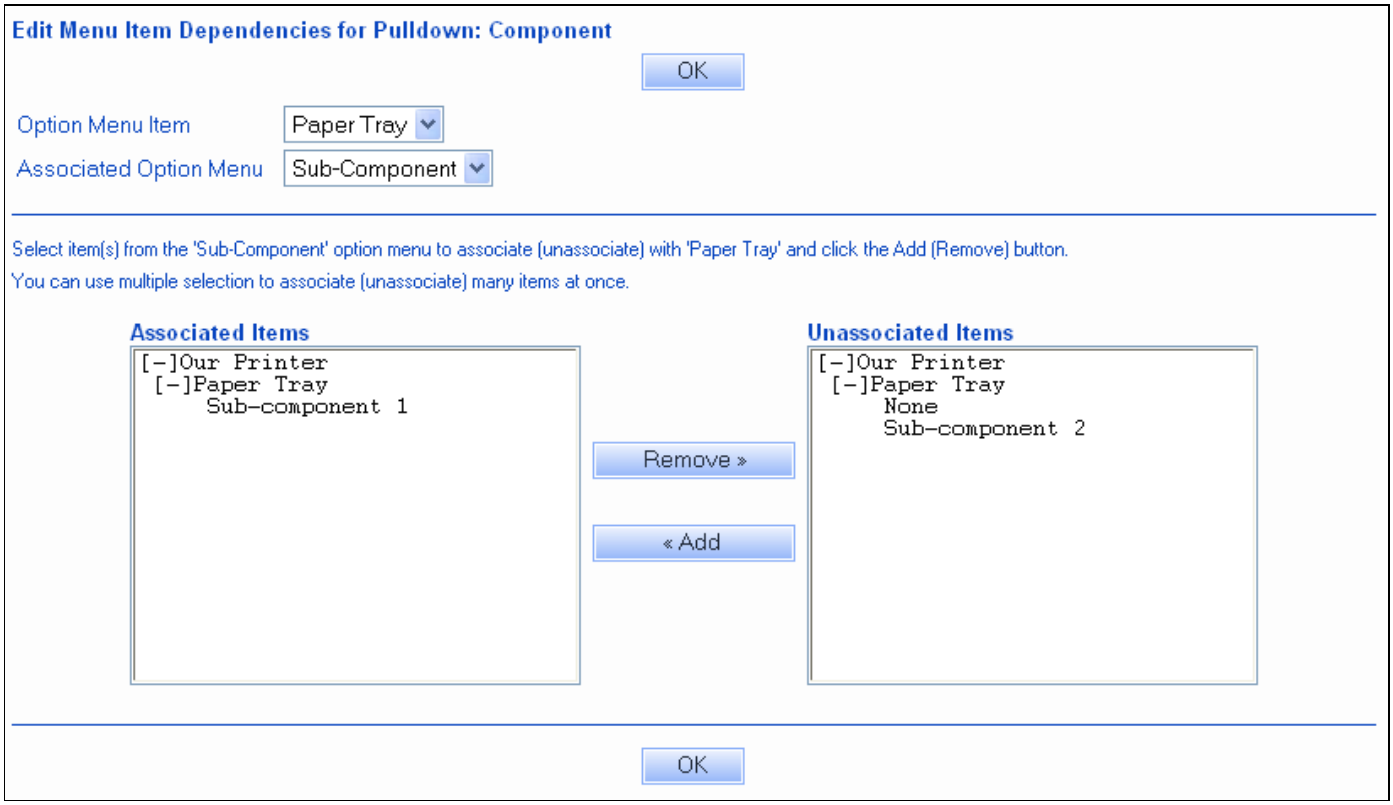
- Item List
  Selecting this option will display the list of option menu items for that field
- Item Dependencies
  Selecting this option will display the Item Dependencies page for that field, where option menu items can be mapped to the field's parent or child pulldown(s).
- Item Defaults
  Selecting this option will display the Item Defaults page for the field, where the default options specific to the dependent relationships are configured. This option will only be available for fields that have a parent pulldown.

Dependent Relationships with Multiple Levels of Hierarchy

Dependent relationships between pulldown menus can span multiple levels. For instance, Pulldown A can be the parent of Pulldown B. Pulldown B is the parent of Pulldown C. This is a 3 level dependent relationship. Multiple level hierarchies (with 3 or more levels) are displayed slightly differently than a relationship where there is only 2 levels (one parent and its child pulldown menus). For multiple level hierarchies, the complete tree structure of all of the pulldown menus involved is displayed in the Item Dependencies page for each pulldown. The figure below demonstrates a 3 level hierarchy with the following dependencies established:

Product > Component > Sub-Component

The Product field represents the root (or highest) level in the hierarchy. The figure below shows the relationships between the Component field and Sub-component, its child pulldown.



This figure displays which option menu items from "Sub-Component" are associated with "Paper Tray", an option menu item in the Component field. In the Associated Items column, the option menu item "Sub-component 1"is associated with "Paper Tray". The option menu item "Sub-component 2" is unassociated with "Paper Tray".

Note the items "[-] Our Printer" and "[-] Paper Tray" in the tree structure displayed in this figure. "[-] Our Printer" is an option menu item of the Product field (from the root or highest level of the hierarchy). "[-] Paper Tray" is an option menu item of Component field (the second level of the hierarchy). When multiple level hierarchies exist in Tracker, the Item Dependencies page for a pulldown menu will display the tree structure higher than its own level. So, in the example explained above, the figure shows the Item Dependencies page for the Component field and also shows the level above Component.

Setting Defaults for Dependencies

Because dependencies can be mapped such that the option menu item that is the "global default" (the default for the field involved in the dependent relationship) is not a valid selection, you can specify defaults for each parent-child mapping. The defaults should only be selected after mapping the relationships between the menu items in the Item Dependencies page. Instructions on mapping pulldown menu items can be found in the Configure relationships between option menu values in the parent pulldown and the child pulldown section.

For example, let's say the Product is parent to Component with the following values
Product: Product A, Product B
Component: 10, 20, 30 , 40
The option menu item "20" is the default for the Component field.

The following relationships are set up between Product and Component:
Product A > 10, 30, 40
Product B > 20, 30, 40

The option "20" is the "global default" for the Component field, but it is not a valid option when Product A is selected. You can specify which item ("10", "30" or "40") will be selected in the Component field by default when Product A is selected via the Default Items section.

To set the defaults for a parent-child mapping:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button
5. Click on the Default Items button
6. A tree structure will be displayed. Each parent option menu item will be preceded by "[-]". Under each parent option menu item, the related child option menu items will be displayed. If a parent option menu item does not appear on this page, this indicates that the parent item does not have any child items related (or mapped) to it.

   Select one child option menu item to be the default value for each parent. To set the child option menu item as the default, click on the child option menu item, then click on the Toggle Default button. Once the child option menu item has been set as the default, "[Default]" will be noted after the name of the child option menu item.

7. Click OK to return to the Manage Menu Items page.

When the child pulldown is set as required during the Add or Task operations (when a field is required on Add or Task, the user is prompted to choose an option menu item other than the global default in order to complete the Add or Task operation) and the global default for the field is not a valid value, the user will not be forced to make a different selection because the field is already set to a value that is different than the global default. You can control which default is available when the global default is not a valid value by setting the defaults for dependencies using the steps above.

Effects of Making Dependent Pulldowns Invisible

A field can be set such that it is not visible in certain areas of Tracker or to certain groups by configuring the field visibility settings. When a field that is involved in a dependency is not visible on a page where values are being set (e.g. Add, Edit, Task pages), the values saved in the record will still adhere to the dependencies that were mapped for the related fields. Some examples are explained below to illustrate this concept.

All of the following examples are based on this sample configuration:

The field Component is the parent of the Sub-Component field.
Component has the values: A, B
Sub-Component has the values: A1, A2, B1, B2
Component A is mapped to Sub-Components A1 and A2; A1 is the default.
Component B is mapped to Sub-Components B1 and B2; B1 is the default.

Example 1: A record is modified using the Edit operation. Component is visible on the Edit Page, but Sub-Component is not visible on this page.
A record has Component set to "A" and Sub-Component set to "A2". Let's say you go to the Edit Page of this record and change the Component field to "B" and click on the "Update Fields" button. When you view this record, the Sub-Component field will have been changed to the value "B1" even though the field was not visible on the Edit Page when the change was made. This occurs because when the parent field (Component) is changed, all child fields (like Sub-Component) have to be reset to a value that corresponds to mappings configured for the dependent fields. In this case, "B1" was set as the value because it is the default for Sub-Component when the Component field is set to "B". The same behavior will occur when using the Task operation to modify a record.

Example 2: A record is modified using the Task operation. Component is not visible on the Task Page, but Sub-Component is visible on this page.
A record has Component set to "A" and Sub-Component set to "A2". Let's say you are using the Task operation on this record and click on the Sub-Component field. The only available values for this field will be "A1" and "A2". This occurs because when the parent field (Component) is not visible, any child fields (Sub-Component) can only display values that correspond to the current value in the parent field based on the mappings configured for the fields. The same behavior will occur when using the Add and Edit Pages.

Effects of Making Changes to Dependent Pulldowns

Dependent relationships between pulldown fields can be established at any time and also can be removed at any time. Because these changes can be made before and / or after problem records have been added, there are situations where these changes in the dependent relationships could result in additional changes with respect to the option menu items of the pulldowns involved. During the course of changing the relationship between pulldown fields (either when editing a pulldown's parent or modifying the mapping in the Item Dependencies section), Tracker will prompt the user with information about the effects of changing dependent relationships. Examples of such changes are discussed below. The following sample multiple level hierarchy is provided to illustrate the examples below:

Product > Component > Request Type > Priority

In addition, the root level is the highest level in the hierarchy (the Product field in this example). The intermediate leaf level are the levels in the middle of the hierarchy (the Component or Request Type fields). The last leaf level is the lowest level in the hierarchy (the Priority field in this example).

Click on the example to see an explanation of the effects

1. Pulldown Field at the root or last leaf level deleted
2. Pulldown Field at an intermediate leaf level deleted
3. Option Menu Item deleted from a pulldown menu involved at any level
4. Parent Pulldown changed to <No Pulldown>
5. The associations between an Option Menu Item and the next lower level are removed
6. Parent Pulldown changed to another pulldown field

Explanations for the above cases

1. Pulldown Field at the root or last leaf level deleted in the Fields section
   When a pulldown field is deleted, any parent or child pulldown fields associated with the removed field will become independent of the relationship. The removed pulldown field will be removed from all records, but any levels of hierarchy above or below this field will be preserved.

   Using the example, if Product were deleted, the Product field and all of its option menu items would be removed. The option menu items in the Component field would be independent of the associations that existed with the Product field. However, the dependent relationship between Component and Request Type would be preserved. The dependencies in the level below Request Type are also preserved.

   Similarly, if Priority were deleted, the Priority field and all of its option menu items would be removed. The option menu items in the Request Type field would be independent of the associations that existed with the Priority field. However, the dependent relationship between Request Type and Component would be preserved. The dependencies in the level above Component would also be preserved.

2. Pulldown Field at an intermediate leaf level deleted in the Fields section
   When a pulldown field is deleted, any parent or child pulldown fields associated with the removed field will become independent of the relationship. The removed pulldown field will be removed from all records, but any levels of hierarchy above or below this field will be preserved.

   Using the example above, if Component were deleted, the Component field and all of its option menu items would be removed. The option menu items in the Product and Request Type fields would be independent of the associations that existed with the Component field. However, the dependent relationship between Request Type and Priority would still be preserved.

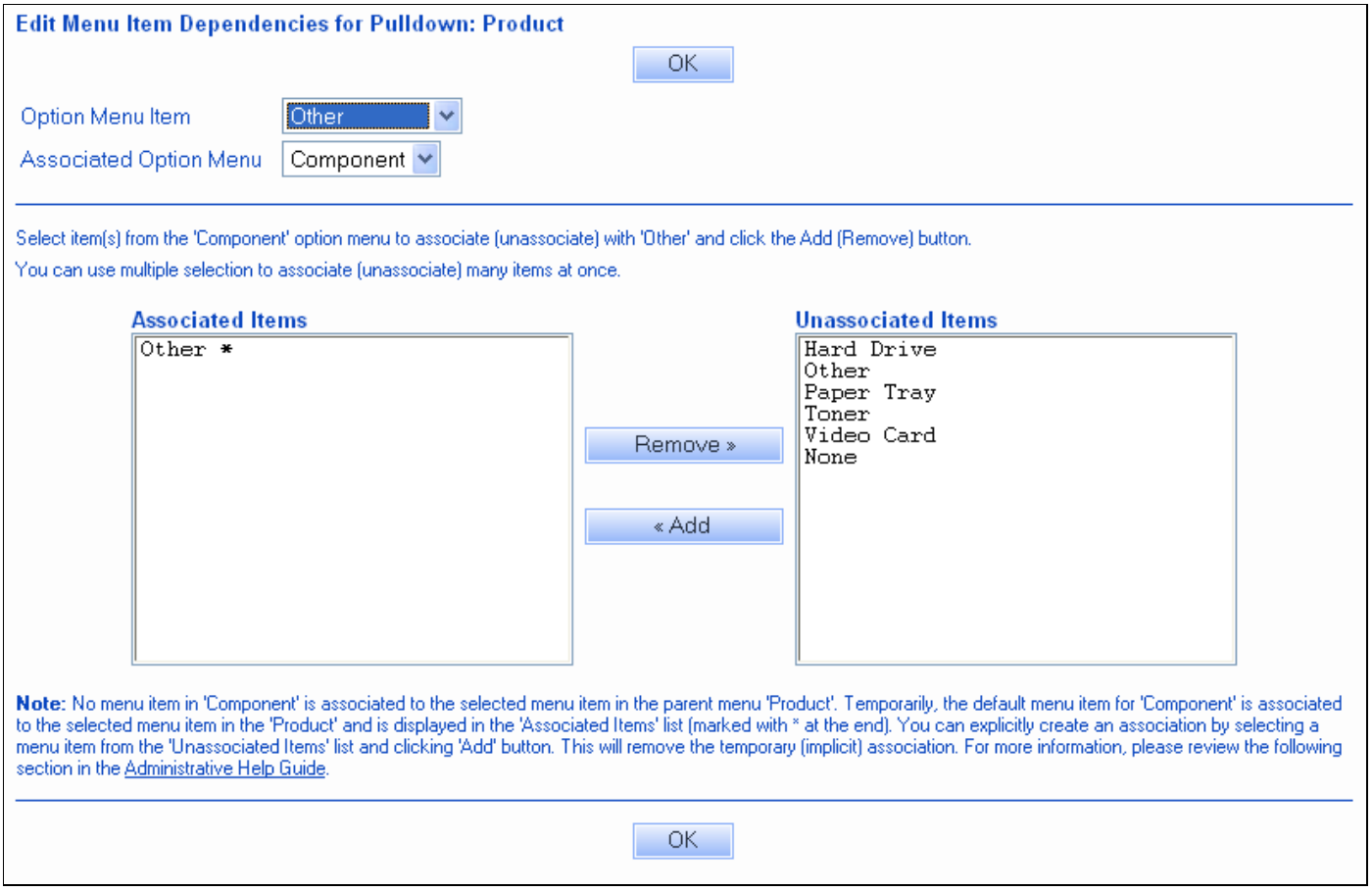
3. Option Menu Item deleted from a pulldown menu involved at any level
   When an option menu item is removed by deleting it in the Items section of a pulldown menu, the user making the change will be prompted with the options below:
   - Choose one of the remaining menu values for that field to replace the removed value in records that have the obsolete value selected. If this option is chosen, there may be records where the parent and child values do not follow the dependent relationship configured in the Item Dependencies section. Using the example above, Product has the option menu items "Our Printer" and "Our Computer". "Our Printer" is associated with the option menu item "Paper Tray" from the "Component" field. "Our Computer" is associated with the option menu item "Hard Drive" from the "Component" field. If we choose to replace the value "Our Printer" in all records where "Our Computer" is selected, these records will have "Our Printer" entered with "Hard Drive" in the "Component" field even though "Hard Drive" is unassociated with "Our Printer" in the Item Dependencies section. However, after completing this operation, you could use the Edit Results operation to globally change these records to have acceptable values. In the case described above, you could run a query with the criteria "Product" = "Our Printer" and "Component" = "Hard Drive". Then, when the results are generated, use the Edit Results operation to change the "Component" field to have a value that is associated with "Our Printer" for all of the records displayed in the query results.
   - Delete any records that contain the obsolete value. Choosing this option will permanently delete these records.
   - Leave the records containing the obsolete value unchanged. Choosing this option may cause unexpected results in the Edit, Task, Query and Metrics pages when the obsolete value is present in a record.

4. Parent Pulldown changed to <No Pulldown> in the Fields section
   When the Parent Pulldown attribute of a pulldown is changed to <No Pulldown> in the Fields section, the option menu items of this pulldown become independent of any associations that existed between the pulldown and its former parent. However, any dependencies that exist at levels above or below this pulldown will be preserved.

   Using the sample hierarchy above, let's say the Component field was changed to have <No Pulldown> in the Parent Pulldown attribute in the Fields section. The option menu items of Component will be independent of the associations that existed with Product. However, the associations between the option menu items of Component and levels below it will be preserved.

   Using the sample hierarchy, let's say the Request Type field was changed to have <No Pulldown> in the Parent Pulldown attribute in the Fields section. The option menu items of Request Type will be independent of the associations that existed with Component. However, the associations between Request Type and Priority will be preserved. The associations between Product and Component will also be preserved.

5. The associations between an Option Menu Item and the next lower level are removed in the Item Dependencies page
   If all of the associations between an option menu item and the next lower level are removed, this indicates that the option menu item is not explicitly associated with any option menu item in a child pulldown menu. When this occurs, Tracker automatically creates an implicit (temporary) relationship between the option menu item and the default option menu item of the child pulldown menu. This implicit relationship is shown in the figure below. The "*" after the child option menu item in the Associated Items column indicates that the association is implicit.



   Using the sample hierarchy and the figure displayed above, the Product field has the option menu item "Our Computer". All associations between "Our Computer" and the option menu items of the Component field were removed. The default option menu item of Component is "Other". Thus, when all of the associations between "Our Computer" and the option menu items of Component were removed, Tracker automatically created an implicit relationship between "Our Computer" and "Other * ".

6. Parent Pulldown changed to another pulldown field in the Fields section
   When the Parent Pulldown attribute of a pulldown is changed to select another pulldown menu in the Fields section, the option menu items of this pulldown become independent of any associations that existed between the pulldown and its former parent. However, any dependencies that exist at levels above or below this pulldown will be preserved.

   Using the sample hierarchy above, let's say the Component field was changed to have another field, Severity, in the Parent Pulldown attribute in the Fields section. The option menu items of Component will be independent of the associations that existed with Product. However, the associations between the option menu items of Component and levels below it will be preserved.

   Using the sample hierarchy, let's say the Priority field was changed to have another field, Severity, in the Parent Pulldown attribute in the Fields section. The option menu items of Priority will be independent of the associations that existed with Request Type. However, the associations between Request Type and Component will be preserved. The associations between Component and Product will also be preserved. Tracker will automatically create an implicit association(s) between the default option menu item of Priority and the option menu items of its new parent, Severity. These temporary associations can be changed by creating explicit associations in the Item Dependencies section.

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NetResults Tracker Help

Workflows

Overview

Tracker allows you to customize workflows to match your organization's procedure for processing records. A workflow process is a set of steps, represented by states and transitions. Each record will move through the workflow steps to be processed by various users who enter information into the record throughout the process. Any number of workflows and states may be defined. Each state may have one or more transitions. A state group is a collection of states that can be used in workflow settings, transitions and reports. A transition is a path from one state to another state.

A Default Workflow is created in each workgroup. The name of the default workflow depends on the template that was used to create the workgroup. For example, the Product Development template has the "Product Development Issue Process" created by default and the Help Desk template has the "Help Desk Ticket Process" created by default. Information about the default settings in a particular template can be found in the template list in the Putting It All Together section.

The following sections describe aspects of the Workflow Customization in detail:

Workflows
States
Transitions
Forms
Email Rules

Before customizing your workflow, it may be helpful to review the Tracking Defects with Tracker section to get a feel for how the workflow settings interact with other areas in Tracker.

Managing Workflows

Multiple workflows can be created and managed in the Workflows section. By default, a single workflow called "Default Workflow" is configured in a workgroup.

To view the properties of a workflow:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. By default the Default Workflow's properties will be displayed. To view another workflow's properties, select a workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.

   The workflow properties include the states that are part of the workflow, the transitions available in each state, the forms which use the workflow and the email rules in effect for the workflow.

   Click on the Expand All link to the right of the workflow name to expand all of the sub-sections of the workflow. Click on the Collapse button to collapse the expanded sub-sections. The sub-sections include:

   - States
   - Next States for each state
   - Transitions for each state
   - Transition Properties, Task Fields and Alerts

- Forms
- Form Properties, Email Content and Alerts
- Email Rules

Please note: In the Workflows section, a "+" icon is available for expanding sub-sections and a "-" icon is available for collapsing sub-sections.

Adding a Workflow

To add a workflow:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Add Workflow button
5. Enter a name for the workflow in the Workflow Name field.

   While holding down the Ctrl button on your keyboard, click on the states you wish to include in the workflow in the Include These States field. Additional states can be added to the workflow later using the (for instance, if you have not yet created all the states you wish to use).

   In the Form field, select a form to be used with this workflow.

   For Form's Allowed Add States, select the state group that contains the states that should be available in the Status field when it is displayed on the Add Page (basically, to which states can a newly added record be routed).

   For Form's Default Add State, select the state to which a newly added record should be routed when the Status field is not available on the Add Page. The states available for selection are the states in the state group selected for Form's Allowed Add State.

6. Click OK to save the new workflow
7. Click OK to view and manage the properties of the newly added workflow or click Add another Form to this Workflow to add states to the newly added workflow.
8. If you opted to add another form to the workflow, you will be prompted to select a form in the Form field.

   For Form's Allowed Add States, select the state group that contains the states that should be available in the Status field when it is displayed on the Add Page (basically, to which states can a newly added record be routed).

   For Form's Default Add State, select the state to which a newly added record should be routed when the Status field is not available on the Add Page. The states available for selection are the states in the state group selected for Form's Allowed Add State.

9. Click OK to complete the operation

Editing a Workflow Name

To edit the name of a workflow:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the Edit button to the right of the Workflows pulldown
6. Edit the name of the workflow in the Workflow Name field
7. Click OK to save the change
8. Click OK when the change is confirmed

Deleting a Workflow

A workflow can only be deleted if it is not currently being used by any project.

To delete a workflow:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the Delete button to the right of the Workflows pulldown
6. Click OK to confirm the operation
7. If there were no projects using the workflow you are deleting, a warning will be displayed to note that by deleting the workflow all of its Transitions, Form Settings (such as Default Add State Settings, Email Common Content, Alerts) and Outgoing Email Rules will be permanently removed. Click OK to proceed.
8. Click OK when the confirmation page is displayed

   If any projects are currently using the workflow you are deleting, you will be prompted to either change the workflow being used by the project or remove the form using this workflow from the project.

   To change the workflow being used by the project:

   a. Click on the Admin icon
   b. Click on the Projects link
   c. In the Projects pulldown, select the project using the workflow you wish to delete
   d. In the Forms section, locate the form using the workflow you wish to delete
   e. Click on the Change link to the right of the Workflow field
   f. Select another workflow in the Workflow pulldown and click OK to save this change. Another workflow may not be available for selection depending on how your forms are configured. If another workflow is not available for selection, proceed to the steps below to remove the form from the project instead.
   g. Repeat the steps above starting with To delete a workflow to delete the workflow

   To remove the form from the project:

   a. Click on the Admin icon
   b. Click on the Projects link
   c. In the Projects pulldown, select the project using the workflow you wish to delete
   d. Click on the Manage link to the right of the Forms section
   e. Click on the form, then click on the Remove button
   f. Click OK to confirm the operation
   g. A warning will be displayed to note that by removing the form from the project all records for this project that were created using this form will be permanently removed (along with related information such as History, Attachments, Record Security, Source Code Files, Alerts, Discussion Threads, etc.) as well as the form's State Manager and Incoming Email settings. Click OK to proceed.
   h. Click OK when the confirmation is displayed
   i. Repeat the steps above starting with To delete a workflow to delete the workflow

Setting a Default Workflow

You can select which workflow you would like to see by default when you go to the Workflows page in the Admin section.

To set the default workflow:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow you wish to make the default in the Workflows pulldown at the top
5. Click on the Set as Default button to the right of the Workflows pulldown. If the Set as Default button is not available, this indicates that the workflow is already set as the default workflow.

Automatic Assignment for the Add and Task Operations

The Status and Assignee of a record can be determined automatically when records are created using the Add form or processed using the Task operation. Automatic assignment functions for the Add and Task operations are based on:

- The combination of Form and Project selected for the record
- Whether the Status, and, Assigned To fields are visible on the Add page
- the selection made in particular pulldown fields for the record such as Product, Priority, Severity or other pulldown fields you customize (optional)

Automatic Assignment Guidelines for Add Page

When a field is visible on the Add page, this indicates that the field's visibility settings are configured such that the field is displayed on the Add page when a user creates a new record. Please review the Field Visibility section of the Fields Help section for more information.

Tracker's automatic assignment for a new record is a combination of the values selected for Form, Project, a particular pulldown, Status and Assigned To fields on the Add page. These fields can either be selected by the user on the Add page or selected automatically based on the guidelines described below:

- The combination of the Form and Project fields determine which states are available in Status field via the Allowed Add States Setting. The Allowed Add State setting can be based on a selection made in a particular pulldown (e.g. If Priority is set to 1, the Status field will contain the states from one state group and if Priority is set to 2, the Status field will contain the states from another state group).

- The combination of the Form, Project and Status fields determine which user will be assigned to a record via the State Managers setting if <State Manager> is selected in the Assigned To field on the Add page. The State Managers can be based on a selection made in a particular pulldown (e.g. If Product is "Product A", assign the record to "Developer One". If Product is "Product B", assign the record to "Developer Two".)

- If the Allowed Add States or the State Managers are based on a particular field and the particular field is not visible on the Add page, the user cannot select a value in the field for the new record. When a new record is saved, the field is set to the default value and inherits the Allowed Add States or State Manager set for that value.

- When the Status field is visible on the Add page, the user can accept the default for the Status field (by not making a selection), which will route the record to the state listed in the field Default Add State for the combination of Form, Project and pulldown field selected in the record. If the user chooses to make a selection for the Status field, when the new record is saved, it will be routed to the state selected by the user.

- When the Status field is not visible on the Add page, the user cannot select a state. When the new record is saved, it is routed to the state configured as the Default Add State for the combination of Form, Project and pulldown field selected in the record.

- When the Assigned To field is visible on the Add page, the user can accept the default for the Assigned To field (by not making a selection), which will assign the new record to the State Manager for the combination of Form, Project, pulldown and Status selected in the record. If the user chooses to make a selection for the Assigned To field, when the new record is saved, it will be assigned to the user selected in the Assigned To field.

- The value State Manager can be listed as the default for the Assigned To field when the General Preference Include State Manager in the Assignee List on Add operation is enabled. When a new record is saved with "State Manager" selected, the record will be assigned to the State Manager for the combination of Form, Project, pulldown and Status selected in the record.

- When the Assigned To field is not visible on the Add page, the user cannot select an assignee. When the new record is saved, it is assigned to the State Manager for the combination of Form, Project, pulldown and Status selected in the record.

- If the fields Status, Assigned To, pulldowns (fields that settings are based on) are not visible on the Add page, the newly added record will be saved with the pulldowns set to their default values, Status set to the Default Add State for the default value of the pulldown it is based on and Assigned To set to the State Manager for the Default Add State for the combination of Form and Project selected in the record.

Automatic Assignment Guidelines for the Task Operation

When a record is processed using the Task Operation, the settings in the transition selected determine whether automatic assignment is used.

- If the State Manager settings for the combination of Form and Project are based on a particular pulldown, the value of the pulldown field in the record is used to determine the State Manager.
- If a transition has New Assignee set to "<State Manager>", the record will be routed to the State Manager for the New State that corresponds to the transition.

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NetResults Tracker Help

Workflow States

Each workflow is a set of steps that are used to process a record. Each step can be represented by a state. States can be used in one or multiple workflows. After adding states to a workflow, create transitions, or paths, to move records from one state to another and state groups to create collections of states to be used in reports and workflow settings.

Global States List

OK | Add State | State Groups

Options	State Name (Status)	Order	Transition Label Style	Used In Workflows
Edit Delete	Reported	1	Radio	Default Workflow , Support
Edit Delete	Scheduled	2	Radio	Default Workflow
Edit Delete	In Development	3	Radio	Default Workflow
Edit Delete	Fixed	4	Radio	Default Workflow
Edit Delete	In Test	5	Radio	Default Workflow
Edit Delete	Tested	6	Radio	Default Workflow
Edit Delete	Released	7	Radio	Default Workflow
Edit Delete	Deferred	8	Radio	Default Workflow
Edit Delete	Duplicate	9	Radio	Default Workflow
Edit Delete	Closed	10	Radio	Default Workflow , Support
Edit	Not Applicable	15		Empty Workflow

OK | Add State | State Groups

Adding a State

To add a new state:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Global States button
5. Click on the Add State button
6. Make selections in the options presented
7. Click on the OK button to save the new state
8. Click OK to return to the Global States List or click on the Add Another State button to create another state.

Properties of a State

State Name
Name of the state

Order
The order of the state. This will determine the order in which it appears in the Global States List and a workflow's Available States list. You may wish to order the states according to their place in a workflow process. For example, if Reported is the first state for the default

workflow, you may want to specify "0" as the order for this state. States which have the same value specified in the order field will be listed alphabetically.

Transition Label Style
The style of the labels that will be displayed when a transition is displayed in the Task operation. You can choose from three types of label styles:

- Radio
  Transition options will be displayed as a radio button selection (listed vertically).
- Buttons
  Transition options will be displayed as clickable buttons (listed horizontally).
- Pulldown
  Transition options will be listed in a single pulldown menu.
- Vertical Button
  Transition options will be displayed as clickable buttons (listed vertically).

Instruction Message
The instructional message for this state. The message appears whenever a user performs the Task operation on a record that is in this state. This can be used to instruct the user to select a transition for the state or to provide general information about tasking the record. Up to 255 characters can be entered. The transition image in the Marking a Task Complete section of the User Guide shows an example of the Instruction Message above all the listed Transitions.

Editing a State

To edit a state:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Global States button
5. Click on the Edit button listed to the left of the state you wish to modify
6. Make the desired changes to the state's properties
7. Click OK to save the changes

Deleting a State

Before a state can be deleted, Tracker will check if any of the following conditions exist. If any of the conditions exist, you will be prompted to make changes to select a replacement or change the configuration accordingly:

- Whether the state is selected as the Default Add State for any forms in workflows that contain the state you are deleting
- Whether the state is added to any workflows
- Whether the state is selected in the Status field for any records

When deleting a state, the following items will be affected:

- Whether the state is selected for "New State" in any transitions
- Whether the state is selected in any Email Rules
- Whether the state is selected as part of the criteria in any Saved Queries or Metrics
- Whether the state is selected as the Default State for Incoming Mail
- Whether the state is selected for publishing articles to the Knowledge Base

Deleting a state will remove the state's transitions and state managers.

To delete a state:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Global States button
5. Check the Used In Workflows column. If there are any workflows listed, click on the OK button to return to the Workflows section.

Select a workflow that was listed in the Used In Workflows column in the Workflows pulldown at the top. The page will be refreshed to display the properties of the selected workflow.

Click on the + icon to the left of a form in the Forms section. Check to ensure that the state you wish to delete is not listed as the Default Add State for the form. If the state is selected as the Default Add State for a form, click on the Manage link to the right of Default Add State Settings. Select another state for Default Add State to replace the one you wish to delete. You may have to apply this change to other values in a pulldown if the Default Add State setting is based on a particular pulldown field. Click OK to save the changes and click OK again to return to the Workflows section. Repeat this step for any other forms which have the state selected as the Default Add State.

Click on the Manage link to the right of States. Click on the state you wish to delete and click on the Remove button. If there are any related items, you will be prompted to delete the items or select a replacement state. Click OK to save the change and click OK to return to the States for a Workflow section. Click OK again to return to the Workflows section. Repeat the above steps for any other workflows that were listed in the Used In Workflows column.

Click on the Global States button

6. Click on the Delete button listed to the left of the state you wish to remove. Click OK to confirm the operation. Click OK again to confirm and click OK once again after the state has been deleted.

State Groups

Often when formulating criteria for queries and charts or setting up a workflow, you may wish to limit the criteria or the workflow options to a particular group of states. Tracker allows you to do this by defining State Groups. A State Group is a collection of workflow states that appears as a choice on the Query, Metrics, and Workflow sections. One example of using state groups is to create a state group which contains only those states in which records are considered active (e.g. all records which are not closed, on hold or in any other state where they are not being actively processed). This "Active" state group could be used when running reports to limit the data returned by the report to only "active" records.

By default, a state group called "All", which contains all states, is available. To view the state groups currently available in the workgroup:

1. Login to the workgroup as Admin.
2. Click on the Admin icon.
3. Click on the Workflows link
4. Click on the Global States button
5. Click on the State Groups button
6. The state groups will be listed in alphabetical order. The States In This State Group column shows the states which are included in the state group.

Adding a State Group

To add a State Group:

1. Login to the workgroup as Admin.
2. Click on the Admin icon.
3. Click on the Workflows link
4. Click on the Global States button
5. Click on the State Groups button
6. Click on the Add State Group button
7. Enter a name in the State Group Name, then click on the OK button
8. Click on the Add States to this State Group button to add states to the new state group or click OK to return to the State Groups section
9. To add states to the state group, click on a state in the Available Global States column, then click on the Add button to move it to the States In This State Group column. Repeat this until all states you wish to add are in the States In This State Group column.
10. Click OK to return to the State Groups page

Editing a State Group

To edit a state group:

1. Login to the workgroup as Admin.
2. Click on the Admin icon

3. Click on the Workflows link
4. Click on the Global States button
5. Click on the State Groups button
6. Click on the Edit button to the right of the state group you wish to modify
7. Edit the name of the state group by changing the State Group Name field
8. Click OK to save the change
9. Click OK when the confirmation page is displayed to return to the State Groups section

Adding or Removing States From a State Group

To add or remove states from a state group:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Global States button
5. Click on the State Groups button
6. Click on the States button to the left of the state group you wish to modify
7. To remove a state from the state group, click on the state in the States In This State Group column, then click on the Remove. To add a state to the state group, click on the state in the Available Global States column, then click on the Add button.
8. Click on the OK button to return to the State Groups section

Deleting a State Group

When removing a state group, Tracker will check the following items and ask you to either select a replacement for the state group you are removing or choose to delete the related item:

- Whether the state group is selected for the Allowed Add States option in a Workflow Form
- Whether the state group is selected for the "Articles in these State(s) are visible" option in the Knowledge Base Preferences
- Whether the state is selected in any Email Rules
- Whether the state group is selected for "New State" in the Prompt with <State Group> in any transitions
- Whether the state is selected as part of the criteria in any Saved Queries or Metrics

To delete a state group:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Global States button
5. Click on the State Groups button
6. Click on the Delete button to the left of the state group you wish to modify, then click OK to confirm the action

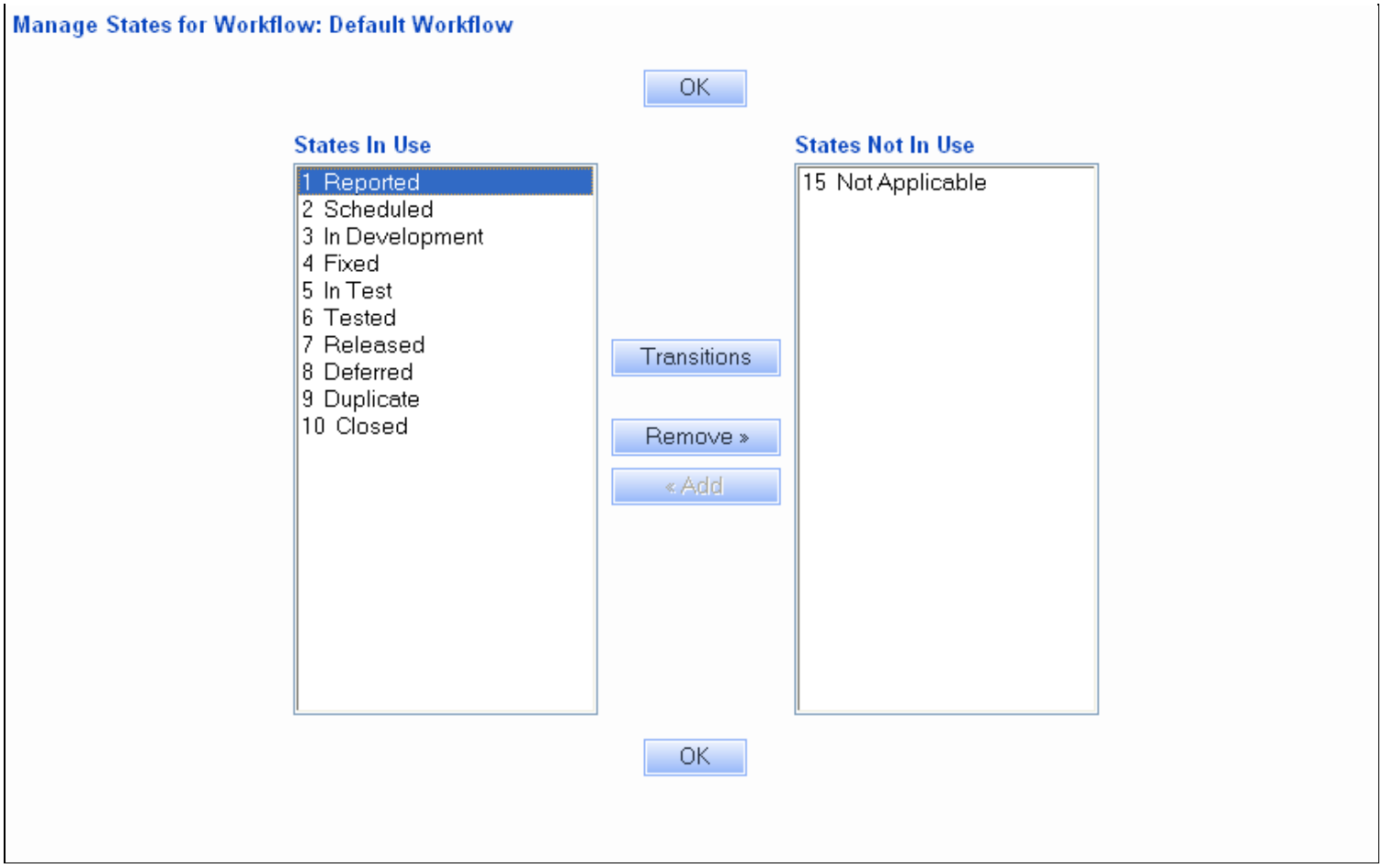
   If the state group is selected for the Allowed Add States option in a Workflow Form or is selected for the "Articles in these State(s) are visible" option in the Knowledge Base Preferences, you will be prompted to select a different state group for these options before you can delete the state group. Change the options mentioned and then repeat the above steps to delete the state group

   If the state group is selected in any Email Rules, is selected for "New State" in the Prompt with <State Group> in any transitions, or is selected as part of the criteria in any Saved Queries or Metrics, you will be prompted to either select a replacement or delete the items. Click OK after selecting replacements / deleting related items.

7. Click OK after the state group has been deleted

Managing States in a Workflow

States can be added or removed from a workflow on the Workflows page. Expanding a state listed in the States section for a workflow will display the state's Next States, Transitions, Transition properties, Task Fields and Alerts. Next States are states selected as the "New State" for a transition configured in the selected state. For example, if you have expanded the "Reported" state and it has a transition that will move records to the "Scheduled" state, The Scheduled state will be listed in "Next States" for the Reported state.



To add or remove states from a workflow:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the Manage link to the right of States for the workflow you wish to modify
6. The states in the States In Use column are states currently used by the selected workflow. The states in the States Not In Use column are states that are not currently used by the selected workflow. The states available for selection in the States Not In Use column are the states created in the Global States List.

   To add a state to the workflow, click on a state in the States Not In Use column, then click on the Add button. To remove a state from the workflow, click on the state in the States In Use column, then click on the Remove button.

7. Click OK to return to the Workflows section or click on a state and click on the Transitions button to manage the transitions for a state. Details about managing transitions can be found in the Workflow Transitions Help section.

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NetResults Tracker Help

Workflow Transitions

A transition is a path used to move a record from one state to another in the workflow or can be used to assign the record to another user. A transition can include fields called Task Fields that require a user to enter some information into a record before it moves to the next step in the workflow. In some cases a transition may be a loop (a transition which keeps the record in the same state). A loop transition is used when a record simply needs to have information added to a field, but does not move to another state and / or does not move to another assignee.

Please note: The "+" icon is available for expanding the Transitions sub-sections in the Workflows section. The "-" icon is available for collapsing sub-sections.

Manage Transitions for State: Reported (Workflow: Default Workflow)

OK | Add Transition

Options	Transition Name	Order	New State	New Assignee
Edit Task Fields Alerts Delete	Schedule	5	Scheduled	<State Manager>
Edit Task Fields Alerts Delete	Close	10	Closed	TBD
Edit Task Fields Alerts Delete	Defer	15	Deferred	<State Manager>
Edit Task Fields Alerts Delete	Mark Duplicate	20	Duplicate	TBD

OK | Add Transition

Defining Transitions for a State

The transitions for a particular state can be managed from the Workflows section or in the Available States section.

To manage the transitions for a state in the Workflows section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the "+" icon to the left of the state for which you want to manage the transitions
5. Click on the Manage link to the right of Transitions. Use the steps in the sections below for adding, editing, or deleting a transition.

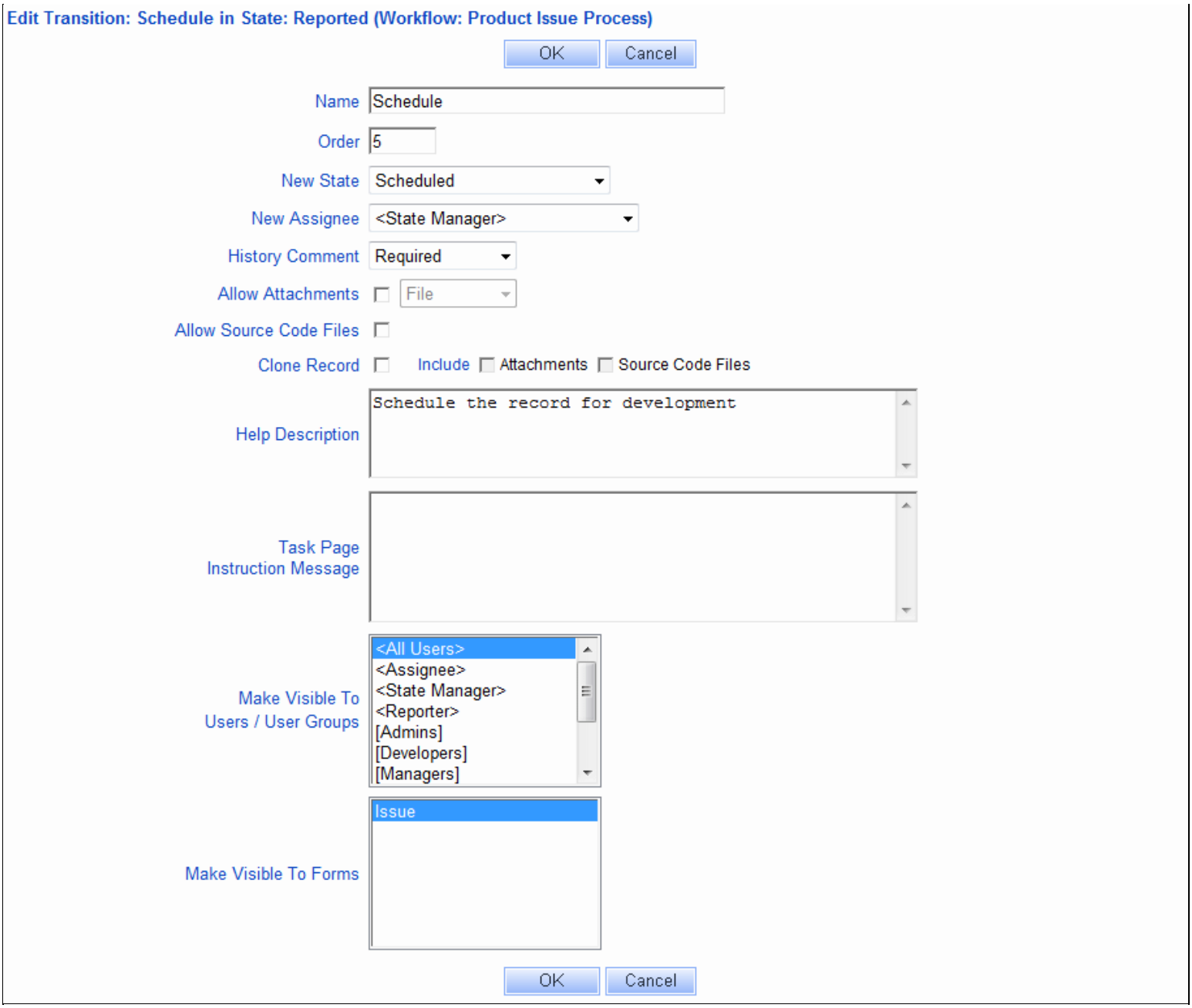
To manage the transitions for a state in the Available States section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Manage link to the right of Available States
5. Click on a state in the States In Use column, then click on the Transitions button Use the steps in the sections below for adding, editing, or deleting a transition.

Adding a New Transition

To add a new transition:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Transitions button to the left of the state for which you want to define transitions
5. Click on the Add Transition button
6. Make selections for the properties described below
7. Click OK to save the transition



Properties of Transitions

The following options will be presented when you add or modify a transition:

Transition Name
Enter a label that will be used as the name of the transition during the Task operation

Order
The order of the transition. This will determine the order in which it appears in the transitions table as well as in the list displayed during the Task operation. Transitions which have the same value specified in the order field will be listed alphabetically.

New State
The state to which the record will be routed when this transition is selected during the Task operation. For this option, you may select one of the following:

- A specific state
  Any state in the Workflow State table can be selected as the new state for a transition.

- Prompt with <State Group>
  Selecting this option will allow the user performing the Task operation to choose from a list of all states within a particular state group as the new state for the record. When selecting this option, please select a state group from the second pulldown listed after New State. Review the Defining State Groups section for information on creating a state group. In the third pulldown, select "Require Selection" if you wish to force the user to manually select a state or select "Allow Default" to allow the default (initial) value to be saved without a manual selection by the user. When "Require Selection" is chosen, the default value of the Status field will be the value entered for the option Required Selection of New State Prompt in the

General Preferences section. When "Allow Default" is selected, the current state of the record will be selected by default during the task operation if the current state is part of the state group selected. Otherwise, the states in the state group will be listed in alphabetical order.

- Previous State
  This option will send the record to the most recent state the record was in prior to its current state. Tracker will examine the Record History to determine the previous state.

New Assignee

The user to whom the record will be assigned when this transition is selected during the Task operation. For this option, you may select one of the following choices listed below:

- <State Manager>
  The record will be routed to the State Manager based on the New State for this transition and the State Manager settings for the combination of form and project set in the record. State Managers can be set in the Form State Managers section.

- <Same Assignee>
  This option can be used for transitions where a record does not need to be assigned to a different user. For example, if a record simply needs to be updated by the user who is currently assigned to the record.

- Prompt with <User Group>
  This option enables you to restrict the list of possible assignees to the members of a user group. The user performing the Task operation will select the new assignee from a list of users within the User Group that you specify for this option. When selecting this option, please select a user group in the second pulldown next to New Assignee. In the third pulldown next to New Assignee, select whether the user "TBD" should be included or excluded from this user group when presented during the task operation. TBD is a built-in user that can be used as a place holder or can signify "assigned to no one". In the fourth pulldown, select "Require Selection" if you wish to force the user to manually select an assignee or select "Allow Default" to allow the default (initial) value to be saved without a manual selection by the user. When "Require Selection" is chosen, the default value of the Assigned To field will be the value entered for the option Required Selection of New Assignee Prompt in the General Preferences section. When "Allow Default" is selected, the current assignee of the record will be selected by default during the task operation if the current assignee is a member of the user group displayed. Otherwise, the users in the user group will be listed in alphabetical order.

- <Last Assignee for New State>
  When selecting this option, Tracker will examine the Record History to find the last user who was assigned to this record when it was in the state specified in the field State for this transition. For instance, if the New State is "Scheduled", Tracker will look in the record history for the record and find the last entry where this record was in the Scheduled state. The assignee listed in this entry will become the new assignee for this record. If the record has not passed through the state selected as the New State, another transition will have to be used to process that record since there is not a user who was the Last Assignee.

- Last Assignee for <State>
  When selecting this option, please select a state in the second pulldown next to New Assignee. With this option selected, Tracker will examine the Record History to find the last user who was assigned to this record when it was in the state specified in the second pulldown. For instance, if the state selected is "Scheduled", Tracker will look in the record history for the record and find the last entry where this record was in the Scheduled state. The assignee listed in this entry will become the new assignee for this record. If the record has not passed through the state selected for this option, another transition will have to be used to process that record since there is not a user who was the Last Assignee.

- <Reporter>
  This will assign the record to the original user who reported the issue according to the value of the Reported By field.

- <LoginUser>
  This will assign the record to the user performing the Task operation. An example where this option can be used is in cases where a record is assigned to another user, such as TBD, and the user needs to assign the record to his or herself using the Task operation.

- A specific user
  Any user with "Internal" selected as the user type can be selected as the new assignee for a transition. The user type is set when the user account is created in the User Management System.

History Comment

- Selecting Required for this option will require the user to enter a history comment when selecting this transition during the Task operation.
- Selecting Optional will allow the user to leave this field blank when this transition is chosen during the Task operation.
- When Do Not Display is selected here, the history comment field will not be presented to the user when this transition is chosen during the task operation. Even though the history comment is not displayed, the record history will still reflect that the task operation was performed on a record. In addition, if Do Not Display is selected and there are no task fields configured for the transition, the transition is set up for fast tasking. Up to 2000 characters can be entered into the History Comment.

Allow Attachments

Checking the box for this option and selecting the attachment type will allow the user performing the Task operation to add the chosen attachments type to the record being processed. When selecting a transition with this option enabled, the user will have the option "Add <Type> Attachment(s)" available for selection during the Task operation.

Allow Source Code Files

Checking the box for this option will allow the user performing the Task operation to add attachments to the record being processed. When selecting a transition with this option enabled, the user will have the option "Associate Source Code File(s)" available for selection during the Task operation. This option will only be available in a transition when the Source Code Control Integration is enabled in the General Preferences section.

Clone Record

- If Yes is selected for this option, Tracker will first create a copy (clone) of the record which the user selected for the Task operation (a new record will be added with all field values the same as the record that was selected), then it will perform the Task operation on the newly created record (clone). The originally selected record ("parent" of the clone) will only have its Record History updated to note that a clone was made of the record. The clone ("child" record) will also have an extra Record History entry to note that it was created as a clone of the parent. Whether or not an Email Rule (with a condition such as "change of Assignee") is triggered by this Task operation will be based on a comparison between the parent record (record being copied) and the child record (copy) after the Task operation completes (e.g. is the Assignee different for the child than for the parent). No "Add" Email Notification Rules will be triggered (to avoid getting one notification for an Add and a second one for a Task for what, to the end user, is a single Task operation). Additional general information on cloning a record is available in the Cloning a Record section of the View page help in the Users Guide.
- If Yes is selected for this option, you can also choose to have the file attachments and/or source code file associations copied from the parent record by checking the Attachments and/or Source Code Files boxes.

Help Description

Enter text to be displayed when the user performs the Task operation. This can be used to provide instructions or helpful information about the transition. Up to 255 characters can be entered. The transition image in the Marking a Task Complete section of the User Guide shows an example of a Help Description under the listed Transitions. You can utilize format tags such as bold, *italics* and others as part of the instruction message. A complete list of available tags can be found here.

Task Page Instruction Message

Enter text to be displayed on the Task Fields Page. After selecting this transition in the Task operation, the user can be presented with a message at the top of the Task Fields page. Up to 1000 characters of text can be entered as way of providing the user a customized message. The Task Fields section in the Marking a Task Complete instructions shows an example of the Task Page Instruction Message. The example is the "Explain the reason for closing the ticket..." text. You can utilize format tags such as bold, *italics* and others as part of the instruction message. A complete list of available tags can be found here.

Visibility

Transition Visibility is the feature that allows you to limit which users and user groups can see this transition available when performing the task operation on a record. Transition Visibility can be set by modifying each transition using the Make Visible to These Users property or by modifying each user group. If you prefer to set visibility by user group, review the Transition Visibility information in the User Accounts - Groups section. For this option, you may select one of the following:

- A specific user group
  Any user group in the User Accounts section can be selected as a user group to which this transition will be visible.
- <All Users>
  Selecting this option will make the transition visible to all users (all members of the Users and RestrictedUsers groups).
- <Assignee>
  Selecting this option will make this transition visible to the user currently selected in the Assigned To field of the record.
- <State Manager>
  Selecting this option will make this transition available to the user selected in the State Manager settings for the combination of Form and Project currently set in the record.
- <Reporter>
  Selecting this option will make this transition visible to the user listed in the Reported By field of the record.

Transitions must also be visible to at least one form in the Make Visible to Forms field. The forms available to be selected in this field are determined by the forms selected in the Available Forms section for the selected workflow.

Fast Tasking

Fast Tasking is the process where a transition is chosen and the user clicks on the OK button, the record will immediately be updated because it is set such that there are no task fields and the history comment should not be displayed. If a transition is configured to allow fast tasking and is configured to display alert settings during the task operation, the alert settings will not be displayed during the task operation. The default alert settings for the transition will be used instead.

Editing a Transition

Transitions can either be edited from the Workflows section or the Available States section.

To edit the transitions for a state in the Workflows section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the "+" icon to the left of the state for which you want to edit the transitions
5. Click on the Edit link to the right of the transition you wish to edit
6. Make any desired changes to the properties of the transition
7. Click OK to save the changes

To edit the transitions for a state in the Available States section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Manage link to the right of Available States
5. Click on a state in the States In Use column, then click on the Transitions button
6. Click on the Edit button to the left of the transition you wish to modify
7. Make any desired changes to the properties of the transition
8. Click OK to save the changes

Removing a Transition

Transitions can either be deleted from the Workflows section or the Available States section.

To delete the transitions for a state in the Workflows section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the "+" icon to the left of the state for which you want to edit the transitions
5. Click on the Manage link to the right of Transitions
6. Click on the Delete button to the left of the transition you wish to remove, then click OK to confirm the operation

To delete the transitions for a state in the Available States section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Manage link to the right of Available States
5. Click on a state in the States In Use column, then click on the Transitions button
6. Click on the Delete button to the left of the transition you wish to remove, then click OK to confirm the operation

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Defining Fields For the Task Operation

For each transition within a particular state, you can specify which fields should be presented to the user during the Task operation. By only presenting the user with the necessary fields, you can ensure each user will correctly adhere to the workflow process.

Task fields for a transition can be managed from the Workflows section or the Available States section.

Some system-required fields cannot be added as a task field using these following steps:

Assignee
Whether this field is available during the Task operation is controlled by the New Assignee option for the transition

Last Updated Date
This field is automatically updated when the Task operation is performed on a record. This field cannot be added as a task field.

Status
Whether this field is available during the Task operation is controlled by the New State option for the transition

To add Task Fields to a transition from the Workflows section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the "+" icon to the left of the appropriate state
5. Click on the "+" icon to the left of the appropriate transition
6. Click on the Manage link to the right of Task Fields
7. Click on a field in the Available Fields column, then click on the Add button
8. The task field properties will be displayed at the bottom. Make selections for these properties, then click on the Update button to save your selections
9. Click on the OK button to return to the Transition list

To add Task Fields to a transition from the Available States section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link

4. Click on the Manage link to the right of Available States
5. Click on a state in the States In Use column
6. Click on the Transitions button
7. Click on the Task Fields button to the left of the appropriate transition
8. Click on a field in the Available Fields column, then click on the Add button
9. The task field properties will be displayed at the bottom. Make selections for these properties, then click on the Update button to save your selections
10. Click on the OK button to return to the Transition list

Task field properties can be edited from the Workflows section or the Available States section.

To edit the properties of a Task Field in a transition from the Workflows section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the "+" icon to the left of the appropriate state
5. Click on the "+" icon to the left of the appropriate transition
6. Click on the Manage link to the right of Task Fields
7. Click on the field in the Fields Used In This Transition column, then click on the Edit button
8. Make changes to the properties for the field when it is presented during the Task operation
9. Click on the Update button to save your selections
10. Click on the OK button to return to the Transition list

To edit the properties of a Task Field in a transition from the Available States section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Manage link to the right of Available States
5. Click on a state in the States In Use column
6. Click on the Transitions button
7. Click on the Task Fields button to the left of the appropriate transition
8. Click on a field in the Fields Used In This Transition column, then click on the Edit button
9. Make changes to the properties for the field when it is presented during the Task operation
10. Click on the Update button to save your selections
11. Click on the OK button to return to the Transition list

Task fields can be removed from a transition either from the Workflows section or the Available States section

To remove Task Fields to a transition from the Workflows section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the "+" icon to the left of the appropriate state
5. Click on the "+" icon to the left of the appropriate transition
6. Click on the Manage link to the right of Task Fields
7. Click on a field in the Fields Used In This Transition column, then click on the Remove button
8. Click on the OK button to return to the Transition list

To remove Task Fields to a transition from the Available States section:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Click on the Manage link to the right of Available States
5. Click on a state in the States In Use column
6. Click on the Transitions button
7. Click on the Task Fields button to the left of the appropriate transition
8. Click on a field in the Fields Used In This Transition column, then click on the Remove button
9. Click on the OK button to return to the Transition list

Properties for Task Fields

The following properties can be set for Task Fields when they are presented during the Task operation. Review the Examples section for suggestions for how to set the properties based on the type of task field.

Field Order

The order in which the Task Field will appear on the page during the Task operation relative to the other task fields configured for the same transition. By default, the order will be the order value as listed in the Fields section. Select an integer value. If multiple task fields have the same value for the order field, the task fields will be listed in alphabetical order.

Input Type

Specifies whether the field is required, optional, or read only when it appears during the Task operation.

- Required indicates that a user will not be able to complete the Task operation until the field is changed from its default value or Initial Value, if applicable. For Integer, Float, Link, Text, TextArea, or Date types this means that a blank value will not be allowed. For Pulldown fields, this means that the user must select a value other than the field's default value (the value configured as the Add Default) or Initial Value. For Release Number fields, this means that the user must select a value other than the default value or Initial Value in each digit (the value configured as the Add Default). For YesNo fields, this means that the user must select a value other than the default value set for the field in the Field Properties or Initial Value. If the field already has a value that is not the default (it's not blank or not set to the Add Default) and it's not being initialized, the user will not

be forced to change the field during the Task operation.
- Optional indicates that the user is not required to enter information into the field to complete the Task operation
- Read Only indicates that the contents of the field will be displayed for the user's reference, but the field cannot be modified.
- Invisible indicates that the field will not be displayed for the user to see during the Task operation and it will be Initialized (Reset). When a field is initialized, it is reset to its default value. For all field types, initializing removes any previous values entered/selected in the field. For fields where an Initial Value can be set and such a value is configured, the field will be set to the Initial Value specified when it is initialized. See the explanation of the Initialize property for full details. "Invisible" is not available as a selection for Link or Reporter fields.

You may wish to highlight required fields during the Task operation with a particular color, bold type or with a special character (e.g. "*"). This can be done by configuring the Required Field Highlights option in the General Preferences section.

Initialize (Reset)
For Date fields, this property specifies whether the field should be automatically initialized with an Initial Value when the Task operation is performed. You may wish to use a combination of setting the Input Type to "Read Only" and Initialize (Reset) to "Yes" for date fields. This combination will allow the date field to be set to the current date and time when the Task operation is performed, but the user will not be allowed to modify the date field.

For Text, TextArea, URL, Integer, and Float fields, this property specifies whether the field should be reset to blank or an Initial Value. By setting the Initialize (Reset) property to "Yes" and setting the Type property to "Required", you can force a new value to be entered for a Text, TextArea, URL, Integer, or Float field. This property can be useful in combination with the Clone Record option in a Transition as you may find that you would like several fields to be reset when creating a copy (clone) of an existing record.

Note 1: For Float and Integer fields, if you set the Initialize (Reset) property to "Yes" and the Type property to "Read Only", the field value will be set to the Initial Value configured (0.0 for Float and 0 for Integer) because Float and Integer fields must always have a value (blank is not a valid value for Float or Integer).
Note 2: For all field types, if you set the Initialize (Reset) property to "Yes" the existing value (if any) of the field will be overwritten. Any data previously entered in the field will be lost.

For Pulldown fields, setting the Initialize (Reset) property to "Yes" indicates that the field should be reset to the value selected in the Initial Value field (its default value or another menu item). By setting the Initialize (Reset) property to "Yes" and setting the Type property to "Required", you can force a user to select a value other than the default or the Initial Value.

For Dependent Pulldown fields, if the parent pulldown is set to be initialized, the parent pulldown will be set to whatever was selected for the Initial Value property as long as it is a valid value according to the dependencies configured in the Item Dependencies section. Likewise for a child pulldown, If the child pulldown is set to be initialized, the child pulldown will be set to whatever was selected for the Initial Value property as long as it is a valid value according to the dependencies configured. In either case (parent or child being initialized), if the Initial Value is not a valid value according to the dependency configuration, the field will be set to the default value that is valid. In the case where the parent field is being initialized, the value of any child pulldown menus may be reset to a default value so that it matches the dependency configuration. For example, let's say a field called "Product" is parent to the "Component" field. When you select the product "Printer", the related components are "Paper Tray" and "Toner" (Paper Tray is the default). When you select the product "Monitor", the related component is "Power Cord". Let's say you set a transition such that the Product field will be initialized with the Initial Value of "Printer". If you use this transition on a record where Product is set to "Monitor" and Component is set to "Power Cord", the Product field will be set to "Printer" and the Component field will be set to "Paper Tray". The value of the Component field will be reset to a value that matches the Product field whether or not the Component field is a task field in that transition. This occurs because Component is a child of the Product field and the values in both fields must match what is configured in the dependencies section.

For RelNum fields, this property specifies whether each component of the field should be set to the value configured in the Initial Value field (its default value or another value).

For YesNo fields, this property specifies whether the field should be set to the Initial Valie configured (its default value or the other value).

Initial Value
This option is not available for Link or Reporter fields. This option will only be available when Initialize (Reset) is set to "Yes".

The value entered will be displayed by default during the Task operation and can be changed by the user. If the field is required (Input Type is set to "Required"), the user will be prompted to change the value of the field to something other than the Initial Value. If Input Type is set to "Read Only", the Initial Value will be saved for the field and cannot be modified by the user. For Date, Text, TextArea and Url fields that are set as "Read Only" and the Initial Value is blank, the following note will be displayed next to the field during the Task operation: "Note: This field will be set to blank (empty)." If the Input Type is set to "Invisible", the Initial Value will be saved for the field and will not be shown to the user during the Task operation.

For Date fields, the Initial Value can be set to "<Now>", "<Blank>" (indicating "null" or empty) or can be set to a time relative to the value in a date field. You can enter a number from 1-99, select the time interval (hour(s), day(s), week(s), month(s)), select "before" or "after" and a date field as the point of reference for the initial value. If Input Type is set to "Required", only the "<Now>" and "<Blank>" options are available. If the Initial Value is set based on a date field and the date field is not available in all of the forms used by the transition, the field will be initialized with the current date and time during the Task operation for the forms where the based on date field is not available.

If the field is visible during the Task operation (Input Type is not "Invisible") and Initial Value is "<Now>", the field will be initialized with the current date and time when the date field is displayed on the Task Page. If the field is not visible during the Task operation and the Initial Value is "<Now>", the field will be initialized with the current date and time when the OK button is clicked to complete the Task operation.

Example 1: By selecting "<Now>", the date field will be initialized with the current date and time when the user is performing the Task operation. For instance, when something is Fixed or Closed, you may have a "Fix Date" or "Close Date" field that you want initialized with the date and time when the user performed the Task operation to mark the record "Fixed" or "Closed".
Example 2: By selecting "<Blank>", the date field will be reset so that it does not have a value ("null" or empty). For instance, let's say a Close Date is set when a record is closed. If a record gets re-opened, you may want to set the Close Date to "<Blank>" (since it's being re-opened, the old Close Date no longer applies).

Example 3: By selecting "2 weeks after Date Reported", the date field will be initialized with a date that is 2 weeks after the date in the "Date Reported" field for the record. This can be used when there are deadlines. For instance, you may have a field "Estimated Close Date" which is a ballpark estimate when something will be closed. You can set the Initial Value to be the general guideline for the deadline (e.g. in this example, most issues should be closed within 2 weeks).

For Float fields, an Initial Value is required and must include a decimal point (for example, "0.0") and it can be positive or negative.

For Integer fields, an Initial Value is required and must be an integer and can be positive or negative.

For Pulldown fields, any non-obsolete option menu item can be selected as the Initial Value or "<Default Pulldown Item>" can be selected to set the field to its default value. If the pulldown is involved in a dependency and the pulldown is a parent, the initial value selected may cause the values in any child pulldowns to be reset to their default value relative to the value selected in the parent field. Basically, the the child fields will be reset to values that match with the Initial Value of the parent according to how the dependencies are configured. If the pulldown is a child, the Initial Value selected may not be actually set in the field when the transition is used if it is not a valid value relative to what is selected in the parent pulldown.

For a Text field configured to collect Unregistered User Email with the "Validate User Email Address" option enabled, if an initial value is entered, it must be in the form of a standard email address.

For User Pulldown fields, the following options are available. In all cases except when <Default Pulldown Item>, a specific user or TBD are selected, if the value to be set in the user pulldown is not a valid value (e.g. the user selected is not a member of the user group associated with the pulldown), the value will be set in the field and added to the pulldown as an obsolete value.

- <Default Pulldown Item>
  This will set the field to its default value.
- <Same As Next Assignee>
  This option is only available when Input Type is set to "Invisible". This option will set the field to match the user who will be assigned to the record after completing this transition based on what is set for the New Assignee property of the transition.
- <Same As Previous Assignee>
  This option will set the field to match the user who was assigned to the record before completing this transition.
- Last Assignee for <State>
  This option will set the field to match the last user who was assigned to the record in the selected state.
- <Reporter>
  This option will set the field to match the user who reported the record.
- <Login User>
  This option will set the field to match the user performing the Task operation on the record.
- A specific user that is a member of the user group associated with the field
  A specific user that is a member of the user group assigned with the user pulldown can be selected to be set as the value of the field when the Task operation is performed.
- TBD
  TBD, a built-in user that can represent "to be determined" or "no one", can be set as the value of the field when the Task operation is performed.

For Release Number fields, any non-obsolete option menu item can be selected for each digit as the Initial Value.

For Text or Url fields, the maximum number of characters that can be entered as the Initial Value depends on what is configured for the Maximum Number of Characters property for the Text or Url field in the Fields section. Or, it can be left blank.

For TextArea fields, up to 255 characters can be entered as the Initial Value or it can be left blank.

For YesNo fields, select either "Yes" or "No" to be the Initial Value.

Instruction Text
This property only applies to Text, TextArea and Url fields and will only be available when Initialize (Reset) is set to "Yes". This property will not be available when Input Type is set to "Read Only".

You can enter text that will be displayed in the field by default as instructions for the user filling out the field during the Task operation. For Text fields, the maximum number of characters that can be entered as the Instruction Text depends on what is configured for the Maximum Number of Characters property for the field. Or, it can be left blank. For TextArea fields, up to 255 characters can be entered or it can be left blank.

Clear Instruction Text on Focus
This property only applies to Text, TextArea and Url fields and will only be available when Initialize (Reset) is set to "Yes". This property will not be available when Input Type is set to "Read Only".

Setting this option to "Yes" will remove the text entered in the Instruction Text option when the user puts their cursor on the field. Setting this option to "No" indicates that the Instruction Text should remain in the field when the user puts their cursor on it. This option cannot be set to "Yes" if no value has been entered for Instruction Text.

Annotate
This option only applies to TextArea fields and will not be available if "Read Only" was selected for the option Input Type.

This option determines whether any additions to the TextArea field will be preceded with an annotation when the field is modified during the Task operation. The annotation includes a date and time stamp when the field was modified and the User ID of the user who modified the field.

- Select "Optional" if you wish to have the annotation be included in the field only when the user clicks on the Annotate button
- Select "Automatic" if you wish to have the annotation included automatically when the field is modified. When selecting Automatic, the Annotate button will not be displayed. The annotation will be applied to the field (only if it was modified) when the user clicks on the OK button to complete the Task operation. Selecting Automatic will result in the Append option being set to "Yes" (the annotation and any new information typed into the field will be added after any existing information in the field. Existing information in the field is protected from any changes during the Task operation). Since any new information can only be appended to the field when "Automatic" is selected, any existing data in the field will not be displayed during the Task operation.

  Automatic will not be available as a selection if "Yes" was selected for the option Initialize (Reset).

- Select "Unavailable" if you do not wish to have the field annotated when it is modified

Append
This option only applies to TextArea fields and will not be available if any of the following conditions applies:

- "Read Only" was selected for the option Input Type
- "Yes" was selected for the option Initialize (Reset)
- "Automatic" was selected for the option Annotate

This option determines whether any additions to the TextArea field will be appended to the end of the existing data in the field.

- Selecting "Yes" indicates that any new data added to the field should be appended to the existing data. This option preserves any existing data in the field from being modified during the Task operation. Any existing data is not displayed in the field when "Yes" is selected for this option and Show Current Text is set to "No".
- Selecting "No" indicates that the contents of the field can be modified by the user performing the Task operation. The user can add new data anywhere in the TextArea field.

Show Current Text
This option applies to TextArea Fields and will not be available if the any of the following conditions applies:

- "Read Only" was selected for the option Input Type
- "Yes" was selected for the option Initialize (Reset)
- "No" was selected for the option Append

The purpose of this option is to allow a user to see the text that already entered into a TextArea field when the Append option is set to "Yes". Setting this option to "No" hides the current contents of the TextArea field during the Task operation and will only display an area where data can be entered. Setting this to "Yes" allows the current contents of the TextArea field to be viewed while any new data entered will be appended to the end of the TextArea field.

Examples of Useful Combinations of Task Field Properties

The following are some examples of how to set the task field properties for specific situations.

Example 1 - You want to force a user to enter something into a field or select something other than the default
Set Input Type to "Required". If you also want to clear out what's already in a field (e.g. clear out existing text in a Text or TextArea field or reset a Float, Integer, History, Pulldown, Release Number, YesNo to its default value), set the Initialize (Reset) option to "Yes".

Example 2 - You want a date field to be set automatically during the Task operation
If you want to set the date field to the current date and time when the record is being processed and will not allow the user to change its value, set Input Type to "Read Only", Initialize (Reset) to "Yes", and Initial Value to "Now".

Or, if you want to set the date field to be a date and time relative to the current date and time when the record is being processed (e.g. 2 weeks from now, 1 day before the date in the Estimated Close Date field), set Input Type to "Read Only", Initialize (Reset) to "Yes", and set "Initial Value" to be the relative date of your choice.

Or, if you want to set the date field automatically without displaying it to the user, set Input Type to "Invisible" and set "Initial Value" as desired.

Example 3 - You want to set a field with a particular value, but not show it to the user
Set the Input Type to "Invisible" and set the Initial Value to be the desired value.

Example 4 - You want to protect the text that's already entered into a TextArea field while still allowing a user to add new information
If you want to protect the text that already in a TextArea field, set Initialize (Reset) to "No" and set Append to "Yes". You can set the Show Current Text option to "Yes" to allow the user to see what's already in the field without allowing them to alter the existing text. If you want the new information added to the field to be annotated with the user's name and the date and time the information was added, set the Annotate option to "Automatic".

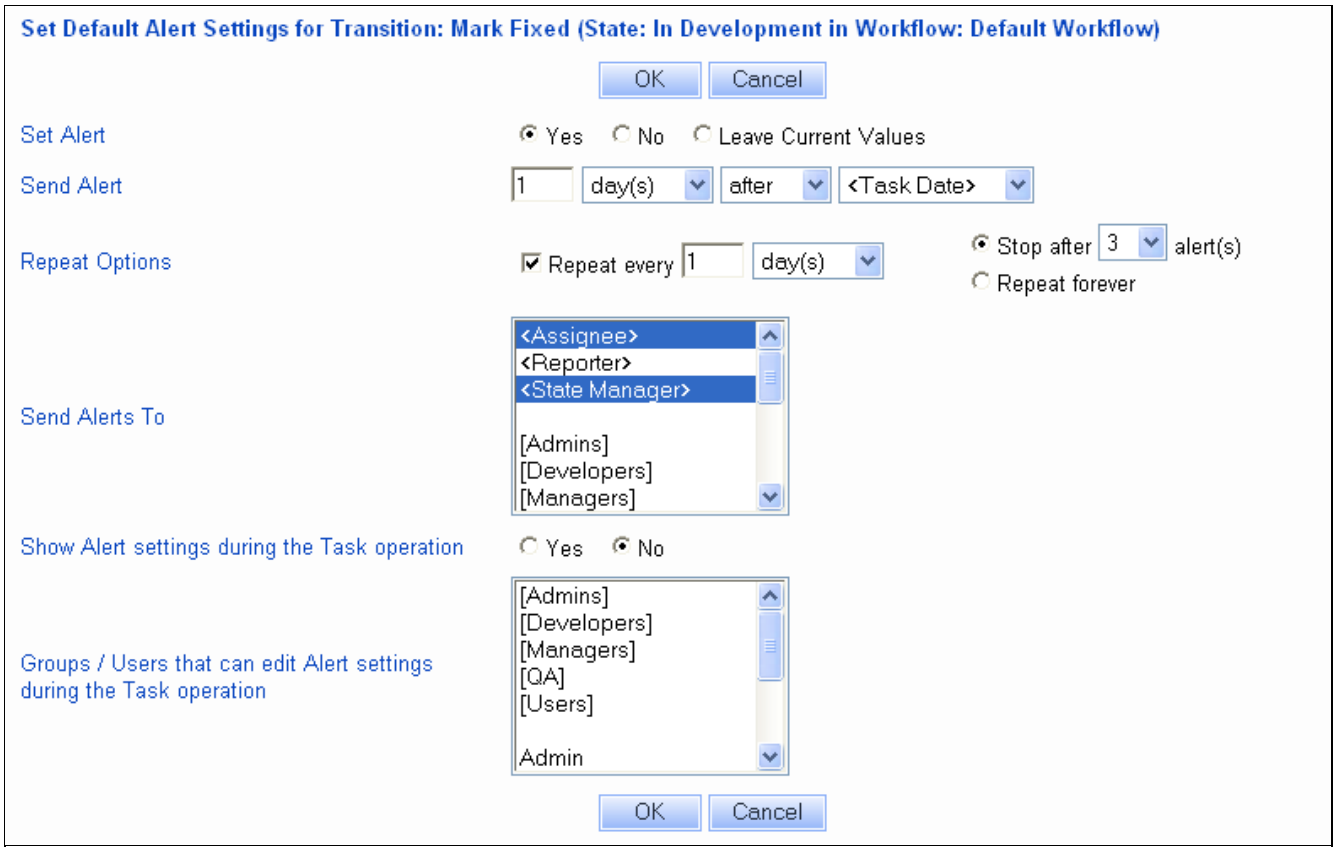
Example 5 - You want to want to enter some sample text into a field to give the users a hint about what to enter into the field
Set Input Type to "Optional" or "Required", set Initialize (Reset) to "Yes" (NOTE: this will clear out anything that already in the field) and type in the sample text into the Instruction Text option. Decide whether you want the sample text to be cleared out when the user put their cursor in the field by setting the Clear Instruction on Focus option.

Alerts

Alerts are email notification messages that can be sent automatically by Tracker at a later date and time to remind a user or group about a record (e.g. send an alert a day before a deadline date in the record passes) or to notify people about a lack of change of status (e.g. record should be processed within a certain time threshold, send an alert if this is not done). Alert settings can be configured for each transition such that these settings will be applied to any record processed with the transition. It is also possible to allow users to be prompted to configure the Alert settings during the Task operation.

To configure default alert settings for a transition:

1. Login to the workgroup as Admin
2. Click on the Admin icon in the top button bar
3. Click on the Workflows link
4. Select the desired workflow in the Workflows pulldown at the top. The page will be refreshed with the properties of the selected workflow.
5. Click on the "+" icon to the left of the state which contains the desired transition
6. Click on the Manage link to the right of Transitions
7. Click on the Alerts button for the desired transition
8. Make selections for the fields described below, then click OK save the changes



- Set Alert
  Selecting "Yes" indicates an alert should be generated for a record that has been tasked using this transition and using the alerts settings below. By selecting this option, the user will not be prompted to Set the Alert Settings when selecting this transition. Selecting "No" indicates that no alert should be sent when this transition is selected for a record. Selecting "Leave Current Values" indicates that an alert should be generated for a record that has been tasked using this transition, but the existing alert settings in the record should be used instead of the settings for this transition. The existing alert settings are those that were set during the Add operation or by the transition selected the last time a task operation was performed on the record.
- Send Alert
  The period of time that should pass before the alert is sent. You can enter a number from 1 - 99, select the interval (hour, day, week, or month), select "before" or "after" as the point of reference for the alert, and a starting point for the time period. The starting point can be "<Now>", or can be based on any of the date fields in the record. Example 1: By entering "1 day after <Now>", the alert will be sent 1 day after the record is added. Example 2: By entering "1 day before <Date Field>", the alert will be sent 1 day before the date entered in the date field selected.

  If a date field is selected as the date to generate an alert and this date field has no value in a record, an alert will not be generated. If a date field is selected as the date to generate an alert and this date field is later removed from the record (deleted in the Fields section, then <Task Date> will be set as the date to generate an alert (to replace the date field that was removed).

- Repeat options
  Check the box to allow the alert to be sent multiple times after the initial time period (in Send Alert field above) has passed. Select the repeat period by entering a number from 1 - 99 and the interval (hour, day, week, month). Then, select how many times the alert should be repeated.

Select either Stop after X alerts where X is a number from 1 - 10 or Repeat forever. Repeat forever will continue to repeat the alert periodically until the state of the record is changed.

- Send Alerts To
  Click on the groups and / or users who should receive the alert message if the record's state has not changed when the configured time period has passed. To select multiple users and / or groups, hold down the Ctrl button on your keyboard while clicking on each user and group you would like to select.
- Show Alert settings during the Task operation
  Selecting Yes indicates that the user should be prompted to select alert settings when this transition is selected during the Task operation. If a transition is configured for "fast-tasking" (the transition has no task fields and history comment is set to "do not display"), then the alert settings will not be displayed during the Task operation.
- Groups / Users that can edit alert settings during the Task operation
  Click on the groups and / or users that should be allowed to edit the alert settings during the Task operation when selecting this transition. To select multiple users and / or groups, hold down the Ctrl button on your keyboard while clicking on each user and group you would like to select.

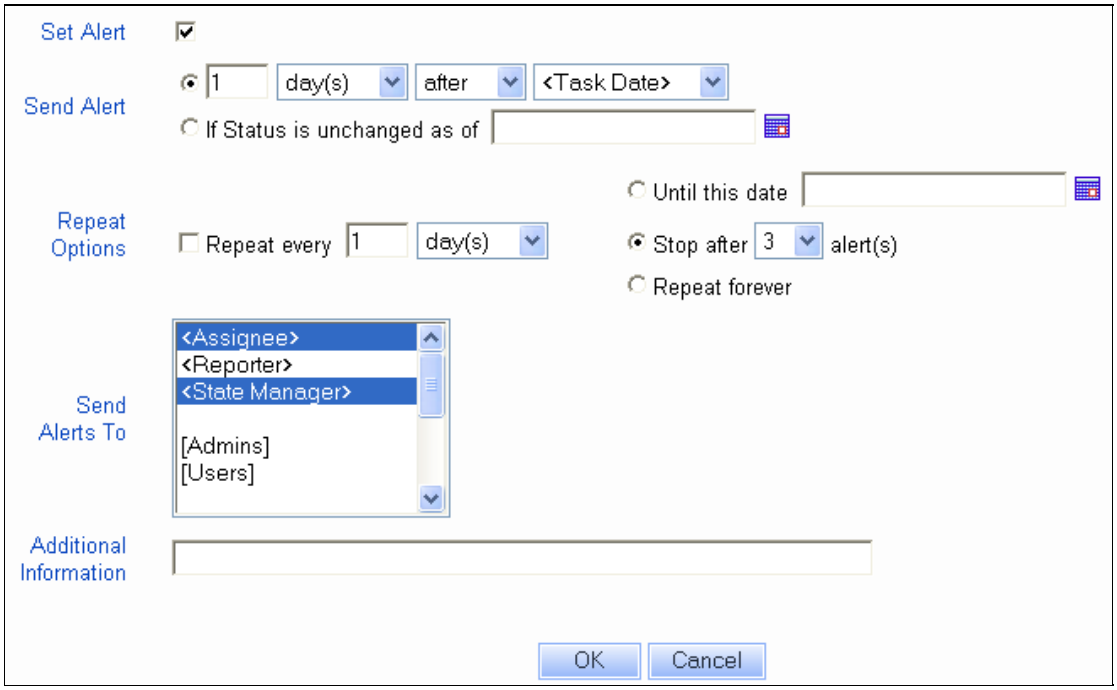
9. After clicking OK to save the changes, click on the Alerts button for another transition to configure the default alerts settings.

Viewing and Editing Alert Settings during the Task Operation

When the task operation is performed on a record, the user may be prompted to configure alert settings depending on the default alert settings for the transition selected (setting the default alert settings for a transition are defined in the Configure Default Alert Settings per Transition section above.

In order for the user to view the alert settings when performing the task operation for a record, the transition selected must have Show Alert Settings during Task Operation set to "Yes" and the user must be a member of a group with the View Alerts Settings user group privilege. After selecting a transition during the task operation, the user meeting the criteria mentioned above will be able to see the alert settings section, but cannot modify the values. The Additional Information field can be modified to add a note or other information to be included in the alert notification message. Click OK to complete the Task operation.

For a user to edit the alert settings during the Task operation, the transition selected must have Show Alert Settings during Task Operation set to "Yes" and the user (or a group of which the user is a member) must be specified in Groups / Users that can edit Alert Settings during the Task Operation. After selecting a transition, the user meeting the criteria mentioned above will see the alert settings section. The user can modify the following alert settings. By default, the values displayed here will be the values selected in the default Alert settings for the transition selected.



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NetResults Tracker Help

Forms in a Workflow

The forms in use by a workflow are managed in the Forms section.

To manage forms:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the Manage link to the right of Forms

6. Any forms currently in use by the selected workflow will be displayed in the Forms In Use column. Any forms available for selection will be displayed in the Forms Not In Use column. The forms that are listed in the Forms Not In Use column are created in the Forms Help section.

   To add a form to be used by the workflow, click on the form in the Forms Not In Use column, then click on the Add button. To remove a form from being used by the workflow, click on the form in the Forms In Use column, then click on the Remove button.

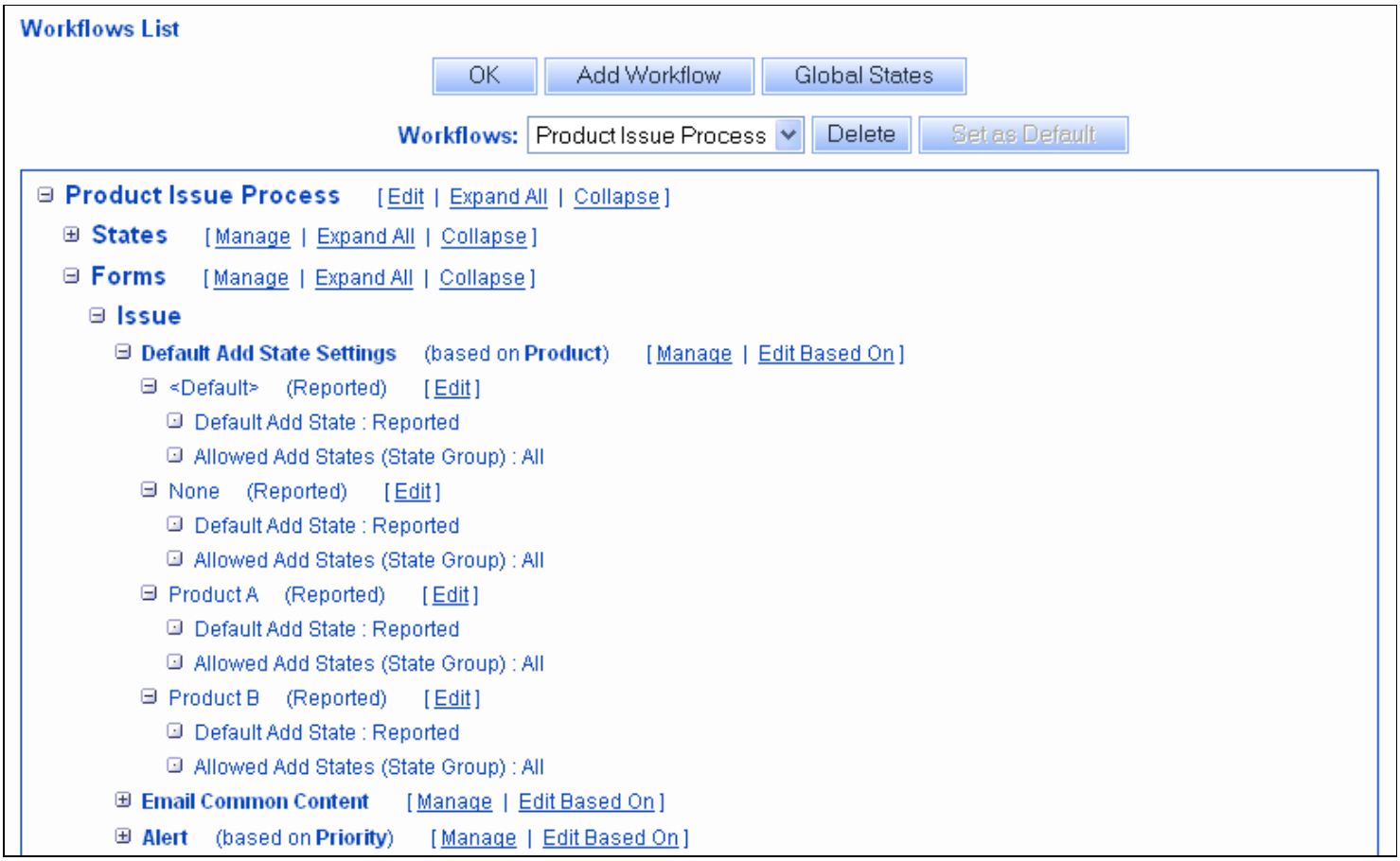
7. Click OK to return to the Workflows section or click on a form in the Forms In Use column and click on the Add State, Email Content or Alert buttons to modify the form's properties.

Properties of Forms

Expanding a form in the Forms section of a workflow will display the form's Default Add State Settings, Email Common Content and Alerts settings. You can configure Default Add State Settings, Email Content and Alerts for the form or configure each section based on each option menu item in a pulldown field.

Default Add State Settings

A form's Default Add State Settings determine what states are available and what state is selected by default in the Status field on the Add form. Default Add State Settings can be configured for a form or based on each option menu item in a particular pulldown.



To manage the Default Add State Settings for a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the "+" icon to the left of the form you wish to modify
6. Click on the Manage link to the right of Default Add State Settings
7. The Default Add State settings for the form will be displayed.

   If a <Pulldown Name> <Default> Default Add State Settings field is displayed (where <Pulldown Name> is the selected

pulldown), this indicates that the default add state settings are set based on the option menu item selected in a particular pulldown field. If the <Pulldown Name> <Default> Default Add State Settings field is not displayed, this indicates that the Default Add State Settings are not different for each option menu item in a pulldown (the Default Add State Settings will be the same for all records added with this combination of Project and Form). The <Pulldown Name> <Default> Default Add State Settings field can be set using the Edit Based On link in the Workflows section.

Select an option in the <Pulldown Name> <Default> Default Add State Settings field to set the Default Add State Settings that will be applied when records are added to Tracker with this option menu item selected. When selecting an option in this field, the page will be refreshed to display the Default Add State Settings that correspond to that selection.

The <Pulldown Name> Values field contains the following options:

- <Default>
  Selecting this option will allow you to choose the Default Add State Settings that will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). When this option is selected, the option Apply these settings to other <Pulldown Name> values will be available. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same Default Add State Settings that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

- Option Menu Items for the Based On pulldown
  Each option menu item configured for the pulldown field selected in the Based On field will be listed. Selecting an option menu item will allow you to set the Default Add State Settings that will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the Default Add State Settings configured for <Default> to be filled into the Default Add State Settings for the option menu item selected.

The Allowed Add States option allows you to select a state group to limit the states to which a newly record can be routed. When Based On is set to "None" and a record is added using the selected form, the Status field will only display the states that are included in the state group selected in the Allowed Add States option. When Based On is set to a pulldown field and a record is added using the selected form and the option menu item in the <Pulldown Name> values field, the Status field will only display the states that are included in the state group selected in the Allowed Add States option. State Groups can be configured in the Workflow States section.

The Default Add State option allows you to select to which state a newly added record will be routed by default. When Based On is set to "None" and a record is added using the selected form, the default selection in the Status field will be the state selected in the Default Add State option. When Based On is set to a pulldown field and a record is added using the selected form and the option menu item in the <Pulldown Name> values field, the default selection in the Status field will be the state selected in the Default Add State option.

8. Click OK to save the selections

Another way to reach the configuration page for the Default Add State Settings for a form is:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the Manage link to the right of Forms
6. Click on a form in the Forms In Use column
7. Click on the Add State button
8. The Default Add State settings for the form will be displayed. The options available on this page are explained in the section above.

To edit the pulldown that the Default Add State Settings are based on:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the "+" icon to the left of the form you wish to modify
6. Click on the Edit Based On link to the right of Default Add State Settings
7. Select a pulldown in the Based on Pulldown so that you can configure different Default Add State Settings for each option menu item in this pulldown
8. Click OK to save your selection
9. Click OK to return to the Workflows section or click Set Default Add State Settings to configure the settings for each option menu item in the selected pulldown

To edit the default add state properties for a specific pulldown option menu item:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the "+" icon to the left of the form you wish to modify
6. Click on the "+" icon to the left of Default Add State Settings
7. Click on the Edit link to the right of the pulldown option menu item
8. The Default Add State Settings for the selected option menu item will be displayed.

   If you are editing the settings for the option menu item <Default>, the Default Add State Settings displayed will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). The option Apply these settings to other <Pulldown Name> values will be available when editing the settings for <Default>. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same Default Add State Settings that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

   If you are editing the settings for an option menu item in the pulldown, the Default Add State Settings displayed will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the Default Add State Settings configured for <Default> to be filled into the Default Add State Settings for the option menu item selected.

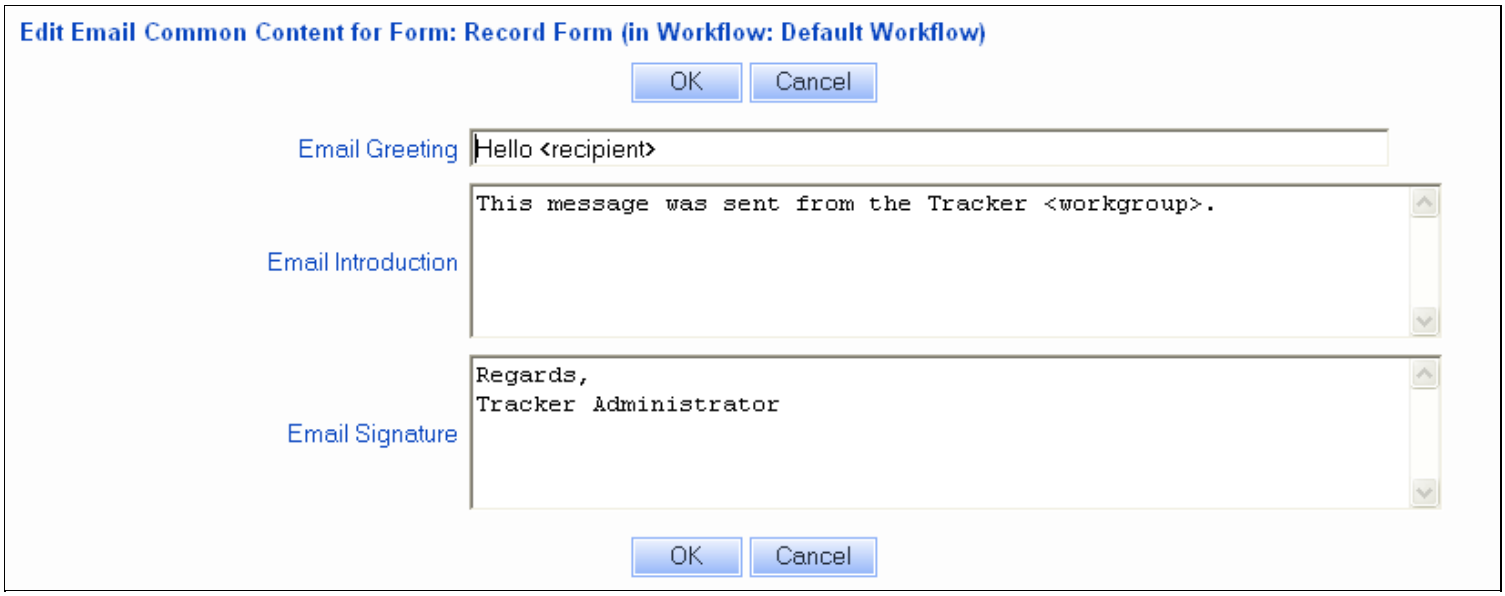
   The Allowed Add States option allows you to select a state group to limit the states to which a newly record with the selected option menu item can be routed. The Status field will only display the states that are included in the state group selected in the Allowed Add States option. State Groups can be configured in the Workflow States section.

   The Default Add State option allows you to select to which state a newly added record with the selected option menu item will be routed by default. The default selection in the Status field will be the state selected in the Default Add State option.

9. Click OK to save the selections
10. Click OK to return to the Workflows section

Email Common Content

Email Common Content are the parts of the email message that will be included in outgoing email notifications sent for records added using the selected form. A Greeting, Introduction and Signature are available in the Email Common Content for each form.



To manage the Email Common Content for a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the

selected workflow.
5. Click on the "+" icon to the left of the form you wish to modify
6. Click on the Manage link to the right of Email Common Content
7. The Email Common Content settings for the form will be displayed.

   If the <Pulldown Name> <Default> Email Common Content field is displayed (where <Pulldown Name> is the selected pulldown), this indicates that the email common content can be set differently for each option menu item in a particular pulldown field. If the <Pulldown Name> <Default> Email Common Content field is not displayed, this indicates that the Email Common Content settings are not different for each option menu item in a pulldown (the Email Common Content Settings will be the same for all records added with this combination of Project and Form). The <Pulldown Name> <Default> Email Common Content field can be set using the Edit Based On link in the Workflows section.

   Select an option in the <Pulldown Name> <Default> Email Common Content field to set the Email Common Content that will be applied when records are added to Tracker with this option menu item selected. When selecting an option in this field, the page will be refreshed to display the Email Common Content that correspond to that selection.

   The <Pulldown Name> Values field contains the following options:

   - <Default>
     Selecting this option will allow you to choose the Email Common Content that will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). When this option is selected, the option Apply these settings to other <Pulldown Name> values will be available. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same Email Common Content that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

   - Option Menu Items for the Based On pulldown
     Each option menu item configured for the pulldown field selected in the Based On field will be listed. Selecting an option menu item will allow you to set the Email Common Content that will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the Email Common Content configured for <Default> to be filled into the Email Common Content for the option menu item selected.

   Variables can be used when customizing the Email Common Content. The Email Greeting is the first line of the body of email notification message, e.g. "Hello Sue Smith,".

   The Email Introduction is a few lines in the body of the email notification message to introduce the email, e.g. a sentence or two to let the user know this is an automated response from Tracker.

   The Email Signature is the last section of the body of the email notification message, typically used for the signature at the bottom of the email, e.g. contact information.

8. Click OK to save the selections

Another way to reach the configuration page for the Email Common Content of a form is:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the Manage link to the right of Forms
6. Click on a form in the Forms In Use column
7. Click on the Email Content button
8. The Email Common Content settings for the form will be displayed. The options available are described in the section above.

To edit the pulldown that the Email Common Content is based on:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the "+" icon to the left of the form you wish to modify
6. Click on the Edit Based On link to the right of Email Common Content
7. Select a pulldown in the Based on Pulldown so that you can configure different Email Common Content for each option menu item in this pulldown

8. Click OK to save your selection
9. Click OK to return to the Workflows section or click Set Email Common Content Settings to configure the settings for each option menu item in the selected pulldown

To edit the email common content for a specific pulldown option menu item:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the "+" icon to the left of the form you wish to modify
6. Click on the "+" icon to the left of Email Common Content
7. Click on the Edit link to the right of the pulldown option menu item
8. The Email Common Content settings for the selected option menu item will be displayed

   If you are editing the settings for the option menu item <Default>, the Email Common Content settings displayed will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). The option Apply these settings to other <Pulldown Name> values will be available. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same Email Common Content that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

   If you are editing the settings for for an option menu item in the pulldown, the Email Common Content settings displayed will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the Email Common Content configured for <Default> to be filled into the Email Common Content for the option menu item selected.

   Variables can be used when customizing the Email Common Content. The Email Greeting is the first line of the body of email notification message, e.g. "Hello Sue Smith,".

   The Email Introduction is a few lines in the body of the email notification message to introduce the email, e.g. a sentence or two to let the user know this is an automated response from Tracker.

   The Email Signature is the last section of the body of the email notification message, typically used for the signature at the bottom of the email, e.g. contact information.

9. Click OK to save the selections
10. Click OK to return to the Workflows section

Alerts

Alert settings for a form determine when alert email notifications will be triggered when records are added to Tracker. The alert settings can also be set based on the option menu item selected in a particular field when a record is added (e.g. Product, Priority, Severity or any pulldown field you customize). The alert settings configured for a form can be applied automatically as records are added to the system or you can allow the end users to view and make changes to the alert settings when adding a record.

To manage the alert settings for a form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the "+" icon to the left of the form you wish to modify
6. Click on the Manage link to the right of Alerts.
7. The Alert settings for the form will be displayed.

   If a <Pulldown Name> <Default> Alert Settings field is displayed (where <Pulldown Name> is the selected pulldown), this indicates that the Alert settings can be set differently for each option menu item in the selected pulldown. If the <Pulldown Name> <Default> Alert Settings field is not displayed, this indicates that the Alert settings are not different for each option menu item in a pulldown (the Alert settings will be the same for all records added with this combination of Project and Form). The <Pulldown Name> <Default> Alert Settings field can be set using the Edit Based On link in the Workflows section.

   Select an option in the <Pulldown Name> <Default> Alert Settings field to set the Alert settings that will be applied when records are added to Tracker with this option menu item selected. When selecting an option in this field, the page will be refreshed to display the Alert settings that correspond to that selection.

   The <Pulldown Name> Values field contains the following options:

   - <Default>
     Selecting this option will allow you to choose the Alert settings that will be applied when new option menu items are added to this

pulldown (the pulldown selected in the Based On field). When this option is selected, the option Apply these settings to other <Pulldown Name> values will be available. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same Alert settings that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

- Option Menu Items for the Based On pulldown
  Each option menu item configured for the pulldown field selected in the Based On field will be listed. Selecting an option menu item will allow you to set the Alert settings that will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the Alert settings configured for <Default> to be filled into the Alert settings for the option menu item selected.

Set Alert
Selecting Yes indicates an alert should be generated for a newly added record using the selected form and if applicable, the selected pulldown value.

Send Alert
The period of time that should pass before the alert is sent. You can enter a number from 1 - 99, select the interval (hour, day, week, or month), select "before" or "after" as the point of reference for the alert, and a starting point for the time period. The starting point can be "<Now>", or can be based on any of the date fields in the record.
Example 1: By entering "1 day after <Now>", the alert will be sent 1 day after the record is added.
Example 2: By entering "1 day before <Date Field>", the alert will be sent 1 day before the date entered in the date field selected.

If a date field is selected as the date to generate an alert and this date field has no value in a record, an alert will not be generated. If a date field is selected as the date to generate an alert and this date field is later removed from the record (deleted in the Fields section, then <Now> will be set as the date to generate an alert (to replace the date field that was removed).

Repeat options
Check the box to allow the alert to be sent multiple times after the initial time period (in Send Alert field above) has passed. Select the repeat period by entering a number from 1 - 99 and the interval (hour, day, week, month). Then, select how many times the alert should be repeated. Select either Stop after X alerts where X is a number from 1 - 10 or Repeat forever. Repeat forever will continue to repeat the alert periodically until the state of the record is changed.

Send Alerts To
Click on the groups and / or users who should receive the alert messages. To select multiple users and / or groups, hold down the Ctrl button on your keyboard while clicking on each user and group you would like to select.

Show Alert settings during the Add operation
Selecting Yes indicates that the user should be prompted to select alert settings on the Add page when creating a new record.

Groups / Users that can edit alert settings during the Add operation
Click on the groups and / or users that should be allowed to edit the alert settings on the Add page when creating a new record. To select multiple users and / or groups, hold down the Ctrl button on your keyboard while clicking on each user and group you would like to select.

8. Click OK to save the selections

Another way to reach the configuration page for Alert settings for a form is:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the Manage link to the right of Forms
6. Click on a form in the Forms In Use column
7. Click on the Alert button
8. The Alert settings for the form will be displayed. The options available are described in the section above.

To edit the pulldown that the Alert settings are based on:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the "+" icon to the left of the form you wish to modify

6. Click on the Edit Based On link to the right of Alert
7. Select a pulldown in the Based on Pulldown so that you can configure different Alert settings for each option menu item in this pulldown. The fields Status, Assigned To and Reported By are not available for selection. Alerts based on Status can be achieved by configuring Alerts for transitions.
8. Click OK to save your selection
9. Click OK to return to the Workflows section or click Set Default Alert Settings to configure the settings for each option menu item in the selected pulldown

To edit the alerts settings for a specific pulldown option menu item:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the "+" icon to the left of the form you wish to modify
6. Click on the "+" icon to the left of Alerts
7. Click on the Edit link to the right of the pulldown option menu item
8. The current Alert settings for the selected option menu item will be displayed.

   If you are editing the settings for the option menu item <Default>, the Alert settings displayed will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). The option Apply these settings to other <Pulldown Name> values will be available. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same Alert settings that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

   If you are editing the settings for an option menu item in the pulldown, the Alert settings displayed will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the Alert settings configured for <Default> to be filled into the Alert settings for the option menu item selected.

   Set Alert
   Selecting Yes indicates an alert should be generated for a newly added record with the selected option menu item.

   Send Alert
   The period of time that should pass before the alert is sent. You can enter a number from 1 - 99, select the interval (hour, day, week, or month), select "before" or "after" as the point of reference for the alert, and a starting point for the time period. The starting point can be "<Now>", or can be based on any of the date fields in the record.
   Example 1: By entering "1 day after <Now>", the alert will be sent 1 day after the record is added.
   Example 2: By entering "1 day before <Date Field>", the alert will be sent 1 day before the date entered in the date field selected.

   If a date field is selected as the date to generate an alert and this date field has no value in a record, an alert will not be generated. If a date field is selected as the date to generate an alert and this date field is later removed from the record (deleted in the Fields section, then <Now> will be set as the date to generate an alert (to replace the date field that was removed).

   Repeat options
   Check the box to allow the alert to be sent multiple times after the initial time period (in Send Alert field above) has passed. Select the repeat period by entering a number from 1 - 99 and the interval (hour, day, week, month). Then, select how many times the alert should be repeated. Select either Stop after X alerts where X is a number from 1 - 10 or Repeat forever. Repeat forever will continue to repeat the alert periodically until the state of the record is changed.

   Send Alerts To
   Click on the groups and / or users who should receive the alert messages. To select multiple users and / or groups, hold down the Ctrl button on your keyboard while clicking on each user and group you would like to select.

   Show Alert settings during the Add operation
   Selecting Yes indicates that the user should be prompted to select alert settings on the Add page when creating a new record.

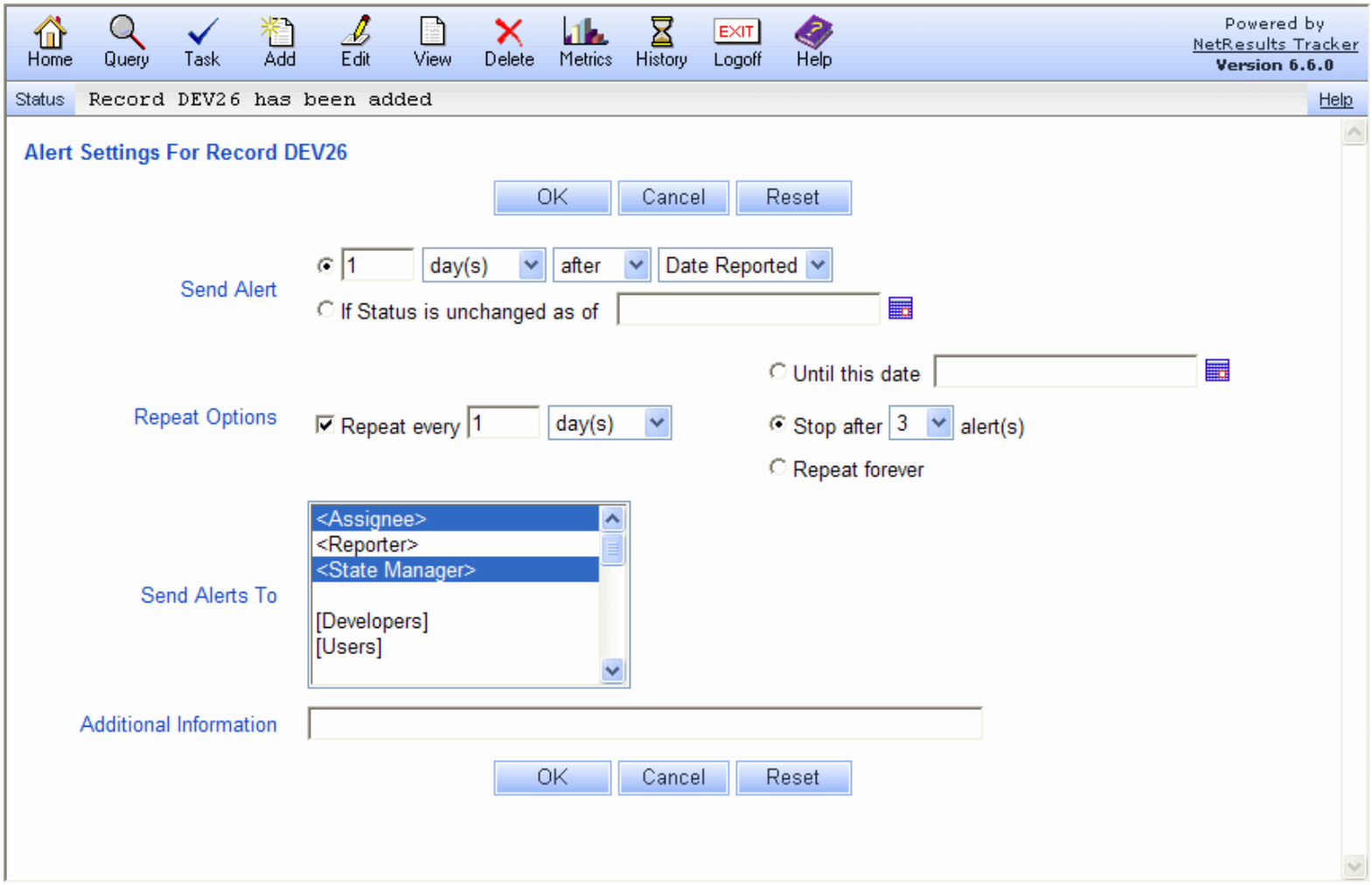
   Groups / Users that can edit alert settings during the Add operation
   Click on the groups and / or users that should be allowed to edit the alert settings on the Add page when creating a new record. To select multiple users and / or groups, hold down the Ctrl button on your keyboard while clicking on each user and group you would like to select.

9. Click OK to save the selections
10. Click OK to return to the Workflows section

Viewing and Editing Alert Settings during the Add Operation

In order for the user to view the alert settings when adding a new record, the alert settings for the form used to submit the record must have Show Alert Settings during Add Operation set to "Yes" and the user must be a member of a group with the View Alerts Settings user group privilege. On the Add page, the user meeting the criteria mentioned above will see the Set Alert field with a check box. Checking the box will allow the user to view the alert settings. When the user clicks OK to add a new record, the alert settings will be displayed, but cannot be modified. The Additional Information field can be modified to add a note or other information to be included in the alert notification message. Click OK to save the information entered.

For a user to edit the alert settings when adding a new record, the alert settings for the form used to submit the record must have Show Alert Settings during Add Operation set to "Yes" and the user (or a group of which the user is a member) must be specified in Groups / Users that can edit Alert Settings during the Add operation. On the Add page, the user meeting the criteria mentioned above will see the Set Alert field with a check box. Checking the box will allow the user to edit the alert settings. When the user clicks Add or Add & Copy to add a new record, the alert settings will be displayed. The user can modify the following settings with respect to alerts. By default, the values displayed here will be the values selected in the alert settings for the form used to submit the record.



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NetResults Tracker Help

Outgoing Email Rules

Basic Information About Email Notifications

The body of a Tracker email notification is divided into seven sections which you can configure. Listed from the top (first line of email body) to the bottom, they are as follows.

1. Greeting - the first line of the email, e.g. "Hello Sue Smith,". The Greeting is part of the Email Common Content configured for each form in Tracker.
2. Introduction - a few lines to introduce the email, e.g. a sentence or two to let the user know this is an automated response from Tracker. The Introduction is part of the Email Common Content configured for each form in Tracker.
3. Operation Description - a few lines to describe why this email notification is being sent, e.g. this issue has been assigned to you (the recipient of the email). The Operation Description can be configured in each Email Rule.
4. Link - link (URL) to the record in Tracker (when browsing to the link, record is displayed after you enter your login information). The hyperlink is created based on the configuration set for the workgroup in the Workgroup Management System
5. History Comment - the History Comment that was entered by the user who triggered the email, e.g. comment they entered when using the Edit operation to update a record.
6. Fields - the fields within the record referenced by the email notification. The fields included in the notification message can be limited by user group within a field's visibility options.
7. Signature - the last section of the email, typically used for the signature at the bottom of the email (contact information). The Signature is part of the Email Common Content configured for each form in Tracker.

The Email Common Content can be configured differently for each form in Tracker or can be configured based on each option menu item in a particular pulldown (for example, the Email Common Content can be different for each product or each priority level). The Subject line of the email as well as the Operation Description part of the email body can be configured per email notification rule. Email Rules can also be configured per form or based on each option menu item in a particular pulldown. Each form or option menu item in a pulldown can have its own unique set of conditions (defined by the email rules) which trigger email notifications. User Group membership (privileges) of the recipient can be used to determine which parts of the email are sent. And, each recipient's personal preferences are used to customize the content of the email they receive. For example, Date/Time fields will be formatted according to the recipient's time zone and date and time format preferences.

Email Rules

Outgoing email notifications can be configured for a workflow using Email Rules. You can configure a set of email rules that are applied to a workflow or you can configure a set of email rules for each option menu item in a pulldown. Review the Basic Information About Email Notifications section for details about the structure of email notification messages.

To manage email rules for a workflow:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the Manage link to the right of Email Rules
6. The Email Rules for the form will be displayed.

   If the <Pulldown Name> <Default> Email Rules field is displayed (where <Pulldown Name> is the selected pulldown), this indicates that the Email Rules can be set differently based on the option menu item that was selected in the pulldown. If <Pulldown Name> <Default> Email Rules field is not displayed, this indicates that the Email Rules are not different for each option menu item in a pulldown (the Email Rules will be the same for all records added with this combination of Project and Form). The pulldown selected in the <Pulldown Name> <Default> Email Rules field can be set using the Edit Based On link in the Workflows section.

   Select an option in the <Pulldown Name> <Default> Email Rules field to set the Email Rules that will be applied when records are added to Tracker with this option menu item selected. When selecting an option in this field, the page will be refreshed to display the Email Rules that correspond to that selection.

   The <Pulldown Name> Values field contains the following options:

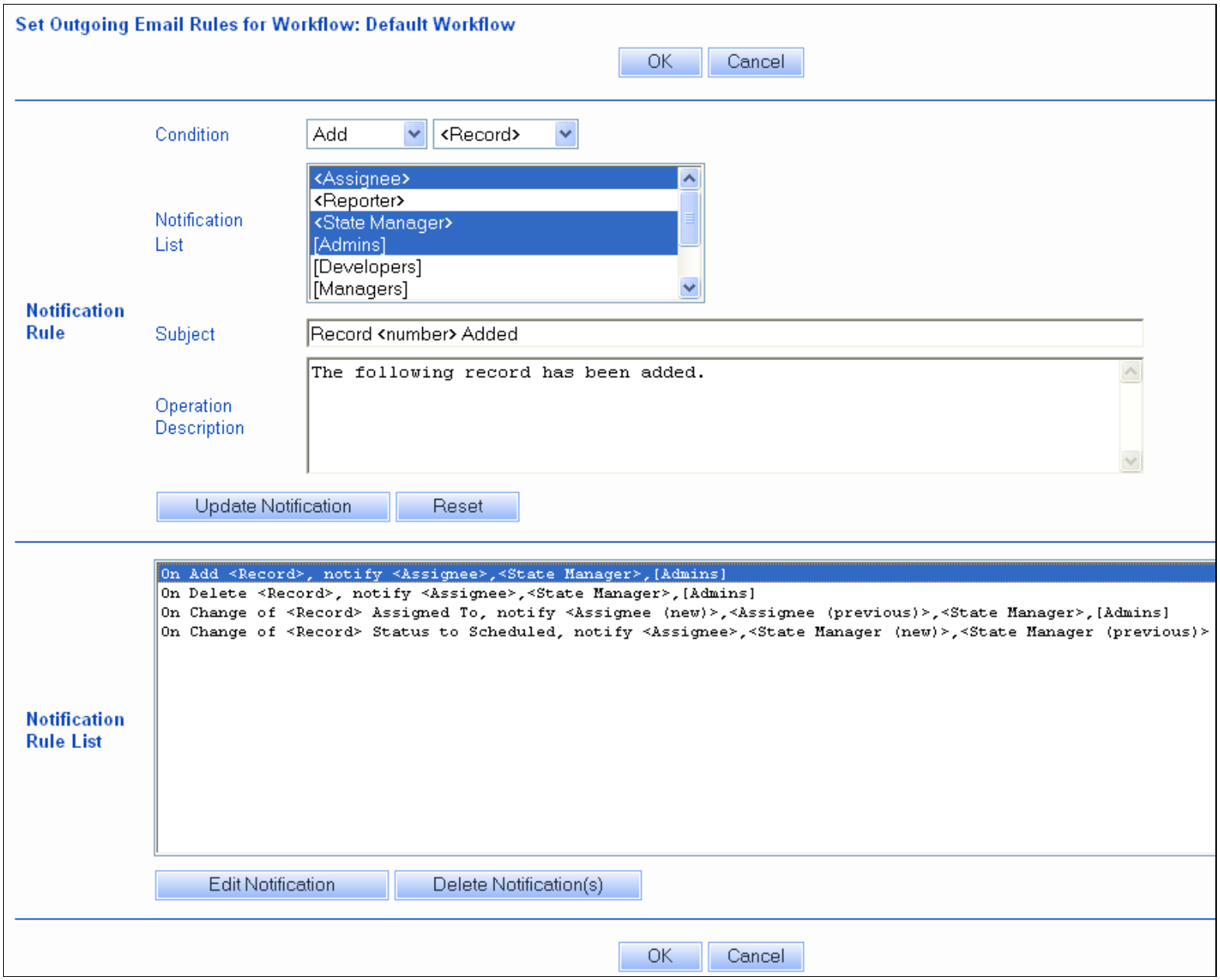
   - <Default>
     Selecting this option will allow you to choose the Email Rules that will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). When this option is selected, the option Apply these settings to other

<Pulldown Name> values will be available. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same Email Rules that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

- Option Menu Items for the Based On pulldown
  Each option menu item configured for the pulldown field selected in the Based On field will be listed. Selecting an option menu item will allow you to set the Email Rules that will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the Email Rules configured for <Default> to be filled into the Email Rules for the option menu item selected.

Decide whether you would like to add, edit or delete an email rule.

7. Click OK to save the changes



To add an email rule:

1. Select a Condition (details of each option that can be selected are described in the Options section). Check the Notification Rule List to see if the condition you selected is already on the list. If so, you may wish to edit an existing preference rather than create a new one.
2. In the Notification List, select the user(s) and / or user group(s) that should receive an email message when the condition occurs. Descriptions of the special user roles such as Assignee, Reporter, etc. can be found in the Notification List section.
3. Enter information into the Subject field. This text will appear as the Subject line of the email message generated when the condition occurs. Up to 80 characters can be entered as the Subject.

4. Enter information into the Operation Description field. This text will appear in the body of the email message after the Greeting and Introduction. Up to 255 characters can be entered as the Operation Description (end of line characters do count towards that limit).
5. For the Subject and Operation Description, you can specify variables so that information from the issue that triggered the email notification is included. For an explanation and example of the variables that can be used, review the Variables section.
6. Click on the Add Notification button. The email rule will now be displayed in the Notification Rule List. Except when the Notification Rule is selected, it will be displayed with a green background until you click the OK button. This is to let you know that this rule has been added, but has not yet been saved. You can continue to create or modify rules, or you can click the OK button to save your changes.

To edit an email rule:

1. In the Notification Rule List, click on the Notification Rule you wish to modify, then click on the Edit Notification button (you can also simply double click on the Notification Rule).
2. The fields in the Notification Rule section will be updated with the information associated with the Notification Rule you selected.
3. Make changes to the fields in the Notification Rule section.
4. Click on the Update Notification button. The Notification Rule will be displayed with an orange background color until you click the OK button. This is to let you know that this rule has been edited, but the changes have not yet been saved. You can continue to edit more rules, or you can click the OK button to save your changes.

To delete an email rule:

1. In the Notification Rule List, click on the preference you wish to delete, then click on the Delete Notification button
2. Click on the OK button to save this change.

Options Available When Configuring Email Rules

The following options are available when configuring email rules.

Conditions
The Conditions below are the actions that can trigger an email rule to be sent. For all conditions you can select whether the condition applies to records added using a particular form configured for the workflow to which the email rules pertain (by selecting a specific form in the 2nd pulldown in the Condition selection) or to all records added using the workflow to which the email rules pertain (by selecting <Record> in the 2nd pulldown in the Condition selection). The forms available for selection in the 2nd pulldown in the Condition selection are based on the forms that have been associated with this workflow. Please Note: If you create a email condition for a specific form in the workflow and you create the exact same condition for all records (<Record>) in the workflow, the form specific condition will be used as a the rule for sending notifications and general condition is ignored. This applies even if the matching conditions specify different recipients or common content. This behavior also allows you to have similar rules with varying common content or recipients for a particular form, while having a general rule that will handle records of the other form types.

- Add
  Setting a rule with this condition will send an email notification message when a record is added to the workgroup: using the Add page, using the Submit page, using the Clone operation on the View page, by submitting via email, or by executing the Tracker SDK AddRecord operation.

- Edit
  Setting a rule with this condition will send an email notification message when a record is edited using the Edit operation.

- Delete
  Selecting this condition will send an email notification message when a record is deleted using the Delete operation.

- Task
  Selecting this condition will send an email notification message when the Task operation is performed on a record.

- Change of
  There are 2 parts to the Change of condition:

  - Change of Status to <State or State Group>
    Creating a rule with this condition will send an email notification message when a record's status is changed to the State selected. If a State Group is selected, an email notification message will be sent when a record's status is changed to one of the states in the State Group selected. To select this condition, select Change of in the first pulldown, select Status in the second pulldown, then select the State or State Group that should used for this rule.

  - Change of Assignment
    Creating a rule with this condition will send an email notification message when a record's Assignment (Assigned To field) is changed. To select this condition, select Change of in the first pulldown, then select Assigned To in the second pulldown.

Variables that can be used in the Email Content

There are a list of variables that are supported so that you can reference the specific record number, status, assignees when entering the content for email notifications. For example, if you want the Subject line for a rule to say "PRN 31 previously assigned to Development Manager has been re-assigned to Developer One", but since each record has an individual record number and may have various possible users that can be assigned at any point in the process, it is necessary to enter the content using variables. To set the Subject line such that it will enter the relevant PRN and User IDs for each record, enter the following into the Subject field exactly as it appears below:

PRN <number> previously assigned to <old assignee> has been re-assigned to <new assignee>

The variables supported by Tracker are listed below

To specify this information in the email content	Enter this variable into the field
workgroup name	<workgroup>
project name	<project>
form name	<form>
form + record number	<formnumber>
record number - PRN	<number>
current user selected in the Assignee field	<assignee>
previous user selected in the Assignee field	<old assignee>
new user selected in the Assignee field	<new assignee>
current state selected in the Status field	<status>
previous state selected in the Status field	<old status>
new value selected in the Status field	<new status>
the current value of the History pulldown	<product>
the user selected in the Reporter field	<reporter>
the user receiving the email notification message	<recipient>
the user whose action triggered the email	<action user>

In addition to the variables listed above, you can also include the value of any field in the record (except for TextArea and Date fields) by specifying the Field Name (in all lower case characters) and surrounding the name with < and >. For example, <text1>, <pulldown23>, or <reporter>. To find the Field Name for a particular field, click on the Admin icon, click on the Forms link, click on the Fields button, click on the field you wish to use as a variable, then click on the Edit button. Take note of the name listed for "API Field Name". Note: The field name variable must be specified in all lower case characters (e.g. <text1> not <Text1>) to be properly recognized by the Tracker email processor. Special fields like PRN and the History Pulldown have variable names that differ from the API Field Name. These exceptions are listed in the table above.

Notification List

The options below are available for selecting which users receive email notification messages for a particular rule.

<Assignee>
The user currently assigned to the record

<Assignee (new)>
The user assigned to the record after a change in the record's Assigned To field has been made. This user is only available for selection in rules for the condition "Change of <Record> Assigned To".

<Assignee (previous)>
The user who was assigned to the record prior to a change made in the record's Assigned To field. This user is only available for selection in rules for the condition "Change of <Record> Assigned To".

<Reporter>
The user who created the record using the Add, Submit Page or Submit via Email feature. When the Reported By field of a record is the "Inet" (Unregistered User), email notification messages are not sent to the Reporter.

<State Manager>
The user who is listed as the manager of the record's current state according to the State Manager settings for the combination of Form and Project set in the record (refer to Form State Managers for more information).

<State Manager (new)>
The user who is listed as the manager of the record's current state according to the State Manager settings for the combination of Form and Project set in the record (refer to Form State Managers for more information) after a change in the record's Status field has been made. This user is only available for selection in rules for the condition "Change of <Record> Status".

<State Manager (previous)>
The user who is listed as the manager of the record's previous state according to the State Manager settings for the combination of Form and Project set in the record (refer to Form State Manager for more information) prior to a change in the record's Status field. This user is only available for selection in rules for the condition "Change of <Record> Status".

<Unregistered User>
This will send email notification messages to the email address saved in the Unregistered User Email field of a record. The rules that will be used to send email notifications to unregistered users depend on the setting for the Send Email Notifications On option in the Unregistered User Options section of the General Preferences page.

<User Pulldown Field>
This will send email notification messages to the user set in a record's user pulldown field. For example, if you have configured a field called Fixed By, the option "<Fixed By>" will be available in the Notification List to send email notifications to the user selected in this field.

User Groups
All user groups in this workgroup will be displayed to be selected for the Notification List

To edit the pulldown that the Email Rules are based on:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the Edit Based On link to the right of Email Rules
6. Select a pulldown in the Based on Pulldown so that you can configure different Email Rule settings for each option menu item in this pulldown
7. Click OK to save your selection
8. Click OK to return to the Workflows section or click Set Email Rules to configure the settings for each option menu item in the selected pulldown

To edit the email rules for a specific pulldown option menu item:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Workflows link
4. Select the workflow in the Workflows pulldown at the top of the page. The page will be refreshed to display the properties of the selected workflow.
5. Click on the Edit icon to the right of the option menu item
6. The Email Rules for the form will be displayed.

   If you are editing the settings for the option menu item <Default>, the Email Rules displayed will be applied when new option menu items are added to this pulldown (the pulldown selected in the Based On field). The option Apply these settings to other <Pulldown Name> values will be available. Checking the box for the option Apply these settings to other <Pulldown Name> values will show a list of the option menu items for the Based On pulldown. Select the option menu item(s) that should inherit the same Email Rules that you have set for <Default>. To select multiple option menu items, hold down the Ctrl button on your keyboard while clicking on the desired option menu items.

   If you are editing the settings for an option menu item in the pulldown, the Email Rules displayed will be applied when records are added to Tracker with this option menu item selected. Click on the Load Defaults button if you wish to have the Email Rules configured for <Default> to be filled into the Email Rules for the option menu item selected.

   Decide whether you would like to add, edit or delete an email rule.

7. Click OK to save the changes

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NetResults Tracker Help

Email Configuration

Overview

Tracker is fully integrated with Internet standard SMTP email, supporting the following features:

Outgoing Mail Features

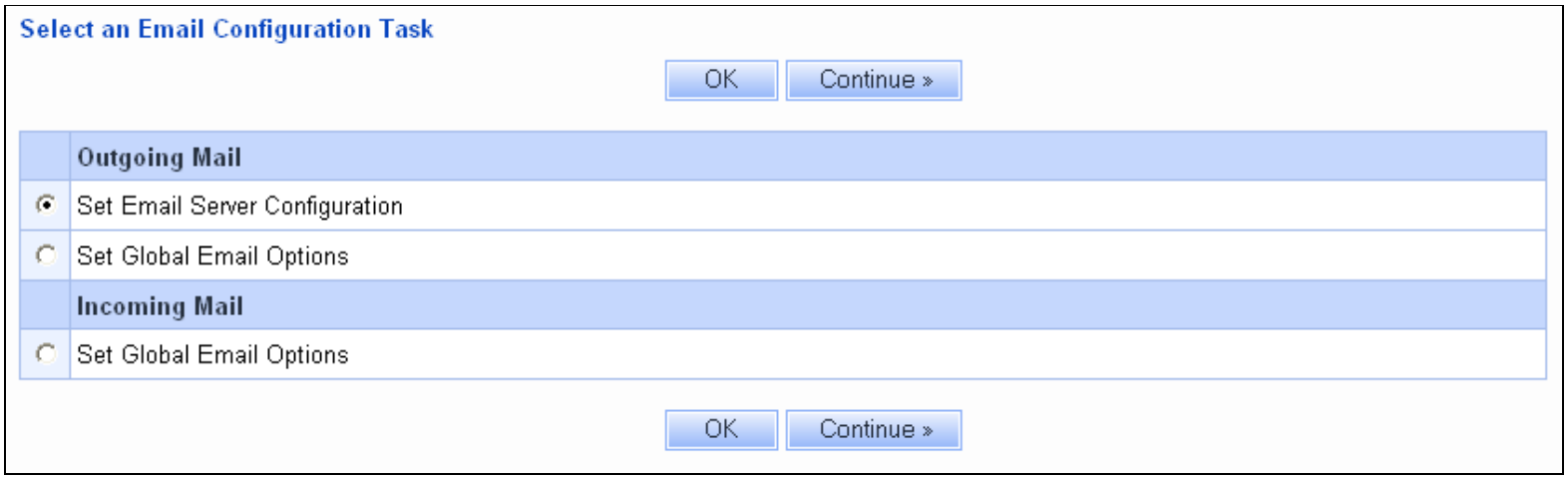
- ***Email Notification*** messages can be sent to users and groups triggered by an action performed on a record (adding, editing, tasking, deleting) or a change in status or assignment. Email Rules can be configured to trigger email notifications.
- ***Alerts (Enterprise Edition Only)*** messages can be sent to users and groups at a designated date and time as a reminder about a record or a means of escalating a record. Review the Alerts Help section for information about enabling and configuring the Alerts feature.
- ***Discussion (Enterprise Edition Only)*** messages can be sent to users and groups to invite them to participate in a discussion or to notify them about a new post to a discussion. Review the Discussion Help section for information about enabling and configuring the Alerts feature.

Incoming Mail Feature

- The ***Submit via Email*** feature allows issues to be created in Tracker from incoming email messages

To configure settings related to email features:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Email Configuration link



The following sections provide details of setting the Outgoing and Incoming Mail configuration:

- Email Notification Messages
- Examples of Email Notification Messages
- Outgoing Mail Server Configuration and Global Options
- Email Rules
- Incoming Mail Configuration
- Sending an Administrative Email

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NetResults Tracker Help

Email Notification Messages

Overview

The following section discusses the features and operations that can trigger email notification messages to be sent from Tracker.

Alerts

The Alerts feature can send email notification messages at a designated date and time to remind a user or group about a record or to notify a user or group that a record's status has not changed within a specific period of time. Information on configuring the Alerts feature to send email notification messages can be found in the Alerts section of this Help guide.

Discussion

The Discussion feature can send email notification messages to invite a user or group to participate in a discussion for a record or can notify a user or group about a new post to a discussion thread. Information on configuring the Discussion feature to send email notification messages can be found in the Discussion section of this Help guide.

Email Notifications triggered by Operations in Tracker

Tracker can be configured to automatically send email notification messages when the following actions are performed on a record:

- Add
- Edit
- Delete
- Task
- Change of Status
- Change of Assignment

Any combination of users and groups can be selected to be notified for each operation mentioned above.

Email notification preferences can be set per workflow and can also be set based on a selection made in a particular pulldown field (Product, Priority, Severity or any pulldown field that you define in the Fields section). Such customization may be necessary to account for changes in the workflow process or the users participating in the process.

Add Options

When a record is created, a notification email can be sent to any of the following individuals and / or groups:

Assignee
The individual who is currently assigned to the record

Reporter
The individual who reported the record

State Manager
The manager assigned to the workflow state of the record when it is added

User Group
The user groups configured within the workgroup will be listed. You can select any user group(s) to receive notification when a record is added

Edit Options

When a record is edited, a notification email can be sent to any of the following individuals and / or groups:

Assignee
The individual who is currently assigned to the record

Assignee (new)
The individual selected in the Assigned To field (if the Assignee is changed during the Edit operation)

Assignee (previous)
The individual who was the previously assigned to the record (if the Assigned To field is changed during the Edit operation)

Reporter
The individual who reported the record

State Manager
The manager assigned to the workflow state of the record when it is edited

State Manager (new)
The manager assigned to the new workflow state of the record (if the Status field is changed during the Edit operation)

State Manager (previous)
The manager assigned to the previous workflow state of the record (if the Status field is changed during the Edit operation)

User Group
The user groups configured in the workgroup will be listed. You can select any user group(s) to receive notification when a record is edited.

Delete Options

When a problem record is deleted, a notification email can be sent to any of the following individuals and / or groups:

Assignee
The individual who is currently assigned to the record

Reporter
The individual who reported the record

State Manager
The manager assigned to the workflow state of the record when it is deleted

User Group
The user groups configured in the workgroup will be listed. You can select any user group(s) to receive notification when a record is deleted.

Task Options

When the Task operation is performed on a record, a notification email can be sent to any of the following individuals and / or groups:

Assignee
The individual who is currently assigned to the record

Assignee (new)
The individual assigned to the record (if the Assigned To field is changed during the Task operation)

Assignee (previous)
The individual who was previously assigned to the record (if the Assigned To field is changed during the Task operation)

Reporter
The individual who reported the record

State Manager
The manager assigned to the workflow state of the record when the Task operation is performed

State Manager (new)
The manager assigned to the new workflow state of the record (if the Status field is changed during the Task operation)

State Manager (previous)

The manager assigned to the previous workflow state of the record (if the Status field is changed during the Task operation)

User Group
The user groups configured in the workgroup will be listed. You can select any user group(s) to receive notification when the Task operation is performed on a record.

Assignment Change Options

When a change of assignment occurs for a record, notification email can be sent to the following individuals and / or groups:

Assignee (new)
The individual the record is being assigned to

Assignee (previous)
The individual the record was assigned to before the change of assignment

Reporter
The individual who reported the record

State Manager
The manager assigned to the current workflow state of the record

User Group
The user groups configured in the workgroup will be listed. You can select any user group(s) to receive notification when a record is re-assigned.

Status Change Options

When a change of state occurs for a record, a notification email can be sent to the following individuals and / or groups:

Assignee
The individual who is currently assigned to the record

Reporter
The individual who reported the record

State Manager (new)
The manager assigned to the new workflow state

State Manager (previous)
The manager assigned to the original workflow state

User Group
The user groups configured in the workgroup will be listed. You can select any user group(s) to receive notification when a record's Status has changed.

You can establish notification rules based on changes to particular states. Examples of notification rules that can be used simultaneously for changes to particular states:

- When the Status of a record is changed to the Closed state, the Reporter, the previous State Manager, and the new State Manager are notified.
- When the Status of a record is changed to Fixed, the Reporter, the new State Manager, and the Managers user group are notified.

Please note that these are just examples of the many combinations that are possible to establish notification rules for a change in state.

Please review the Workflows section for details on configuring email rules.

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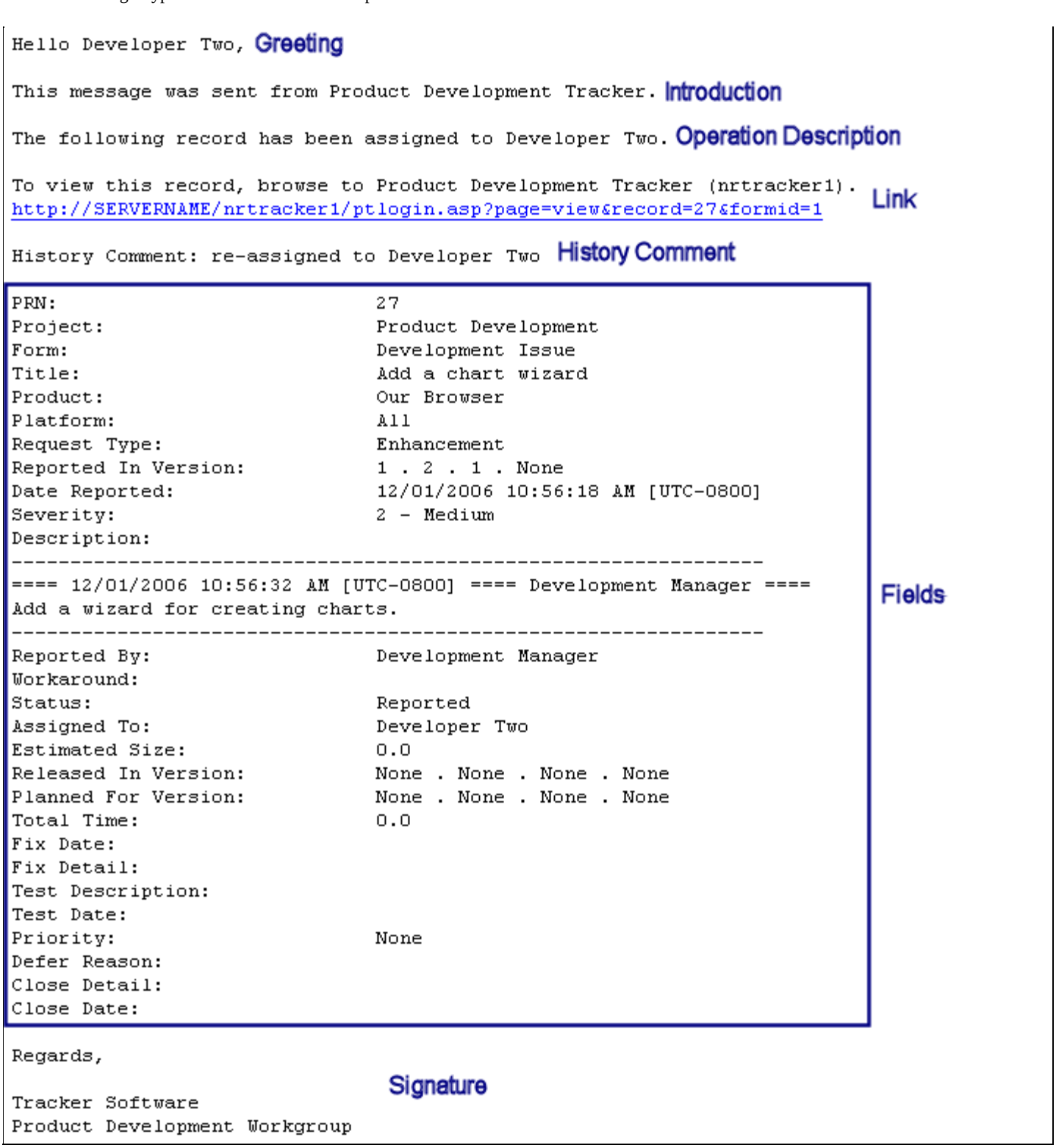
NetResults Tracker Help

Email Notification Message Types

Email notification messages can be generated automatically by Tracker triggered by the actions performed on a record. Notification messages can also be triggered by the use of the Alerts and Discussion features. Each of the features above generates a notification message with a unique structure. Common to all message types is the inclusion of hyperlinks to take the user receiving the message to the workgroup, record, or discussion thread specified in the message. The hyperlink is created based on the configuration set for the workgroup in the Workgroup Management System. The structure of each message type is described below.

Email Notification Messages based on Email Rules

Email Rules can be set for a workflow or set based on each option menu item in a pulldown. Email Rules can be set to send an email message when an operation is performed on a record (such as adding, deleting, editing, or tasking a record) or when the record's status or assignment has changed. The body of a Tracker email notification message is divided into seven sections which you can configure. A description of these sections and how to configure them as well as how to configure email rules can be found in the Email Rules section. Email notification messages are of the form shown in the example below. This example is a message sent to a user who has been assigned to a record:



The fields that are included in the email notification messages can be customized. Whether a particular field is displayed in the email message is determined by the Field Visibility settings for that field. Field Visibility can be customized for each fields in the Fields section.

Alerts Notification Messages

The Alerts feature can be configured to send an email notification message about a record at a particular date and time as shown in the example below. Each message includes a link to the record that generated the alert, information about how long a record has been its current state, when the next alert will be sent, additional information from the alerts settings for the record, and fields from the record:

```
Hello Support Engineer One,

Alert for Record SUP16

To view this record, browse to Support Tracker.
http://SERVERNAME/nrtracker1/ptlogin.asp?page=view&record=16&formid=2

It is 1 hour(s) after Date Reported (12/16/2009 11:47:08 AM) and the record Status (Reported) is unchanged.
Next alert is due on 12/17/2009 12:47:08 PM.
Additional Information:


PRN:                    SUP16
Project:                Support
Form:                   Ticket
Title:                  Access denied error on login
Product:                Our Database
Platform:               Windows XP
Reported In Version:    2.2.1.None
Request Type:           Bug
Severity:               4 (Med Impact - High %)
Description:
-----------------------------------------------------------------
==== 12/16/2009 11:47:59 AM [UTC-0800] ==== Restricted User Three ====
When I try to login, I get the error "Access denied".
-----------------------------------------------------------------
Workaround:
-----------------------------------------------------------------
==== 12/16/2009 11:47:59 AM [UTC-0800] ==== Restricted User Three ====
None
-----------------------------------------------------------------
Reported By:            Restricted User Three
Date Reported:          12/16/2009 11:47:08 AM [UTC-0800]
Status:                 Reported
Assigned To:            TBD
Priority:               -Select-

Note: This is an alert notice sent automatically by Support Tracker.
```

The fields that are included in the message can be customized. Whether a particular field is displayed in the email message is determined by the Field Visibility settings for that field. Field Visibility can be customized for each field in the Fields section of the Administration page.

Discussion Notification Messages

The Discussion feature can be configured to send an email notification message to invite a user or group to participate in a discussion for a record or to notify a user that a new post has been added to a discussion. The sample messages below have the subject (name) of the discussion thread, the record number where the thread is located, and a link to the thread:

Sample 1 - Invitation to participate in a new discussion

```
Hello Developer Two,

You are invited to the "Specification Review" discussion thread for Record 25.

To read or post messages to this thread, browse to Product Development Tracker (nrtracker1).
http://SERVERNAME/nrtracker1/ptlogin.asp?page=thread&record=25&formid=1&threadid=1&messageid=-1

Note: This email is sent automatically by Product Development Tracker (nrtracker1).
To change your discussion notification preferences, browse to Product Development Tracker
(nrtracker1),
http://SERVERNAME/nrtracker1/ptlogin.asp
click Preferences, modify Discussion Settings, click OK.
```

Sample 2 - New post to a discussion in which the user is subscribed

```
Hello Developer Two,

A new message has been posted to the "Specification Review" discussion thread for Record 25.

To read or post messages to this thread, browse to Product Development Tracker (nrtracker1).
http://SERVERNAME/nrtracker1/ptlogin.asp?page=thread&record=25&formid=1&threadid=1&messageid=2

Note: This email is sent automatically by Product Development Tracker (nrtracker1).
To change your discussion notification preferences, browse to Product Development Tracker
(nrtracker1),
http://SERVERNAME/nrtracker1/ptlogin.asp
click Preferences, modify Discussion Settings, click OK.
```

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NetResults Tracker Help

Outgoing Mail Configuration

Enable Email Notification

Before using the email integration features (email notification triggered by actions performed on a record, alerts, and discussion messages), you must first perform some basic configuration.

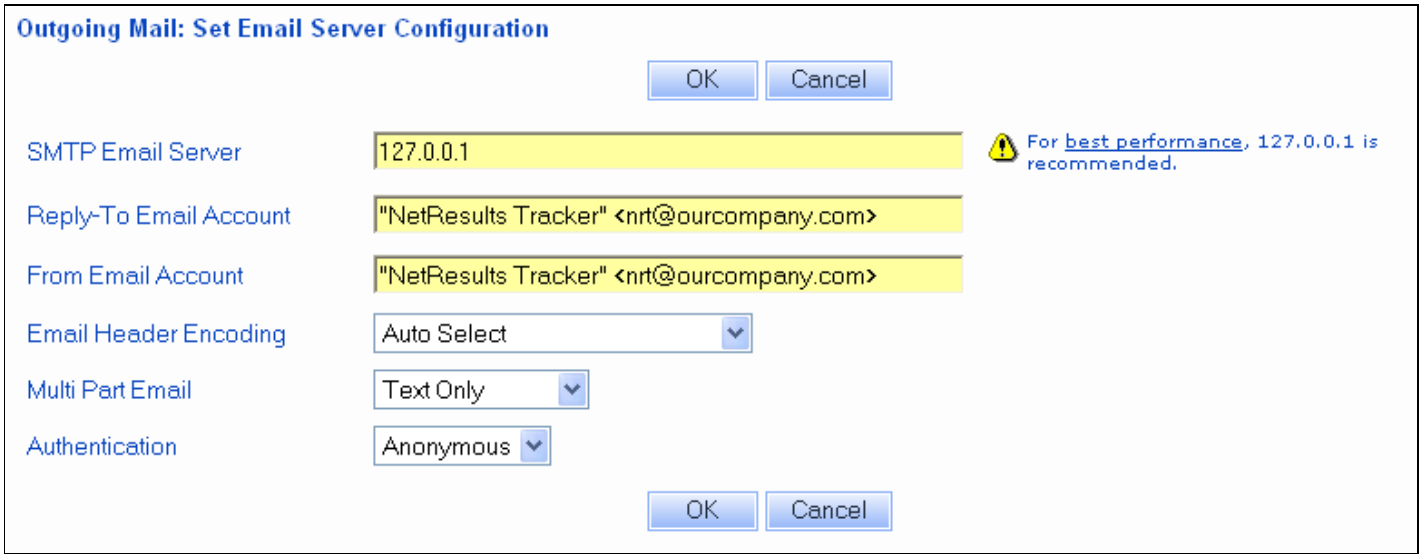
The steps for enabling email notification are:

- Configure Your Mail Server
  The SMTP Mail Server that you plan to use with Tracker needs to be configured to allow forwarding or relaying from the machine where Tracker is installed. For most mail servers, this can be done by entering the IP Address of the machine where Tracker is installed into the list of machines allowed to relay or forward through the mail server. Check with your mail server administrator to configure this. If the Tracker server is not allowed to relay through your mail server, Tracker will be unable to generate email notification messages.

- Set the Mail Server Configuration
  Enter the Mail Server information to be used when generating the outgoing email messages.

  To reach the Mail Server Configuration options:

  1. Login to the workgroup as Admin (or another user who is a member of the Admin user group)
  2. Click on the Admin icon
  3. Click on the Email Configuration link
  4. Select the option Set Mail Server Configuration, then click on the Continue button



  5. Enter the name of the mail server you would like to use in the SMTP Mail Server field. You can enter the name of the mail server as a host name (e.g. *smtp.mydomain.com*) or as an IP address (e.g. *192.168.22.118*). For best performance, it is recommended that you use a mail server located on the same machine as Tracker and reference it by IP address by entering 127.0.0.1 (a special IP address which is interpreted by the IP protocol to mean the local machine and does not require a host name lookup). If you do not have a mail server installed on the same (web server) machine as Tracker, we recommend installing the Microsoft SMTP Service (which is included with Internet Information Services on Windows Server operating systems). Then, configure it to forward email to your main mail server for distribution to the recipients. By having a local mail server (dedicated to Tracker), you may significantly speed up Tracker operations which send email notifications (Add, Edit, Task, and Delete). Detailed steps for configuring the Microsoft SMTP service on Windows and setting up a smart host to route to your main mail server can be found in the following Knowledge Base article:

     http://kb.nrtracker.com/Item.asp?id=237

     NOTE: Please ensure that the mail server you enter for this option is set such that it allows the IP address of the machine where Tracker is installed to forward or "relay" messages through your mail server. Most mail servers are set to not to allow such forwarding or relaying by default to prevent forwarding of spam. This is especially important if your mail server is on a separate machine from Tracker.

  6. In the Reply-To Email Account, enter the email address (e.g. admin@mycompany.com) that should be used when users

attempt to reply to an email message generated by Tracker (or when a destination mail server rejects an email for some reason and sends a delivery failure notification). If you wish to include a name with the email address, enter the information in the form "Name" <email address> (with a space between " and <) as shown in the example above. The double quotes around the name are required unless there is no blank space in the name. The less than and greater than symbols are required around the email address. If you include a name and the double quotes and less than/greater than symbols are not used, Tracker may not be able to send the email or you users may not be able to receive it. Without a valid email address entered into this field, Tracker will be unable to send email notification messages. It may also be a good idea to tell your users to make sure that their spam filters allow all email from this address (put it on their "white list").

7. In the From Email Account, enter the email address (e.g. admin@mycompany.com) that should appear in the From field of the email message sent by Tracker. If you wish to include a name with the email address, enter the information in the form "Name" <email address> (with a space between " and <) as shown in the example above. The double quotes around the name are required unless there is no blank space in the name. The less than and greater than symbols are required around the email address. If you include a name and the double quotes and less than/greater than symbols are not used, Tracker may not be able to send the email or you users may not be able to receive it. Without a valid email address entered into this field, Tracker will be unable to send email notification messages. It may also be a good idea to tell your users to make sure that their spam filters allow all email from this address (put it on their "white list").

8. Select the type of Email Header Encoding you would like to use in the pulldown menu. The encoding that you choose for this option should be based on the characters that will be used in this workgroup. In general, email headers must contain only US-ASCII characters. Headers that contain non US-ASCII characters must be encoded so that they contain only US-ASCII characters. This process involves using either "B" (BASE64) or "Q" (Quoted-Printable) to encode certain characters. The "Q" encoding is recommended for use when most of the characters to be encoded are in the ASCII character set; otherwise, the "B" encoding should be used. If you are not sure what type of encoding is compatible with your mail server, choose Auto Select for this option.

9. Choose a format for the email content in the Multi Part Email pulldown menu. This option determines whether the email messages generated by Tracker will contain only Text or Text and HTML. For example, if the character set for your workgroup is UTF-8, email from Tracker may also contain UTF-8 characters. If your email client cannot display UTF-8 characters, selecting Text and HTML for this option might help. If your email client can display HTML format, the UTF-8 characters in the email message can be displayed correctly.

10. Select the type of Authentication that should be used when generating email notification messages. By default, Anonymous authentication is selected. Anonymous authentication will generate email messages using Tracker's anonymous user account, PUSR4<hostname>, as the effective user. This anonymous user account is configured automatically by the installation setup program.

    If you wish to use Basic authentication, an Authentication User Name and Authentication Password need to be provided in the corresponding fields. Up to 80 characters can be entered for the Authentication User Name and up to 250 characters can be entered for the Authentication Password. This user account will be used to authenticate Tracker's request to the mail server when generating email messages.

11. Click on the OK button to save your Mail Server Configuration settings

- Set the Global Email Options
  The Global Email Options section allows you to choose whether the contents of Text and TextArea fields should be truncated when displayed in the email messages generated by Tracker.

  To reach the Global Email Options section:

  1. Login to the workgroup as Admin (or another user who is a member of the Admin user group)
  2. Click on the Admin icon
  3. Click on the Email Configuration link
  4. Select the option Set Global Email Options , then click on the Continue button
  5. Select No if you wish to display the entire contents of the Text and TextArea fields when they are configured to be included in the email notification messages. Selecting Yes for this option will truncate the Text fields to 55 characters and the TextArea) fields to 250 characters when displayed in email notification messages.
  6. Click on the OK button to save your selection

- Configure Email Content and Rules
  The content included in an email notification message is determined by several different components:
  - Email Common Content
    Email Common Content is information included in the body of email notification messages (Greeting, Introduction and Signature) based on the form used to submit a record. Email Common Content is configured in the Workflows section.
  - Email Rules
    Email Rules determine when and to whom email notification messages will be sent. Email Rules are configured per workflow in the

Workflows section.

- Email User Group Privileges There are a set of user group privileges which determine which pieces of email content users receive based on their user group membership. Email user group privileges are configured in the User Accounts - Privileges section.

- Enable and Configure Alerts (Enterprise Edition Only)
  Information for enabling and configuring the Alerts feature can be found in the Alerts section.

- Discussion (Enterprise Edition Only)
  Information on enabling and configuring the Discussion feature can be found in the Discussion section.

Disable Email Notification

If at any time you wish to turn off all email notification, remove the information from the SMTP Email Server setting in the Mail Server Configuration section mentioned above.

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NetResults Tracker Help

Incoming Mail Configuration

Incoming Mail settings are used for the Submit via Email feature. The Incoming Mail settings will not be displayed in the Email Configuration page of the Administration section unless an Email License Key has been entered into the Tracker License Manager and the "Enable Submit via Email" option is set to "Yes" in General Preferences.

To configure the Incoming Mail settings,

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Email Configuration link
4. Select Set Global Email Options in the Incoming Mail section
5. Click on the Continue button
6. Set the Global Mail Options as desired. The following options are available:

   Send Mail Processing Status (as Email) to User
   Select a user who will receive email messages about the processing status of incoming mail for this workgroup. By default, this is set to Admin. Any user that is added to the workgroup and has a valid email address entered into the user profile information can be selected. Select <None> if you do not wish to send any status email messages.

   Send Mail Processing Status (as Email) on
   Select the condition which will send an email message about the processing status of incoming mail for this workgroup. By default, this is set to "Success and Failure", which will generate an email message every time Tracker checks for email (even if there is no email to process). Warning: Since this setting will generate a status email every time Tracker checks for email, we strongly recommend changing this setting (to Failure or None) once incoming email configuration is complete and connectivity to your mail server has been verified. Selecting "Failure" will generate an email message only when Tracker gets an error attempting to check for email (e.g. can not connect to the mail server) or gets an error while attempting to convert an incoming message to a new record. Selecting <None> indicates that no email messages should be sent regardless of the processing status of each incoming message. These email messages will be sent to the user specified in the option "Send Mail Processing Status (as Email) to User".

7. Click OK to save the changes

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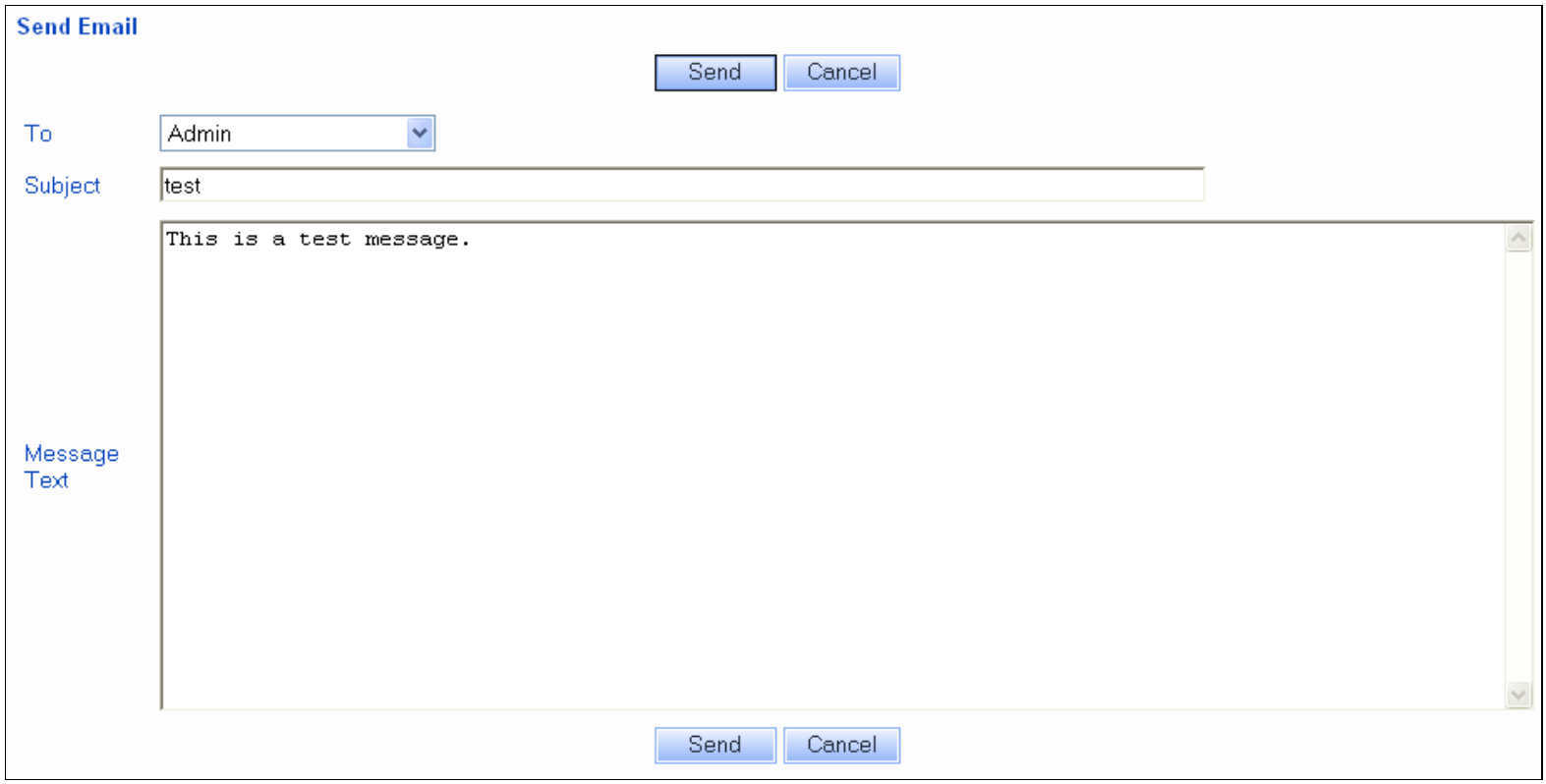
NetResults Tracker Help

Sending an Administrative Email

You can send an email with any message you would like to a user or user group from within Tracker. You may wish to do this while performing administrative tasks to notify users affected by any changes. Or, you may use this facility to troubleshoot problems receiving email messages.

To send an email to a user or a user group, follow these steps:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Send Email link
4. Select a user or user group (user groups are listed as [User Group]) from the pulldown labeled To:,
5. Enter a message subject in the Subject: field, and a message in the Body.
6. Click on the OK button to send the email and return to the Tracker Administration section.



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NetResults Tracker Help

Security Model

Overview

Tracker incorporates a security model that allows the administrator to control access to both function (Add, Delete, Edit, etc.) and data.

By using these features the administrator can create different classes of users (via user groups) with different available operations and access to data. For example, a user group could be defined that allows users access to query and view only those records created by other users in their group.

Note that this section is meant to serve as an introduction to basic Tracker security concepts. Detailed information on how to perform specific tasks are covered in the various help subjects where the options are actually set.

User Groups and Logins

The Tracker security model is based on the concept of individual users and user groups. Each individual user must log into the system, and each user is a member of one or more user groups. User groups are a convenient way to group similar users together, and define security for those users.

For example, rather than defining specific access privileges for all 50 users at a company, the administrator can split the users in to functional groups (Development, QA, Customers, etc.), define security for the functional groups, and then assign the users to those groups.

All users are members of one of the following system-defined user groups by default:

- Users: All users with Static or Floating selected as the License Type are a member of the "Users" group.
- Restricted Users: All users with Restricted selected as the License Type are a member of the "Restricted Users" group.

The Admin user is always a member of the system-defined user group "Admin".

Users and user groups are covered in detailed in these help topics:

- User Accounts - Users
- User Accounts - Groups

Restricting Access To Functions

Each user group can be assigned privileges, and each user that is a member of the group inherits that set of privileges. All of the basic Tracker functions like Add, Edit, etc. are defined to be individual privileges that can be assigned to a user group.

For example, to allow a user to Add and View records, create a user group that has both Add and View privileges, and then assign the user to that group.

One special case is the Admin group, which always has Admin function privilege. Other user groups can also be defined to have this privilege, however it cannot be removed from the Admin group. Privileges are covered in detail in the following section:

- User Accounts - Privileges

Restricting Access to Projects and Forms

Tracker allows multiple projects to be created and maintained in a workgroup. Each project can be defined to be visible to only certain user groups. Only users who are members of those user groups with visibility to a project can add or access records that belong to that project. Users cannot login to Tracker unless they are a member of a user group that has visibility to at least one project.

Each Project has one or more Forms (record types). Within each Project, visibility can be independently specified for each Form. So even within a single Project, some user groups may have access to multiple Forms while others will only have access to one

Form.

Project and Form Visibility are explained in the following sections:

- Projects
- Forms in a Project

Restricting Access to Records by Reporter

If you have purchased Restricted user licenses, user accounts with those licenses will automatically have their access limited to those records which they submitted. More specifically, their access is limited based on the setting of the Reporter field within the record. Users with sufficient privilege can set/modify the Reporter field to submit issues on a Restricted user's behalf. All reports which a Restricted user runs are automatically filtered to only display issues which they submitted (or were submitted on their behalf).

User license types are explained in the following section of the Installation Guide:

- User License Types

Restricting Access To Records

Tracker supports an optional record visibility model. This means that each individual record is defined to be visible to a set of user groups. The record can be seen by any user who is a member of a group in this set, it is invisible to all other users. This feature can be enabled or disabled via the Record Visibility setting under General Preferences.

Record Visibility should only be enabled by advanced Tracker administrators. In most cases, Project Visibility, Form Visibility, or Restricted User accounts can be used to configure and manage visibility. Record visibility is a record-by-record setting of visibility that is rarely needed. In most cases, it is more difficult to configure and maintain (each record may have different visibility settings) than the other visibility options. It is typically only necessary in situations where you must configure visibility on a case-by-case basis. This might be done by the person who submits the issue or by someone later on in the workflow. For assistance in choosing between the visibility options, contact Technical Support. They can review your requirements and provide suggestions regarding which option (or combination of options) may be best for you.

By default, when a record is created, it is set such that it is visible to:

- all groups in which the reporter is a member
- the user groups selected in the Make Visible to Groups privilege for those user groups in which the reporter is a member

You can assign a user group the ability to modify record visibility. All users with this privilege are given the ability to explicitly pick the user groups to which the record is visible when it is created, and also the ability to later edit the visibility. There are options that control this behavior. Review the General Preferences section for details.

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NetResults Tracker Help

Users

Help Topics << >>

Overview

In order to use Tracker, every user must log in as a registered user. Tracker allows you to enter users and distinguish between internal users and external users like customers or partners. Before a user can begin using Tracker, a user must be created and given access to a workgroup(s) in the User Management System (UMS). After this is done, you can add a user to the User Accounts section of your Tracker workgroup. If the UMS Administrator has given you the UMS privileges to do so, you can add, edit and delete user accounts from the User Accounts section. Within a workgroup, a user's access rights and privileges are determined by the user groups to which the user belongs.

Definition of Users by License Type

There are three types of licenses available for use with Tracker: Static, Floating, and Restricted.

For all licenses only one user may be logged in to Tracker per license. A static license is defined as one user account (User ID) for each license purchased. Only one user can login to the system with this particular User ID. A floating license is defined as up to 10 user accounts for each license purchased. Only one user per floating license can login to the system at a particular time. Others who try will be denied access until a floating license user logs off (clicks the Logoff icon). A restricted license is defined as one user account (User ID) for each license purchased.

Static licenses are typically used for users who regularly use Tracker and therefore must be guaranteed access at any time (can never be denied access because too many users are already logged in). Floating licenses are typically used for infrequent users if it is acceptable that they may not be able to login to the system some of the time (as all floating licenses may be in use). Restricted licenses are typically used for external users (e.g. customers, vendors, partners) that should have limited access to Tracker operations and data.

Users of static and floating licenses are often referred to as "non-Restricted" users (users that do not use a Restricted license) in the various Help Guides.

For more details on licensing including your License Agreement and the number and type of license(s) you have, please run the License Manager.

System Defined Users

Tracker has 3 pre-defined users. These users all serve a special purpose and are not counted towards the number of users you have licensed. You cannot remove or modify these users:

- Admin
  The Tracker administrator user. Admin is always a member of the Admin group. The initial Admin password is "Admin". It is recommended that you change this password the first time you login.
- TBD
  TBD is used to allow users to specify no choice. This user can be used as a placeholder for records where the assignee has not yet been decided or in cases where a record has been processed and an assignee is no longer needed. You cannot login as TBD.
- Unregistered User (Inet)
  Unregistered User (Inet) is used by the Submit via Web for Unregistered Users and Submit via Email features. When issues are added using the Submit via Web for Unregistered Users feature (the Submit Page), the Reporter field is set to Unregistered User (Inet). It is also used as the Reporter for issues added using Submit via Email when Tracker can not find a matching user account (one whose email matches the From: address in the email). You cannot login as Inet.

User List

A list of user accounts for the workgroup can be found in the User Accounts section. To get to the User List:

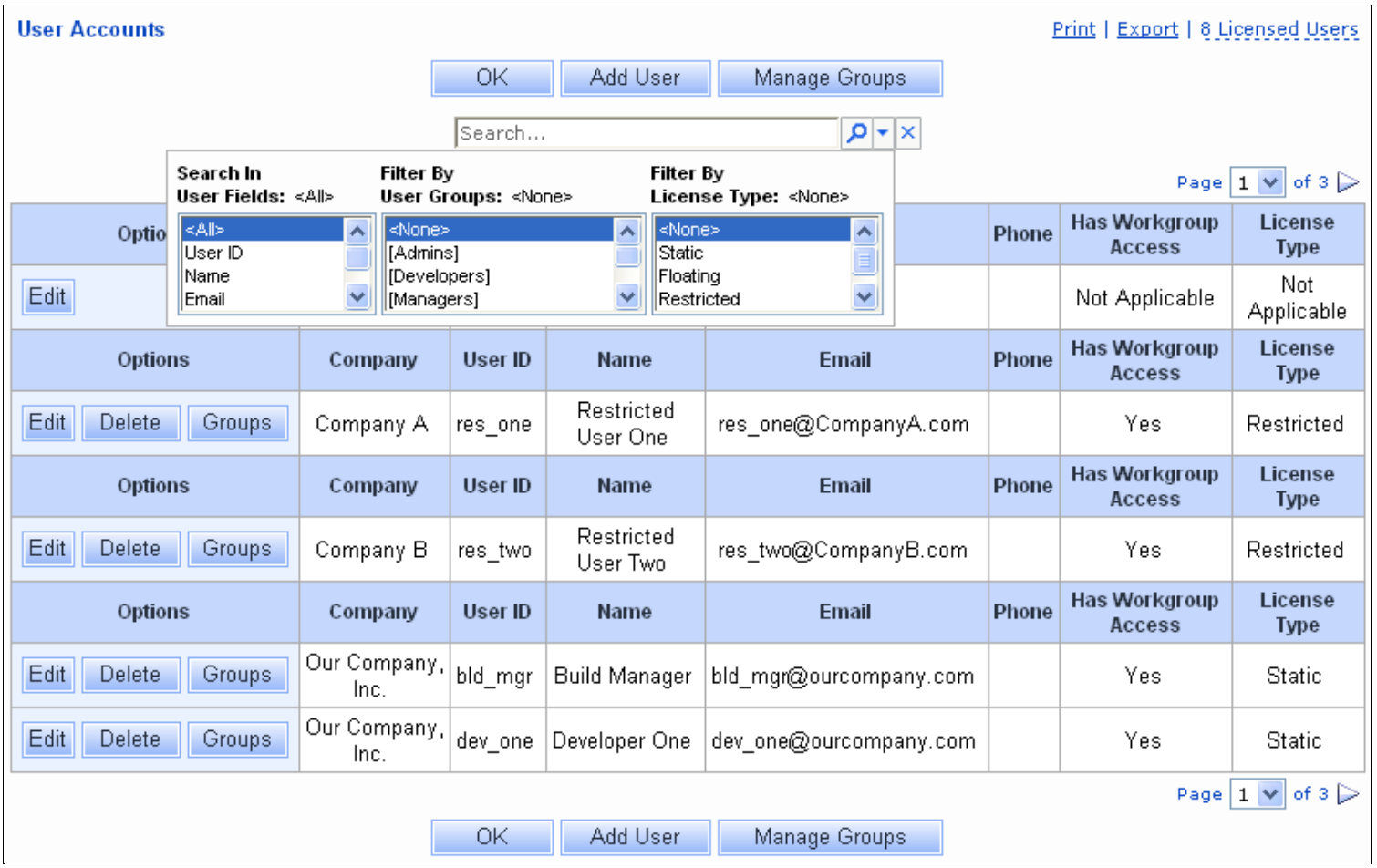
1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link

The list on the User Accounts page provides information such as Company Name, User ID, Name, Email Address and Phone Number. "Has Workgroup Access" lists whether the user account has access to the workgroup (whether a user has access to a workgroup is controlled in the User Management System). License Type shows what type of license (if any) is associated with the user account. The users are grouped by Company Name (with a separate section for the built-in users that cannot be used to login: TBD and Inet).

By default if there are more than 50 users in a workgroup, the list of users will be broken up into pages. Click on the page pulldown to select a

page or click on the Previous or Next arrows to move to another page. You can change how many users are listed per page via the Maximum Licensed Users option in the General Preferences section.

The top right of the User List shows a total number of licensed users in the workgroup. This total does not include the built-in System user accounts: Admin, TBD and Inet. To see a breakdown of licensed users by type, simply move the mouse cursor over this total license count.



Printing the User List

The users displayed on the User List can be printed using the Print link in the upper right corner of the User List pages. Only the users currently displayed on the list will be printed (e.g. if you have run a search for a particular set of users, only those users will be printed as opposed to the full set of users).

Exporting the User List

The users displayed on the User List can be exported to *.csv format (comma separated values) using the Export link in the upper right corner of the User List pages. You can then open this file in another tool such as Microsoft Excel or Crystal Reports. Only the users currently displayed on the list will be exported (e.g. if you have run a search for a particular set of users, only those users will be exported as opposed to the full set of users).

User Search

A search function is available in the User Accounts section to help you quickly locate a user or set of users that match certain criteria.

To search for a user or set of users:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Type in any desired criteria into the Search... text box
5. If you wish to limit the search so that only certain fields are searched or filter the search results by user groups or license type, click on the dropdown icon in the Search box to show the multiple selection boxes for User Fields, User Groups and License Type.

The User Fields that can be searched include User ID, Name, Email, Phone and Company. Selecting "<All>" will search for the criteria entered into the Search box within all User Fields. More details about the User Fields can be found in the User Profile section.

The User Groups filter will exclude any user from the search results that is not a member of the selected groups. More details about the user groups available in list can be found in the User Groups section. Selecting "<None>" will include users from any user group in the search results.

The License Type filter will exclude any user from the search results that is not of the selected license type. The License Types that can be used as filters are Static, Floating, Restricted and Not Applicable. The built-in System user accounts Admin, TBD and Inet are user accounts with "Not Applicable" as the license type. Selecting "<None>" will include users of any license type in the search results.

To make multiple selections in the list boxes, hold down the Ctrl button on your keyboard as you click on the items you wish to select.

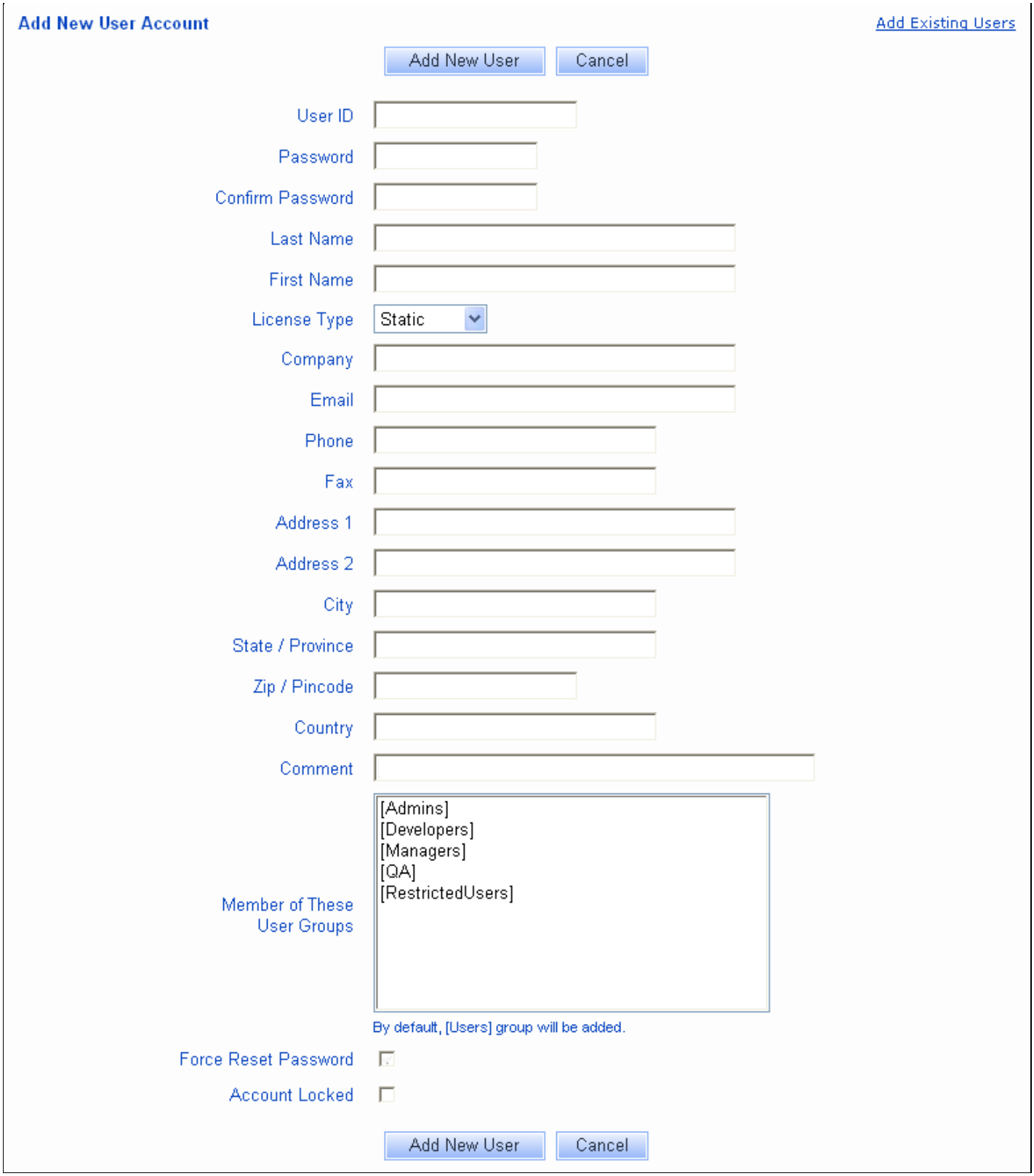
6. Click on the search icon to return the search results

Click on the remove icon to remove the selected criteria and clear the text and selection boxes.

Adding a User

To add a user:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Add User button
5. Depending on the User Management System (UMS) privileges granted to you by the UMS Administrator, you will either see:
    a. The Add New User Account page which has a a list of fields to fill out to create a new user account and an Add Existing Users link at the top right corner to add user accounts that have been previously created to the workgroup. If you want to add an existing user account to the workgroup, review the Add Users to Workgroup section. If you want to create a new user account, review the User Profile Information list for details on filling out the fields to create a new user account. After filling out the fields, click on the Add New User button. A confirmation page will be displayed. Click OK to return to the User Accounts section or click on the Add Another User button to create another user account. Note: If the User ID you entered in the Add New User Account page matches a user account that was previously added and subsequently deleted, you will be prompted to choose whether to restore the user by clicking on the Restore User button or enter a different User ID on the Add New User Account page by clicking on the Back button.



OR

b. The Add Existing Users to Workgroup page displays a list of available users that can be added to the workgroup. Select the license type of the existing user in the Available pulldown at the top. Click on the User ID of the user you wish to add, then click on the user groups you wish to place the user in in the Member of These User Groups section. Click on the Add button. You can select multiple users and added them into multiple user groups by holding down the Ctrl button on your keyboard while clicking on the User IDs you wish to select. Click OK after the operation is complete.

   A user will only appear on the list of available users if the user account has been previously added and given access to the workgroup (This may have been done via the User Management System).

Users that appear on the list of Available Users preceded by "*" are users that were previously deleted from the User Accounts section. These users can be restored by clicking on the user, then clicking on the Add button. Review the Restoring a User section for more information about restoring a user.

Any Static/Floating user will be added to the "Users" group by default. Any Restricted user will be added to the "RestrictedUsers" group by default.

User Profile Information

The following information can be entered when creating a user account. The fields User ID, Password, Confirm Password and First Name are required. Though it is not a required field, it is recommended that you also enter an email address for the new user account so the user can receive email notifications from Tracker.

User ID
Unique identifier for user. May be up to 40 characters long.

Password
Login password for user. May be up to 10 characters long.

The password field is not displayed in a workgroup(s) with Active Directory Integration enabled because the user's Windows user account information will be used for authentication.

Confirm Password
Confirm the login password for user as entered in the Password field above.

The password field is not displayed in a workgroup(s) with Active Directory Integration enabled because the user's Windows user account information will be used for authentication.

Last Name
User's last name

First Name
User's first name

License Type
Can be Static, Floating, or Restricted. See Definition of Users by License Type for further information. Users with Static or Floating selected as the License Type are also referred to as Unrestricted or Non-Restricted users in various areas of the Help Guides.

Company
User's company name

Email
Email address of the user. Used by Tracker for email notification of events.

Phone
User's phone number

Fax
User's fax number

Address 1
First line of user's address

Address 2
Second line of user's address

City
User's city

State/Province
User's state or province

Zip/Pincode
User's zip code or pincode

Country
User's country

Comment
Any other information about the user to be included in his or her profile information

Member of These User Groups
The user groups in which the user is to be a member of. Depending on the License type selected for the account, the user will always be added to the [Users] or [Restricted Users] group. Place the user in other user groups by selecting from the list. Select multiple user groups by holding down the CTRL key and clicking on additional groups. User group membership can be also be added/removed at a later time, for more information see the Assigning User Groups section.

Force Password Reset
Checking this box will force the user to reset their password the next time they login. If the Allowed Bad Password Attempts feature is enabled, and the user fails to login within allowed number of attempts, this option will automatically be enabled (checked).

Account Locked
Checking this box will lock the account from accessing the workgroup. This option is automatically enabled if the Allowed Bad Password Attempts feature is in use and the user fails to login within the allowed number of attempts. Unchecking this box will unlock the user account and allow the user to login.

Deleting a User

To delete a user from a workgroup:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Delete button to the left of the user account you wish to remove.

Deleting a user will not affect your existing records. However, before deleting a user it is recommended that you reassign any records currently

assigned to that user to TBD or some other user in the system. You can search for all records assigned to the user by using the Query function. And, you can use the Edit Results operation from the query results page to reassign all records at once, rather than individually editing each record.

If you attempt to delete a user who is still the assignee for records within your database, you will be prompted to select a new assignee for the records from a list of internal non-Restricted users in the system. Similarly, if you attempt to delete a user who is a state manager, you will be prompted to select a new state manager from a list of internal non-Restricted users in the system. If you attempt to delete a user who is selected to receive alert email notifications, is specified as criteria in any saved queries or charts, or is specified in any transitions, you will be prompted to either select a replacement user from a list of internal non-Restricted users in the system or delete the relevant alert settings, queries, charts and transitions.

Any actions performed by a user will be retained in the Record History even after a user is deleted.

Restoring a User

If a user account is still listed in the "Available Users" list (indicating it is still active in the User Management System and is granted access to the workgroup), you can restore a previously deleted user with the steps below. If you choose to restore the user, the settings in the user's preferences will be preserved as they were at the time the user was deleted from the workgroup's User Accounts section. A restored user which has Static or Floating selected as the license type will be only be added as a member of the Users group. A restored user which has Restricted selected as the license type will only be added as a member of the RestrictedUsers group. A user must manually be added to any other user groups after being restored.

To restore a user account:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Add User button
5. Depending on the User Management System (UMS) privileges granted to you by the UMS Administrator, you will either see the Add New User Account form or the Add Users to Workgroup page. If you the Add New User Account form is displayed, click on the Add Existing Users link to continue restoring a user account.
6. Users who were previously deleted from the User Accounts section will be denoted by a "*" in front of the User ID on the Available Users list. Click on the user account, then click on the Add button.
7. You will prompted that the user account you selected had been previously deleted. Click OK to restore the user account or click Cancel to abort the operation.

Editing a User

Whether the workgroup Administrator is allowed to edit the user details for an account depends on the User Management System (UMS) privileges granted to you by the UMS Administrator. You may only be able to edit the profile information for only the Admin account or only users that have access to a single workgroup or any user. For user accounts where you are not allowed to edit the profile information, the following message will be displayed when you attempt to edit the user account: "You do not have permission to edit the user details within this workgroup."

To edit a user account:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Edit button to the left of the user account to be modified
5. Click OK to save the changes to the account

Please note: It is not possible to edit a user account containing UTF-8 characters from the User Accounts section of a workgroup that is not configured to support UTF-8 characters. Check the Character Set option in General Preferences to see if your workgroup is configured to support UTF-8 characters. If the Character Set option is set to "UTF-8", the workgroup can support UTF-8 characters. If something other than UTF-8 is listed as the character set, the workgroup cannot support UTF-8 characters and you cannot edit the user profile information for any account containing UTF-8 characters via the User Accounts section.

Assigning User Groups

To add or remove a user to/from user groups:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link

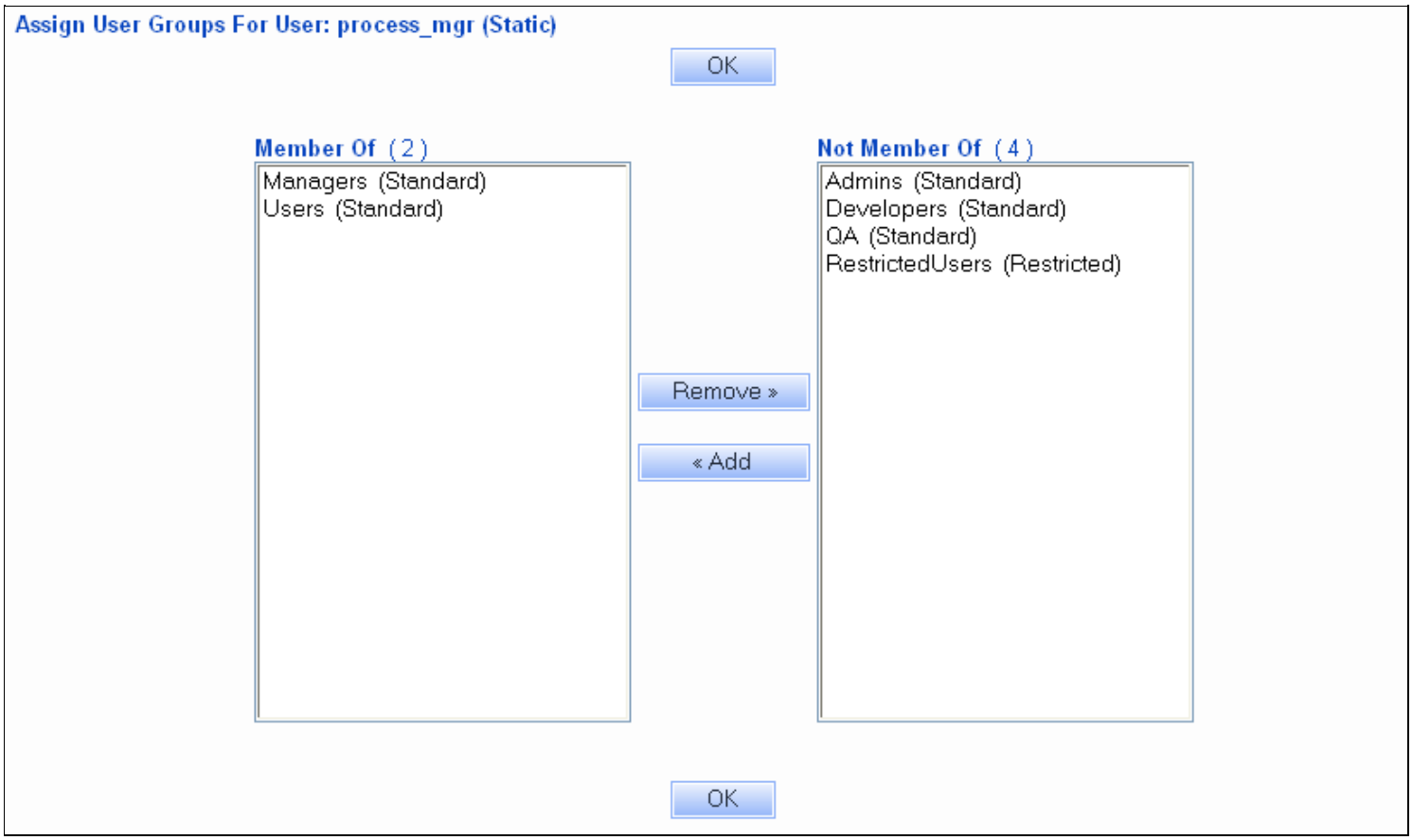
4. Click on the Groups button to the left of the user account
5. To add the user to a group, click on the desired group in the Not Member Of column, then click on the Add button. To remove the user from a group, click on the desired group in the Member Of column, then click on the Remove button.

   If there are any personal saved queries or charts created by the user being removed from the group and those saved queries/charts only have one project and form selected that is only visible to the user group, those saved queries/charts will be deleted.

   Removing a user from a group that is associated with a user pulldown field will cause the user to be marked as an obsolete item in that field.

6. Click OK to return to the User Accounts section.

As an alternative, you can assign multiple users to a group using the instructions in the User Accounts - Groups section.



Locking or Unlocking a User Account

In some cases, it may be necessary for the Administrator to lock a user account so that a user is not able to login to Tracker. This can be done by editing the user account, checking the box for the option "Account Locked" and clicking OK to save the change.

An account can be locked automatically based on the settings for the Allowed Bad Password Attempts option in the Login Page section. To unlock the account, edit the user account, uncheck the box for the option "Account Locked" and click OK to save the change.

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NetResults Tracker Help

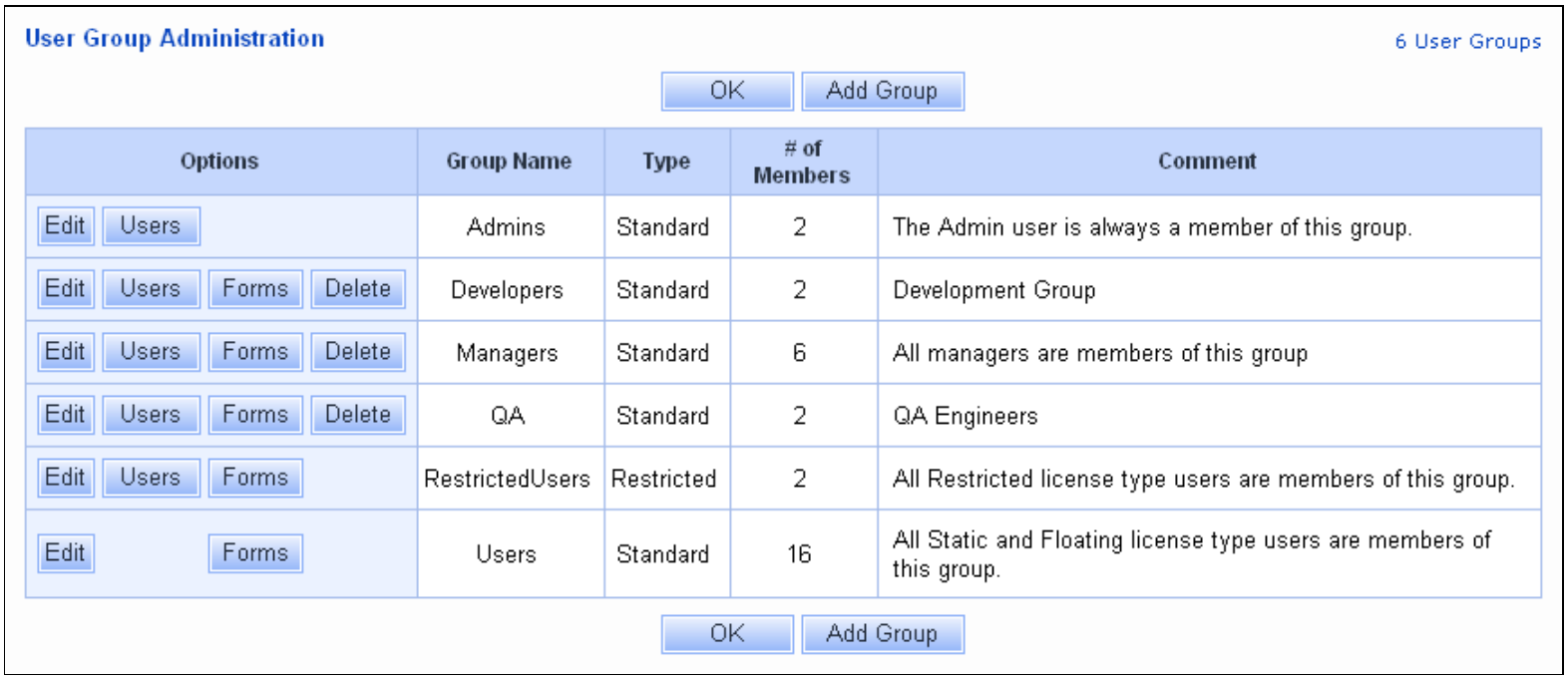
User Groups

Overview

A user group is a collection of zero or more users. Each group is assigned rights and privileges to the system, and all members of the group inherit those rights and privileges. For example, any user that is a member of the Admins group inherits the ability to access the Admin features of Tracker.

You can assign each user to one or more user groups, and the privileges of each user is the sum of all the privileges for all of the groups in which he or she is a member. There are some restrictions:

- All non-Restricted users are a member of the Users group
- All Restricted users are a member of the RestrictedUsers group
- The Admin user is always a member of the Admins group
- A Standard user group can contain Static or Floating users as members. Restricted users cannot be members of a Standard user group
- A Restricted user group can contain Restricted, Static or Floating users as members.



Adding a User Group

To add a new user group:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Manage Groups button
5. Click on the Add Group button
6. Enter a name for the user group in the Group ID field
7. Enter some information to describe the purpose of the user group in the Description field
8. In the pulldown, select the Type of user group you are creating.
    - Select Standard if the members of this user group will be Static or Floating users. Restricted users cannot be members of a Standard user group
    - Select Restricted if the members of this user group will be Restricted users. Non-Restricted users can be members of either Standard or Restricted user groups
9. In the Visible Forms field, select which forms and projects the user group will have access to. To select multiple forms, hold down the CTRL button on your keyboard while clicking on the desired forms. If "<None>" is selected, no project or form will be selected for the user group and visibility can configured at a later time. Review the Making Projects and Forms Visible to the User Group help section.

10. Click on the Add Group button
11. By default, some privileges will be enabled for the user group. If you are adding a Standard user group, the privileges enabled by default will be all of the privileges currently enabled for the Users group. If you are adding a Restricted user group, the privileges enabled by default will be all of the privileges currently enabled for the RestrictedUsers group.

    To enable other privileges, check the box next to the privilege. To disable a privilege, uncheck the box. Details of the privileges available for each type of user group can be found in the following sections:

    - Privileges for Standard User Groups
    - Privileges for Restricted User Groups

12. After enabling all of the desired privileges, click on the OK button to save the user group
13. Click OK to return to the User Group section or click on the Add Another Group button to create another user group

Making Projects and Forms Visible to the User Group

Giving the user group visibility to the Projects and Forms will ensure that the members of the new user group can utilize the privileges you enable for the group. This allows you to either add or remove the Project and Form visibility for the user group.

To add visibility of a form, or forms in a particular project:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Manage Groups button
5. Click on the Forms button to the left of the user group
6. Click on the Add Forms link next to the desired project
7. In the Make These Forms Available field, select the forms the user group will be able to access. To select multiple forms, hold down the CTRL button on your keyboard while clicking on the desired forms. Click on the All button to select all forms of this project.
8. Click OK to save the changes
9. Click OK to confirm the change
10. Click OK to return to the Set Visibility for User Group page

To remove visibility of a form, or forms in a particular project:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Manage Groups button
5. Click on the Forms button to the left of the user group

    To remove visibility of a single form:

    a. Click on the Remove link next to the desired form under the appropriate project.
    b. A warning will be displayed to note that by removing the user group's visibility to the form, all saved queries and charts belonging to this group and were created using this form, will be permanently removed. Click OK to proceed.
    c. Click OK to return to the Set Visibility for User Group page

    To remove visibility of one or more forms:

    a. Click on the Remove Forms link next to the desired project
    b. In the Make These Forms Unavailable field, select the forms the user group will be able to access. To select multiple forms, hold down the CTRL button on your keyboard while clicking on the desired forms. Click on the All button to select all forms of this project.
    c. Click OK to save the changes
    d. Click OK to confirm the change
    e. A warning will be displayed to note that by removing the user group's visibility to the form, all saved queries and charts belonging to this group and were created using this form, will be permanently removed. Click OK to proceed.
    f. Click OK to return to the Set Visibility for User Group page

Adding and removing visibility of projects and forms can also be done in the Projects section. For information about configuring user group visibility in the Projects section, review the Project Visibility Help section.

Editing a User Group

To edit a user group:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Manage Groups button
5. Click on the Edit button to the left of the user group you wish to modify
6. You can update the group name, description, or privileges. The "Type" property for each group cannot be edited. Click OK to save your changes.

Deleting a User Group

To delete a user group:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Manage Groups button
5. Click on the Delete button
6. Click OK to confirm the operation. If there are any saved queries or charts that have a project and form selected that is only visible to the group being deleted, those reports will be deleted. Any saved queries that have other projects and forms selected in addition to the combination that is only visible to the affected user group will be modified to remove that project and form from the query criteria.

   If there are any email rules where this user group is selected as a recipient, you will be prompted to either choose a user group to replace the user group being deleted or remove the user group from the email rules.

   If there are any transitions where this user group is selected in the properties, you will be prompted to either select a user group to replace the one being deleted or delete the transitions.

   If there are any alerts settings where this user group is selected as a recipient or in the "Show Alerts during Add/ Task" privilege list, you will be prompted to choose a user group to replace the user group being deleted or delete the alert settings.

7. Click OK to proceed. Click OK on the confirmation page.

Assigning Users to a User Group

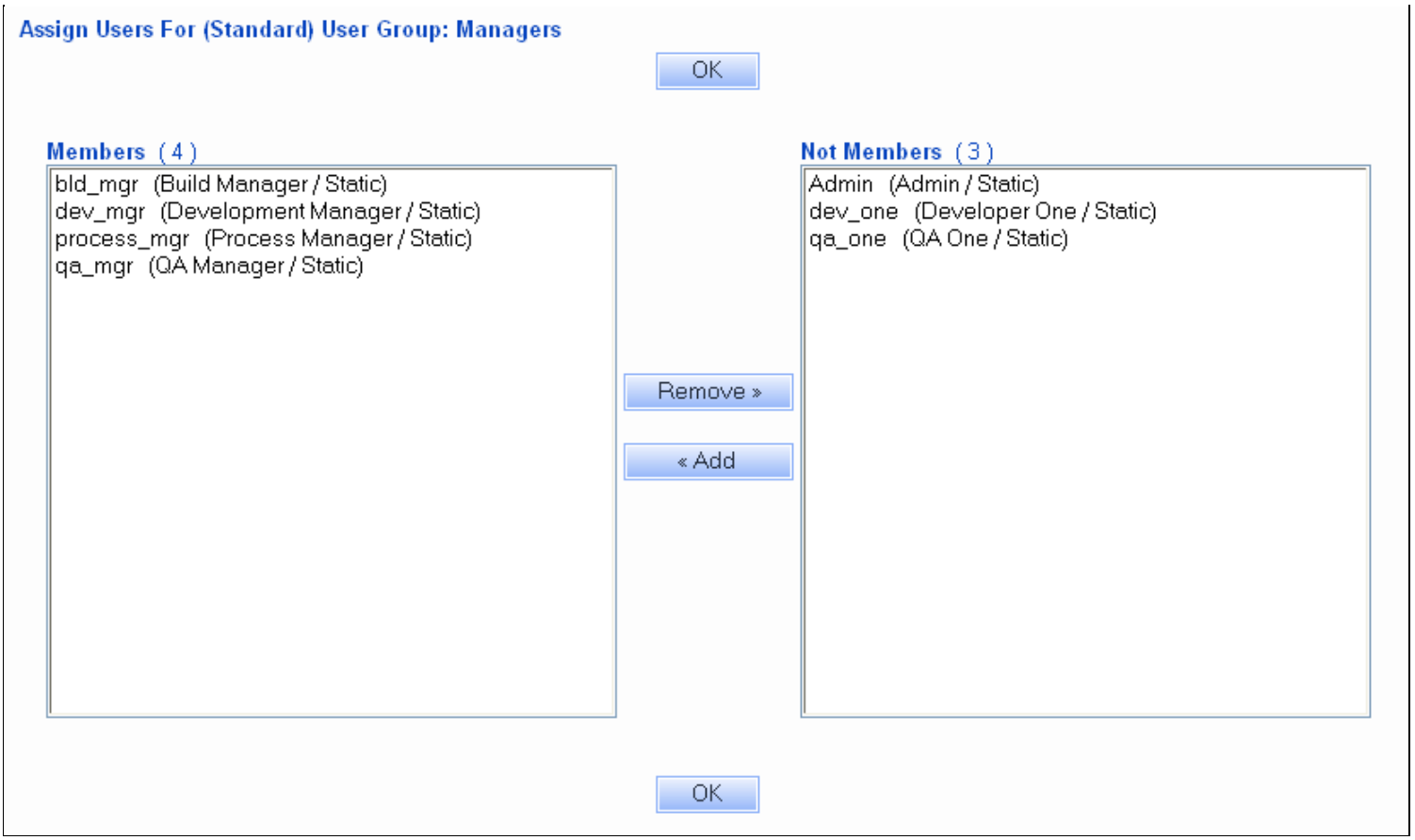
To assign users to a user group:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Edit Groups button
5. Click on the Users button
6. To add a user as a member of the user group, click on the User ID in the Not Members column, then click on the Add button. To remove a user as a member of the user group, click on the User ID in the Members column, then click on the Remove button. To select multiple users, hold down the CTRL button on your keyboard while clicking on the desired users.

   Removing a user from a group that is associated with a user pulldown field will cause the user to be marked as an obsolete item in that field.

   If there are any saved queries or charts created for the user being removed and the saved queries/charts only have project(s) and form(s) selected that are only visible to this user group, these queries/charts will be deleted. Any other saved queries that have other projects and forms selected in addition to the project(s) and form(s) only visible to the affected user group will be modified to remove the project(s) and form(s) that are only visible to the user group.

For a Standard user group, only non-Restricted users will be listed in the Not Members column as available users to be added to the user group. For a Restricted user group, Restricted and non-Restricted users will be listed in the Not Members column to be added to the user group.



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NetResults Tracker Help

Privileges

The following describes the privileges that may be assigned to Standard and Restricted user groups. To set the privileges for a user group:

1. Login to the workgroup as Admin
2. Click on the Admin icon in the button bar
3. Click on the User Accounts link
4. Click on the Manage Groups button
5. Click on the Edit button to the left of the user group for which the privileges will be modified
6. To grant a privilege to a user group, check the box to the left of the privilege. To deny a privilege, uncheck the box. Details of the available privileges for each user group type can be found below.
7. Click OK to save your changes

When assigning user group privileges, please note:

1. All non-Restricted users are members of the Users group. Therefore, if a privilege is granted to the Users group, all non-Restricted users will have the privilege. When a new non-Restricted user is added to the workgroup, this user inherits the privileges granted to the Users group. It is best to limit the privileges assigned to the Users group to be a minimal set of privileges, then create new user groups that provide additional privileges.
2. All Restricted users are members of the RestrictedUsers group. If a privilege is granted to the RestrictedUsers group, all Restricted users will have the privilege. When a new Restricted user is added to the workgroup, this user inherits the privileges granted to the RestrictedUsers group. It is best to limit the privileges assigned to the RestrictedUsers group to be a minimal set of privileges, then create new user groups that provide additional privileges.
3. Users can be members of one or more user groups, so the operations a user can perform are based on the privileges assigned to all of the user groups in which the user is a member.
4. Non-global privileges (privileges that are not marked with "*" are privileges that are applied per Project and Form. In other words, the set of privileges a user inherits from being a member of a particular user group determine what actions the user can perform for the Projects and Forms that are visible to that user group. Refer to the Form Visibility section to see what user groups have visibility to a combination of Project and Form.

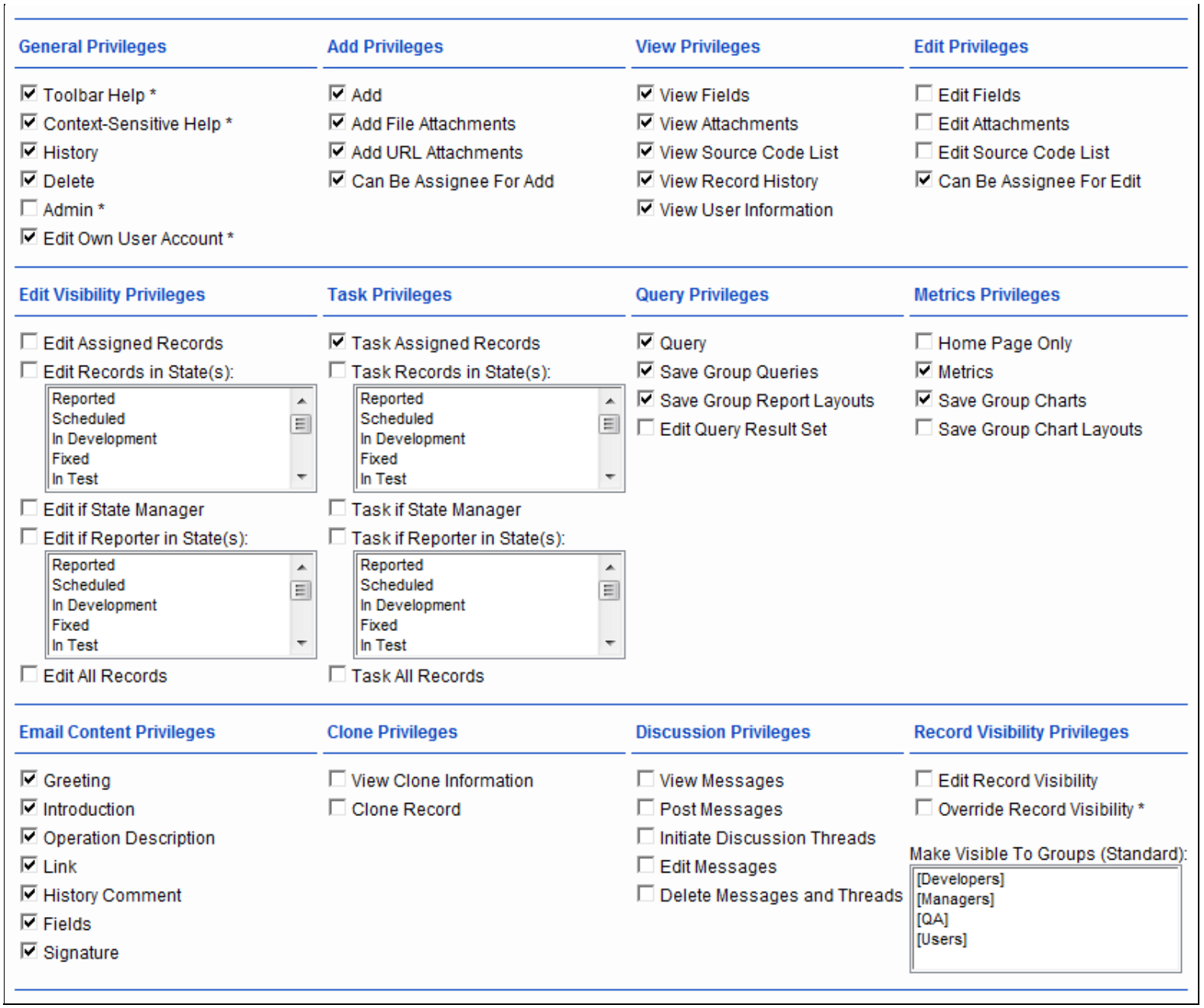
   For example, let's say a workgroup has 2 forms: a Product Development form for submitting issues to the Product Development Process and a Support form for submitting tickets through the Support Ticket Process. User One is a member of the user groups "Developers" and "Support". The Developers group has visibility to the Product Development form and has the privileges "View Fields" and "Task Assigned Records" enabled. The Support group has visibility to the Support form and has the privileges "Add", "View Fields" and "Task Assigned Records" enabled. Even though User One is a member of a user group with the "Add" privilege enabled, User One can only add issues using the Support form (and not the Product Development form).

   Report privileges (Query and Metrics) are non-global by default. An example to illustrate what this means: let's say a user is a member of the Developers and Managers user groups. The Developers group has the "Query" privilege as the only privilege enabled in the Query section. The Managers group has all of the privileges enabled in the Query section. In the Saved Queries pulldown, if there is a saved query with "[Developers]" at the end of the name (a group saved query for the Developers group), the user will only be able to use the operations "Run" or "Set as Default" for this saved query because the Developers group does not have "Save Group Queries" privilege enabled. If there is a saved query with "[Managers]" at the end of the name (a group saved query for the Managers group), the user will be able to use any operations ("Run", "Preview", "Edit", etc.). The behavior for group saved report layouts, group saved charts and group saved chart layouts is similar to the above.

   The option "Make All Report Privileges Global" is available in the General Preferences section if you wish to make report privileges global (such that they are applied to users that are members of a user group irrespective of the Projects and Forms visible to the user group).

5. Privileges marked with "*" in the privileges list below are global privileges. This indicates that the privilege is applied to users that are members of a user group irrespective of the Projects and Forms visible to the user group. In other words, a user that inherits a global privilege from one user group can make use of the privilege anywhere in Tracker.

Privileges for Standard User Groups



Standard user groups (all members are non-Restricted users) can be granted or denied the following privileges.

General Privileges

The following privileges are basic Tracker operations. An icon will appear in the top button bar for members of the user groups which have been granted one or more of the following general privileges:

Toolbar Help*

Members of groups with this privilege are allowed to access the help documentation by clicking on the Help icon in the Button bar. Clicking on the Help icon will open a browser window to display either the default Tracker Help guide page or the URL entered for the Custom Help Link for Standard Users option in the General Preferences section.

Context-Sensitive Help Link*

Members of groups with this privilege are allowed to access the help documentation by clicking on the context-sensitive "Help" links that appear in the upper right corner of the Status bar on each page in Tracker. Clicking on the "Help" link will open a browser window displaying the specific Help section which describes the page where the link was clicked.

History

Members of groups with this privilege are allowed to make queries into the record history database (audit trail documenting changes made by whom and when)

Delete
Members of groups with this privilege are allowed to delete records

Admin*
Members of groups with this privilege allowed to perform Admin functions

Edit Own User Account*
Members of groups with this privilege are allowed to make changes to the contact information listed in their user account. Users with this privilege can click on the Account Info link in the upper right corner of the Home Page to edit the information in their user profile

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Add Privileges

The following privileges are related to the Add operation. The members of the user group(s) that are granted any of the privileges below will have the Add icon displayed in the button bar:

Add
Members of groups with this privilege are allowed to add records

Add File Attachments
All members of groups with this privilege are allowed to add a File Attachment on the Add page (along with the original problem record). To subsequently modify attachments in a record (Edit, Delete, or Add additional attachments), a user must also be a member of a group with the Edit Attachments privilege.

Add URL Attachments
All members of groups with this privilege are allowed to add a URL Attachment on the Add page (along with the original problem record). To subsequently modify attachments in a record (Edit, Delete, or Add additional attachments), a user must also be a member of a group with the Edit Attachments privilege.

Can Be Assignee For Add
All members of groups with this privilege appear in the Assignee list when a record is added. This allows you to limit which users can be assigned to a newly added record.

View Privileges

The following privileges are related to the View operation. The members of the user group(s) that are granted any of the privileges below will have the View icon displayed in the button bar and in the reports displayed on the Home and Query pages:

View Fields
Members of groups with this privilege are allowed to view the fields within records. The fields which the members or groups are allowed to view are based on the Field Visibility settings on the View page for each user group.

View Attachments
Members of groups with this privilege are allowed to view attachments within records

View Source Code List
Members of groups with this privilege are allowed to view source code files associated with records when Source Code Control Integration is enabled

View Record History
Members of groups with this privilege are allowed to view record history (audit trail documenting changes made by whom and when)

View User Information
When the "Assigned To" or "Reported By" fields appear on the View Page or in reports on the Home or Query pages, all members of groups with this privilege will be able to click on the user's name to see the details in their user account (e.g. phone number, email address, company name).

Edit Privileges

The following privileges are related to the Edit operation. The members of the user group(s) that are granted any of the privileges below will have the Edit icon displayed in the button bar and in the Action column of the reports displayed on the Home and Query pages:

Edit Fields
Members of groups with this privilege are allowed to edit the fields within records. The fields which the members or groups are allowed to

edit are based on the Field Visibility settings on the Edit page for each user group. In order for this privilege to be meaningful, you must also enable at least one Edit Visibility privilege.

Edit Attachments
Members of groups with this privilege are allowed to edit the attachments within records. In order for this privilege to be meaningful, you must also enable at least one Edit Visibility privilege.

Edit Source Code List
Members of groups with this privilege are allowed to edit the source code files associated with records when Source Code Control Integration is enabled. In order for this privilege to be meaningful, you must also enable at least one Edit Visibility privilege.

Can Be Assignee for Edit
All members of groups with this privilege appear in the Assignee list when a record is edited. This allows you to limit which users can be assigned to a record that is being edited.

Edit Visibility Privileges

The following privileges are related to the Edit operation. The members of the user group(s) that are granted any of the privileges below will have the Edit icon displayed in the button bar and in the Action column of the reports displayed on the Home and Query pages:

Edit Assigned Records
Members of groups with this privilege have the ability to edit only those records where he/she is the current Assignee. In order for this privilege to be meaningful, you must also enable at least one privilege from the Edit section.

Edit Records in State(s):
Members of groups with this privilege have the ability to edit only those records where the current status is one of the state(s) selected for this privilege. Hold down the Ctrl button on your keyboard to select multiple states. In order for this privilege to be meaningful, you must also enable at least one privilege from the Edit section.

Edit if State Manager
Members of groups with this privilege have the ability to edit only those records where he/she is the state manager for the record's current state. A state manager for a record is based on the combination of the project and form selected for the record (see Form State Managers). In order for this privilege to be meaningful, you must also enable at least one privilege from the Edit section.

Edit if Reporter in State(s):
Members of groups with this privilege have the ability to edit only those records where he/she is the user listed in the Reported By field and the current state of the record is one of the state(s) selected for this privilege. In order for this privilege to be meaningful, you must also enable at least one privilege from the Edit section.

Edit All Records
Members of groups with this privilege enabled have the ability to edit any record irrespective of the record's current status or assignee. In order for this privilege to be meaningful, you must also enable at least one privilege from the Edit section.

Task Privileges

The members of the user group(s) that are granted any of the privilege below will have the Task icon displayed in the button bar and in the Action column of the reports displayed on the Home and Query pages.

Task Assigned Records
Members of groups with this privilege are allowed to perform the Task operation on records in which he / she is user selected in the Assigned To field.

Task Records in State(s):
Members of groups with this privilege are allowed to perform the Task operation on records in which the Status field is set to one of the states highlighted in the list below the privilege. Click on a state to select it. Multiple states can be selected by holding down the Ctrl button on your keyboard while clicking on the states you wish to select.

Task if State Manager
Members of groups with this privilege have the ability to Task only those records where he/she is the state manager for the record's current state. A state manager for a record is based on the combination of the project and form selected for the record (see Form State Managers).

Task if Reporter in State(s):
Members of groups with this privilege have the ability to Task only those records where he/she is the user listed in the Reported By field and the current state of the record is one of the state(s) selected for this privilege.

Task All Records
Members of groups with this privilege are allowed to perform the Task operation on all records irrespective of who is currently assigned to the record.

Query Privileges

The following privileges are related to the Query operation. The members of the user group(s) that are granted any of the privileges below will have the Query icon displayed in the button bar:

Query
Members of groups with this privilege are allowed to access the query page to generate reports. The fields which the members or groups are allowed to query are based on the Field Visibility settings on the Query / Home pages for each user group.

Save Group Queries
Members of groups with this privilege are allowed to add, edit, and delete group saved queries for any group in which they are a member. If this privilege is enabled, the "Query" privilege will also be enabled.

Save Group Report Layouts
Members of groups with this privilege are allowed to add, edit, and delete group saved report formats for any group in which they are a member. If this privilege is enabled, the "Query" privilege will also be enabled.

Edit Query Result Set
Members of groups with this privilege are allowed to perform a query and then perform an edit that affects all the records in the query result set. If a user is also a member of a group with Delete privilege, then they can perform a delete of all records matching a query. If this privilege is enabled, the "Query" privilege will also be enabled.

Metrics Privileges

The following privileges are related to the Metrics operation. The members of the user group(s) that are granted any of the privileges below will have the Metrics icon displayed in the button bar:

Home Page Only
Members of groups with this privilege are only allowed to run Metrics from their Home page. They will not have the Metrics icon in their toolbar. This can be used to limit users to running only those Metrics created for their User Group(s). This can not be selected if any of the other three options (above) are selected.

Metrics
Members of groups with this privilege are allowed to generate Metrics reports and will have the Metrics icon displayed in the top button bar

Save Group Charts
Members of groups with this privilege are allowed to add, edit, and delete group saved charts for any group in which they are a member. In order to use this function, the "Metrics" privilege mentioned above should also be enabled.

Save Group Chart Layouts
Members of groups with this privilege are allowed to add, edit, and delete group saved report formats for any groups in which they are a member. In order to use this function, the "Metrics" privilege mentioned above should also be enabled.

Email Content Privileges

The following privileges are associated with the content included in the email notification messages sent by Tracker. The privileges represent the components of an email notification message as configured in the Email Rules section.

Greeting
Members of groups with this privilege receive email notification messages with the Greeting section included

Introduction
Members of groups with this privilege receive email notification messages with the Introduction section included

Operation Description
Members of groups with this privilege receive email notification messages that contain the Operation Description section

Link
Members of groups with this privilege receive email notification messages that contain a hyperlink to the View page of the record listed in the email message

History Comment
Members of groups with this privilege receive email notification messages that include the history comment entered during the operation that triggered the notification message

Fields
Members of groups with this privilege receive email notification messages that include the record's fields that are visible to this user group via email

Signature
Members of groups with this privilege receive email notification messages with the Signature section included

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Record Visibility Privileges

The following privileges will only be displayed if Record Visibility is enabled. This is a feature which restricts a user's access to records based on the user groups in which he or she is a member:

Edit Record Visibility
When a record is added, it is made visible to all user groups in which the reporter is a member. Members with this privilege are allowed to explicitly select which other groups may view the record when it is added, and also change what groups may view the record at any later time. If a user does not have this privilege and Record Visibility is enabled, then when they add a new record the visibility of the record is based on the General Preferences settings related to Record Visibility. Typically you should grant this privilege to internal user groups (users who should be able to select which groups can see a record they are reporting) and exclude it from external user groups. User groups with this privilege will have the field Make Visible to These User Groups displayed on the Add, Edit and Edit Results pages if they also have privileges related to the Add, Edit and Edit Results operations.

Override Record Visibility*
All members of groups with this privilege are allowed to view all records. This is typically used to allow members of internal user group(s) to view records added by all other external user group(s) without having to be a member of every user group. Member of user groups that have this privilege and the Edit Record Visibility privilege can set the visibility of any record to any set of user groups (not just the user groups to which they belong).

Make Visible to Groups (Standard):
When a record is added by a member of this user group, it will automatically be made visible to other members of this group as well as members of any other Standard user group selected for this option. To select multiple user groups, hold down the Ctrl button on your keyboard while selecting user groups.

Clone Privileges

The following privileges are associated with the cloning (copy record) feature.

View Clone Information
Members of groups with this privilege will have the Clone Info section visible on the View page. The Clone Info section of the View page includes information about and links to the "parent" (record that the record being viewed was cloned from) as well as the "children" (clones created from the record being viewed), if any.

Clone Record
Members of groups with this privilege can perform the Clone operation from the View page. This privilege is not needed to perform a Task operation that has been configured to clone a record. If you wish to control when a record can be cloned (based on the Status of the record) and what fields must (or may) be modified in the clone (child record) immediately after the clone operation, then we recommend that you do not enable this privilege. Instead, you should configure (or add) some Transitions to perform the clone operation.

Import Privileges

The following privilege is associated with the pulldown item import feature.

Create Pulldown Items
Members of groups with this privilege will have the Import link available on the Manage Menu Items page for each pulldown field so that pulldown option menu items can be imported from a data file or can be added on the fly by the import tool when importing records data. If only importing pulldown items, the Admin privilege should also be enabled for the user group.

Alert Privileges (Enterprise Edition Only)

The following privileges are related to Alerts, a feature which allows alert notification messages to be sent when a record has not changed state during a certain period of time. These privileges will only be displayed if an Alerts License Key has been entered and the feature has been enabled in the General Preferences section:

View Alert Settings
Members of groups with this privilege are allowed to view the alert settings for a record. In addition, members of groups with this privilege will have the View icon present in the button bar and in the reports displayed on the Home and Query pages.

Edit Own Alert Settings
Members of groups with this privilege are allowed to modify the alert settings for records in which they are the current assignee. In addition, members of groups with this privilege will have the Edit icon present in the button bar and in the reports displayed on the Home and Query pages.

Edit Alert Settings
Members of groups with this privilege are allowed to modify the alert settings for a record. In addition, members of groups with this privilege will have the Edit icon present in the button bar and in the reports displayed on the Home and Query pages.

Discussion Privileges (Enterprise Edition Only)

The following privileges are related to Discussion, a feature which allows users to discuss various topics within a particular record. These privileges will only be displayed if a Discussion License Key has been entered and the feature has been enabled in the General Preferences section. The members of the user group(s) that are granted any of the privileges below will have the Discuss icon displayed in the button bar and other discussion icons in the reports displayed on the Home and Query pages:

View Messages
Members of groups with this privilege may view messages within discussion threads for any record the group can access.

Post Messages
Members of groups with this privilege may post a new message or reply to a message within the discussion threads for any record the group can access. Granting this privilege to a group automatically grants the group the "View Messages" privilege as well.

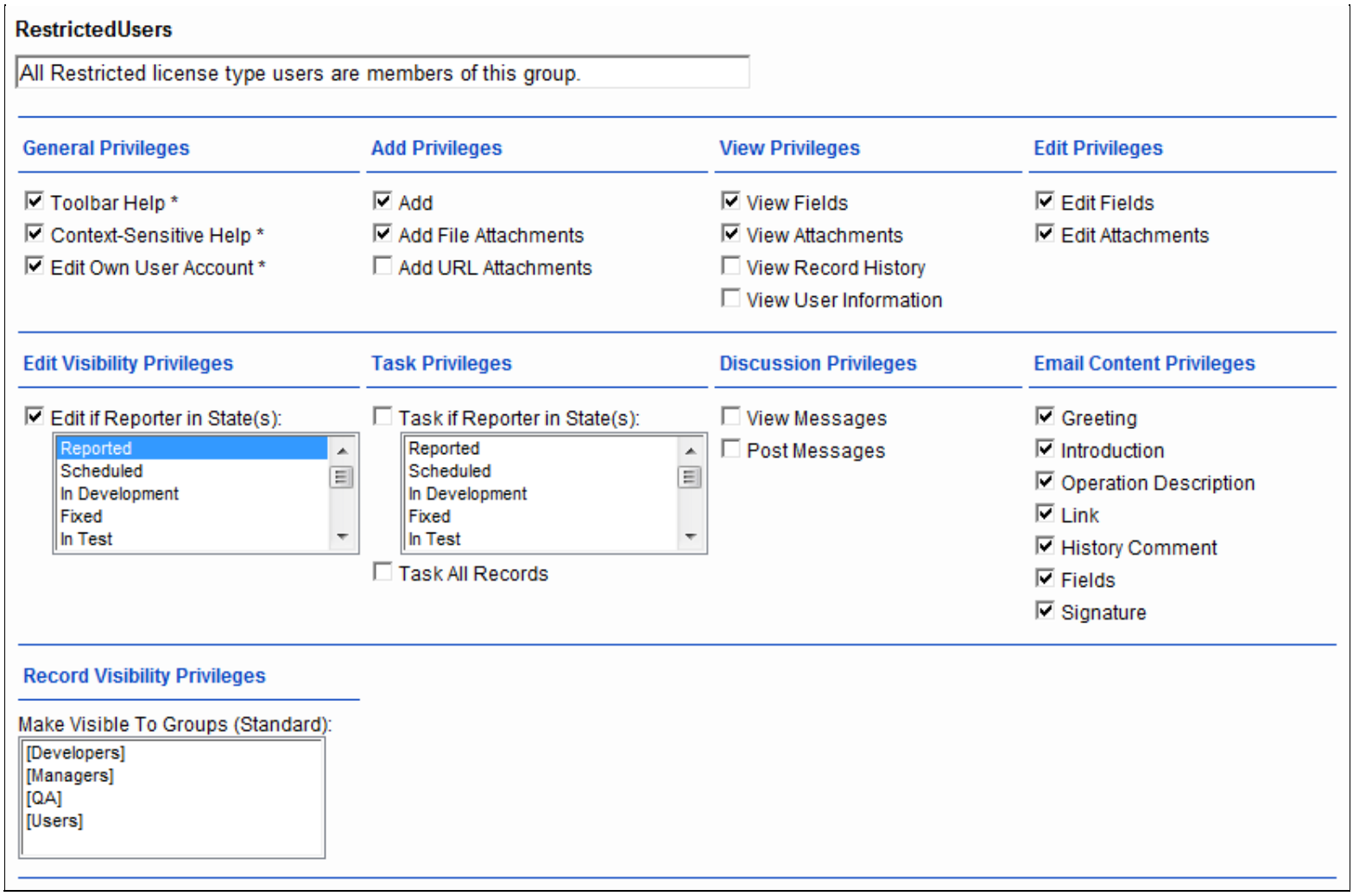
Initiate Discussion Threads
Members of groups with this privilege may create a new discussion thread for any record the group can access. Granting this privilege to a group automatically grants the group the "View Messages" and "Post Messages" privileges as well.

Edit Messages
Members of groups with this privilege may edit the messages within a discussion for any record the group can access. Granting this privilege to a group automatically grants the group the "View Messages" privilege as well.

Delete Messages and Threads
Members of groups with this privilege may delete the messages and / or threads within a discussion for any record the group can access. Granting this privilege to a group automatically grants the group the "View Messages" privilege as well.

The privileges above make reference to "any record the group can access". If record visibility is enabled within a workgroup, the user can only access a record or the discussion(s) within a record if the user is a member of a user group to which the record is visible.

Privileges for Restricted User Groups



The following are the set of privileges available for Restricted User Groups:

General Privileges

Toolbar Help*

Members of groups with this privilege are allowed to access the help documentation by clicking on the Help icon in the Button bar. Clicking on the Help icon will open a browser window to display either the default Tracker Help guide page or the URL entered for the Custom Help Link for Restricted Users option in the General Preferences section.

Context-Sensitive Help Link*

Members of groups with this privilege are allowed to access the help documentation by clicking on the context-sensitive "Help" links that appear in the upper right corner of the Status bar on each page in Tracker. Clicking on the "Help" link will open a browser window displaying the specific Help section which describes the page where the link was clicked.

Edit Own User Account*

Members of groups with this privilege are allowed to make changes to the contact information listed in their user account. Users with this privilege can click on the Account Info link in the upper right corner of the Home Page to edit the information in their user profile

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Add Privileges

These privileges are associated with creating records in Tracker. Members of user groups that are granted any of these Add privileges will have an Add icon displayed in the top button bar.

Add

Members of groups with this privilege are allowed to add records

Add Attachments via Add Page

Members of groups with this privilege are allowed to add an Attachment on the Add page (along with the original problem record)

View Privileges

These privileges are associated with viewing records in Tracker. Members of user groups that are granted any of these View privileges will have an View icon displayed in the top button bar and in the Action column of reports on the Home Page.

View Fields

Members of groups with this privilege are allowed to view the fields within records. The fields which the members of groups are allowed to view are based on the Field Visibility settings on the View page for each user group.

View Attachments

Members of groups with this privilege are allowed to view attachments within records

View Record History

Members of groups with this privilege are allowed to view record history (audit trail documenting changes made by whom and when)

View User Information

When the "Assigned To" or "Reported By" fields appear on the View Page or in reports on the Home page, all members of groups with this privilege will be able to click on the user's name to see the details in their user account (e.g. phone number, email address, company name)

Edit Privileges

The following privileges are related to the Edit operation. The members of the user group(s) that are granted the privilege below will have the Edit icon displayed in the button bar and in the Action column of the reports displayed on the Home and Query pages:

Edit Fields

Members of groups with this privilege are allowed to edit the fields within records. The fields which the members or groups are allowed to edit are based on the Field Visibility settings on the Edit page for each user group.

Edit Attachments

Members of groups with this privilege are allowed to edit the attachments within records.

Edit Visibility Privileges

The following privileges are related to the Edit operation. The members of the user group(s) that are granted the privilege below will have the Edit icon displayed in the button bar and in the Action column of the reports displayed on the Home and Query pages:

Edit if Reporter in State(s):

Members of groups with this privilege have the ability to edit only those records where he/she is selected in the Reported By field and the current status is one of the state(s) selected for this privilege. Hold down the Ctrl button on your keyboard to select multiple states.

Task Privileges

The following privilege is associated with performing the Task operation on records. Members of user groups with this privilege will have a Task icon displayed in the top button bar and in the Action column of reports on the Home Page.

Task if Reporter in State(s):

Members of groups with this privilege have the ability to Task only those records where he/she is the user listed in the Reported By field and the current state of the record is one of the state(s) selected for this privilege. Hold down the Ctrl button on your keyboard to select multiple states.

Task All Records

Members of groups with this privilege are allowed to perform the Task operation on any record to which they have access.

Discussion Privileges

The following privileges are related to Discussion, a feature which allows users to discuss various topics within a particular record. These privileges will only be displayed if a Discussion License Key has been entered and the feature has been enabled in the General Preferences section. The members of the user group(s) that are granted any of the privileges below will have the Discuss icon displayed in the button bar and other discussion icons in the reports displayed on the Home and Query pages:

View Messages

Members of groups with this privilege may view messages within discussion threads for any record the group can access.

Post Messages
Members of groups with this privilege may post a new message or reply to a message within the discussion threads for any record the group can access. Granting this privilege to a group automatically grants the group the "View Messages" privilege as well.

Email Content

The following privileges are associated with the content included in the email notification messages sent by Tracker. The privileges represent the components of an email notification message as configured in the Email Rules section.

Greeting
Members of groups with this privilege receive email notification messages with the Greeting section included

Introduction
Members of groups with this privilege receive email notification messages with the Introduction section included

Operation Description
Members of groups with this privilege receive email notification messages that contain the Operation Description section

Link
Members of groups with this privilege receive email notification messages that contain a hyperlink to the View page of the record listed in the email message

History Comment
Members of groups with this privilege receive email notification messages that include the history comment entered during the operation that triggered the notification message

Fields
Members of groups with this privilege receive email notification messages that include the record's fields that are visible to this user group via email

Signature
Members of groups with this privilege receive email notification messages with the Signature section included

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Record Visibility Privileges

The privileges in this section are only meaningful if Record Visibility is enabled. This is a feature which restricts the records a standard user is allowed to see based on user group membership.

Make Visible To Groups (Standard):
When a record is added by a member of this user group, it will be made visible to any standard user groups selected for this privilege. To select multiple user groups, hold down the Ctrl button on your keyboard while selecting user groups.

Using Can Be Assignee for Add/Edit Privileges to Replace User Type

User Type is a user account property that has been deprecated and is planned to be removed in a future release. This property determines whether a user can be listed as a possible selection in the Assigned To list on the Add and Edit pages. This property is only meaningful if the Enable User Type Property option is enabled in User Management System (UMS). It is recommended that you discontinue use of this property since it will be removed in a future release. Instead, the privileges Can Be Assignee for Add and Can Be Assignee for Edit can be used to limit which users are available in the Assigned To field on the Add and Edit pages.

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NetResults Tracker Help

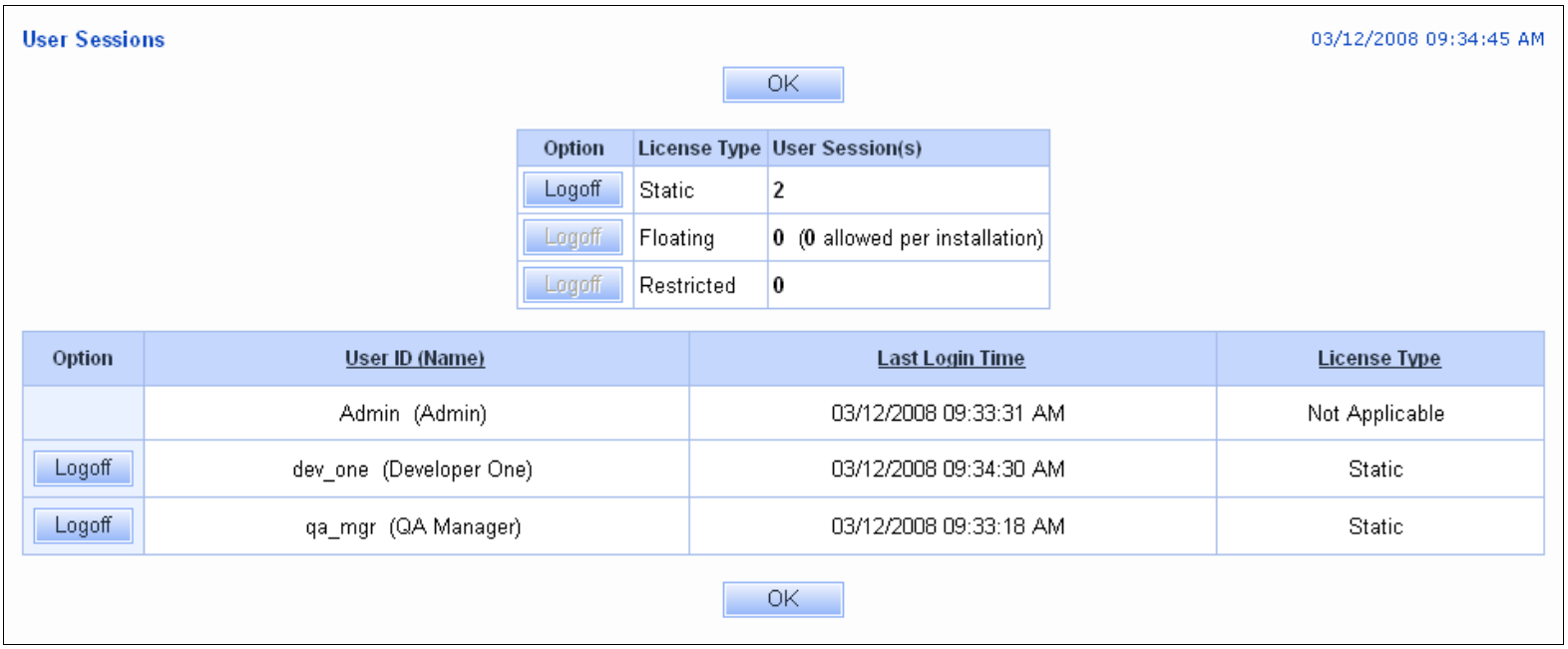
User Sessions

Overview

A current snapshot of all user sessions can be found in the User Sessions section in the Admin page. Each user session begins when a user logs in and ends when they click the Logoff icon (or when you close their session, see below). A tally of user sessions by license type as well as total sessions allowed by each license key appears at the top of the page. Please note that the Admin user session is not counted against the license limit.

To see a list of current User Sessions:

1. Login to the workgroup as Admin.
2. Click on the Admin icon.
3. Click on the User Sessions link.
4. By default the list of sessions will be sorted by User ID (ascending). To change the sort order, click on the User ID, Last Login Time, or License Type column label. Clicking a column label a second time will change sort order (ascending to descending or vice versa). When you click on the License Type column, it will use User ID as a secondary sort criterion (sort by User ID ascending for those users with the same License Type).
5. To end a single user session, click on the Logoff button next to the listed user, then click OK on the popup to confirm. Or, to end all sessions for users of a particular license type, click the Logoff button to the left of the license type (listed at the top of the page) you wish to logoff. More information about closing user sessions can be found below.



User Sessions 03/12/2008 09:34:45 AM

OK

Option	License Type	User Session(s)
Logoff	Static	2
Logoff	Floating	0 (0 allowed per installation)
Logoff	Restricted	0

Option	User ID (Name)	Last Login Time	License Type
	Admin (Admin)	03/12/2008 09:33:31 AM	Not Applicable
Logoff	dev_one (Developer One)	03/12/2008 09:34:30 AM	Static
Logoff	qa_mgr (QA Manager)	03/12/2008 09:33:18 AM	Static

OK

Closing User Sessions

A listing of each individual user session is displayed, which includes the User ID and last login time. The license type is listed for each user session. A Logoff button appears for each user session except Admin. You can terminate an individual user session by clicking the Logoff button next to the User ID. To end user sessions by the a particular license type, click the Logoff button next to the license type tally, at the top of the page. This is useful in cases where the limit of active floating user sessions has been reached causing another user to be unable to login. Also, this Logoff functionality can be used to clear out all user sessions when Administrative tasks need to be performed on the database (database backup, making large changes, etc.). When logging off all users of a particular license type, the user ending the sessions will not be logged off even if his/her user account is of the same type being logged off.

Note: A user may only terminate their session by clicking the Logoff icon. Simply exiting their browser will not terminate their session. If a user does exit their browser (or shuts down their machine) without clicking the Logoff icon, they can end their previous session by attempting to login again. At that point they will be offered an opportunity to terminate their previous session. By answering YES to terminating their previous session (and then clicking the Logoff icon at some point after successfully logging in this time), they can remove any "stale" sessions they have created without your assistance. Similarly, if a user browses off to another site without clicking the Logoff icon to end their Tracker session, they can click the Back button on their browser several times to return to the last Tracker page they were on and then click the Logoff icon. Or, they can simply browse back to the login page, login again (in this case no message about a previous session will be displayed as cookie information in their browser lets us know which session they were previously using), then click the Logoff icon on the Home page when it is displayed. Tracker does not allow more than one active session per user account (irrespective of license type), so if a user logs in and then logs off they can always be certain that they have not left any active sessions around. The information above is explained to your users in the Logging In section of the User's Guide, though you may wish to provide an explanation that is more specific to your Tracker configuration.

Session Timeout

A session timeout is configured by default in all Tracker workgroups. This timeout will end a user's session after a certain length of inactivity time (time where the user has not performed any actions in Tracker). The inactivity time is based on last transaction between the user's browser and the web server. A user typing information into the Add page could be counted as inactivity because the browser does not communicate with the web server until the user clicks on the

"Add" button to save the information entered on the form.

The session timeout can be adjusted for each workgroup through your web server settings in Internet Information Server. Because the way a user's inactivity is determined does not account for some cases where the user is actively using Tracker, it is recommended that you do not set the session timeout to fewer than 120 minutes.

To adjust the session timeout in IIS 6.0:

1. Launch Internet Services Manager for IIS
2. Under the web site where you have installed Tracker, locate the virtual directory of the workgroup you wish to modify
3. Right click on the virtual directory and select Properties
4. In the Virtual Directory tab, click on the Configuration button
5. Click on the App Options tab. You will find the Session Timeout option under Enable Session State. Specify a value for Session Timeout in minutes. The default is 720 minutes. It is recommended that you do not set this value to fewer than 120 minutes.
6. Click OK to save your selection.
7. Restart IIS so this new setting will take effect.

To adjust the session timeout in IIS 7.0:

1. Launch Internet Services Manager for IIS
2. In the left pane, browse to the web site where you have installed Tracker, locate the virtual directory of the workgroup you wish to modify and click on it
3. In the middle pane, click on Features View at the bottom. Locate the ASP feature, right click on it and select Open Feature.
4. Under Services > Session Properties, locate the Time-out property. Click in the right column for that property and change the length of time, which is displayed in hours:minutes:seconds format. The default is 12:00:00 (12 hours). Specify a value for session timeout. It is recommended that you do not set this value to fewer than 2 hours (02:00:00).
5. Click Apply in the Action pane on the far right to save your selection. A confirmation note will say the changes have been successfully saved.
6. Restart IIS so this new setting will take effect.

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NetResults Tracker Help

General Preferences

General Preferences are workgroup-wide options that can be set by a Tracker Administrator. To modify the General Preferences:

1. Login to the workgroup as Admin or a user that is a member of the Admin user group
2. Click on the Admin icon
3. Click on the General Preferences link
4. Make any desired changes and click OK to save them

General Options

- Page Title
  Enter the text that should be displayed in the browser's page title. By default, the text "<Template Name> Tracker (<workgroup>)" will be displayed. <Template Name> is the name of the template selected for the workgroup when it was created (e.g. Product Development, Web Site Development, Help, Support, Knowledge Base, etc.). <workgroup> is a variable to represent the name of the workgroup (e.g. pteval, ptswdev1, ptdev, ptweb, etc.). Up to 80 characters can be entered.

- Required Field Highlights
  Check the box(es) for each method you wish to use to highlight required fields on the Add Page, Submit Page and during the Task operation. Checking the box for "Color" will highlight the required field's label in the color selected for the Required Field Label Text option in the Color Preferences section. Checking the box for "Bold" will highlight the required field's label in bold type. Checking the box for "Character" will append a character at the end of the required field's label. A text box to enter a character will be displayed when the box for the "Character" option is checked.

  Checking any of the boxes for this option will display the following text at the top of the Add and/or during the Task operation when required fields are present: "Fields marked with *, Bold and Color are required fields." Only the methods selected will be mentioned in this text. For example, if only the methods "Color" and "Character" are selected, the displayed text will be "Fields marked with <character selected> and Color are required fields." A sample with all 3 methods in use is available in the Add Page sample in the Fields section.

- Display Order Button on Button Bar
  The order button displays the order form in a separate browser window. If you wish to remove this button from the button bar, select "No".

- Remove Records from Database on "Delete" Operation
  This option determines whether a delete operation merely marks a record and associated records as deleted (sets "Deleted" field to "Yes", also known as a "soft delete") or executes a true delete and permanently removes these records from the database (also known as a "hard delete"). The default setting for this option is "No".

- Enable Session Locking with Administrator Level Override
  A record edit locking feature is activated when "Yes" is selected for this option. Users who begin editing, deleting or task operations on a record will lock access to that record until moving to another operation. Record locks can be overridden by users with Administrator level privileges. When an override occurs, the Administrator is notified and asked to confirm the override. The user whose lock has been released, will receive a notification message that their operation was overridden and could not be completed. The default setting for this is "No" (i.e. Session Record Locking is disabled).

- Include "State Manager" in the Assignee List on Add Operation
  Selecting "Yes" for this preference will allow the value "State Manager" to be displayed in the "Assigned To" field when this field is visible on the Add page. Selecting "State Manager" in the "Assigned To" field on the Add page will assign the newly created record to the user listed as the State Manager in the State Manager section for the combination of Form and Project set in the new record. Please review the Workflows section for an explanation of how State Managers are used as a means of automatic assignment.

- Make All Report Privileges Global
  Selecting "Yes" for this preference will allow all privileges related to reports (Query and Metrics) to be applied globally. This indicates that any user group that has Query or Metrics privileges will have the privileges applied irrespective of the Projects

and Forms that are visible to the user group. Selecting "No" indicates that the user groups will only have the privileges applied to the Projects and Forms which are visible to the user group. For more detail on what selecting "No" for this option indicates, please review the information about non-global privileges in the User Group Privileges Help section.

- User Name Format for Reports and Email Messages (Home, View, Query and History reports)
  This option determines what will be displayed to identify a user in the Reported By, Assigned To and user pulldown fields in the Home, View, Query, History, and Email Notification Messages. The selection in this option will also affect the sorting of reports that use the Reported By or Assigned To fields in the layout.
  - When "User ID" is selected, the information entered in the User ID field of the user's profile will be displayed and used for sorting in the reports.
  - When "Full Name" is selected, the information entered in the First and Last Name of the user's profile will be displayed. The name will be sorted alphabetically by first name in the reports.
  - When "First Name" is selected, the information entered in the First Name field of the user's profile is displayed and used for sorting in the reports.
  - When "Last Name" is selected, the information entered in the Last Name field of the user's profile is displayed and used for sorting in the reports.

- Report Sort Order (Query and Metrics)
  This option determines how reports will be sorted in the pulldowns which display the list of available reports on the Home, Query, Metrics and Preferences pages. Selecting "Report Name, then User Group" will sort the reports by name first, then by the user group to which the report is accessible. Selecting "User Group, then Report Name" will sort the reports by the user group to which each report is accessible, then by report name (e.g. all reports with "[Users]" listed after the name will be grouped together in the list as the primary sort order).

- Maximum Users (User Accounts Page)
  This option determines how many users will be displayed per page in the User Accounts section. 50 is the default; a value from 5 to 100 can be entered.

- Maximum Menu Items (Manage Pulldown Page)
  This option determines how many pulldown option menu items will be displayed per page in the Manage Menu Items page for a pulldown. 50 is the default; a value from 5 to 100 can be entered.

- Character Set
  This value is set when the workgroup is created through the Workgroup Management System and determines the languages that the workgroup can support. For information about character set including which languages are supported by the one selected for the workgroup, please review the section Adding a Workgroup.

Add-On Features

The options is the Add-On Features section are only available when the corresponding license key has been entered into the Tracker License Manager.

- Enable Alerts
  Selecting Yes for this option allows you to use the Alerts feature. The Alerts feature allows you to configure Tracker to send an alert message at a specific date and time or when a record's state has not changed within a certain period of time. Please review the Alerts section for more details about using this feature. This option will not be displayed unless you are using Tracker Enterprise Edition and you have entered a valid Alerts license key in the License Manager (or you are using a trial version).

- Enable Discussion
  Selecting Yes for this option allows you to use the Discussion feature. Discussion allows various threads to be initiated within each record for users and groups to view and post messages. Please review the Discussion section for more details about using this feature. This option will not be displayed unless you are using Tracker Enterprise Edition and you have entered a valid Discussion license key in the License Manager (or you are using a trial version).

Enable API
Selecting Yes for this option allows you to use the Add API feature. This option will not be displayed unless you have entered a valid API license key in the License Manager. This feature must be installed using its own installation setup program separate from the Tracker installation.

- API User
The user selected will determine the settings used when a record is created via the Add API. These settings include the privileges and field visibility granted to this user based on group membership. This option will not be displayed unless you have entered a valid API license key in the License Manager.

- Enable Submit via Web for Unregistered Users
Selecting Yes for this option allows you to use the Submit Page. The Submit Page allows end users to add records to this workgroup without a user account. Please review the Submit Page section for more details about using this feature. This option will not be displayed unless you have entered a valid Submit license key in the License Manager (or you are using a trial version).

- Enable Submit via Email
Selecting Yes for this option allows you to use the Submit via Email feature. Please review the Submit via Email Overview for more details about using this feature. This option will not be displayed unless you have entered a valid Email license key in the License Manager.

- Enable Knowledge Base
Selecting Yes for this option allows you to use the Knowledge Base feature. This feature allows you to publish articles that can be searched by your end users to find answers to common issues or questions. Please review the Knowledge Base Overview section for more details about using this feature. You must enter a valid Knowledge Base license key in the License Manager (or you are using a trial version).

Home Page Options

The options available in this section are related to items displayed on the Home Page.

- Include "Default [Users]" in the Home Page Reports
Selecting "Yes" for this option will display the "Default [Users]" saved query for selection in the saved query pulldowns on the Home Page. Selecting "No" will exclude this saved query from being displayed in the saved query pulldowns on the Home Page. Default [Users] is a saved query that is included in a workgroup by default and is designed to display all records in the workgroup.

- Home Page Message for Restricted Users
Enter text to be displayed on the Home Page of all Restricted Users. This can be used to enter instructions or announcements. Up to 1000 characters can be entered and the text is treated as plain text. The Home Page image in the Home Page section of the User Guide shows an example of a Home Page message stating "Tracker will be upgraded over the weekend..." You can utilize format tags such as bold, *italics* and others as part of the instruction message. A complete list of available tags can be found here.

- Home Page Message for Standard Users
Enter text to be displayed on the Home Page of all non-Restricted users. This can be used to enter instructions or announcements. Up to 1000 characters can be entered and the text is treated as plain text. The Home Page image in the Home Page section of the User Guide shows an example of a Home Page message stating "Tracker will be upgraded over the weekend..." You can utilize format tags such as bold, *italics* and others as part of the instruction message. A complete list of available tags can be found here.

Help Options

The following options are related to use of the Help and Task icons in a user's Button Bar. For the Help icon, you can customize the link such that standard or restricted users will be directed to the URL you desire when clicking on the Help icon in Tracker. This can be used to direct users to your own custom Help documentation or to an intranet site or other URL that provides information to

guide their use of Tracker. For the Task icon, you can customize the tool tip that is displayed when the mouse is hovered over the Task icon. This can be used to explain to your users the purpose of the Task operation (e.g. "Update Record", "Mark Issue Complete", etc.).

- Custom Help Link for Restricted Users
  Enter the URL for the page that should be displayed when a Restricted user clicks on the Help icon in the Button Bar. The URL must start with "http://" or "https://". Leaving this option blank will display the default Tracker Help Guide page when clicking on the Help icon.

- Custom Help Link for Standard Users
  Enter the URL for the page that should be displayed when a Static or Floating user clicks on the Help icon in the Button Bar. The URL must start with "http://" or "https://". Leaving this option blank will display the default Tracker Help Guide page when clicking on the Help icon. Note: This setting does not apply to the "Admin" user account. The Admin user account will be directed to the default Tracker Help Guide page when clicking on the Help icon in the Button Bar.

- Task Icon Tool Tip for Restricted Users
  Enter the text that should be displayed as a tool tip when a Restricted user hovers their mouse over the Task icon in the Button Bar. Up to 255 characters can be entered. "Mark Task Complete" will be entered for this option by default.

- Task Icon Tool Tip for Standard Users
  Enter the text that should be displayed as a tool tip when a Static or Floating user hovers their mouse over the Task icon in the Button Bar. Up to 255 characters can be entered. "Mark Task Complete" will be entered for this option by default.

- Display Field Help for Restricted Users
  Select an option with respect to displaying the field help text for Restricted Users. Field Help is text that is customized per field to provide additional information about the purpose of the field on the form. To customize the Field Help text, configure the text in the "Help Description" property of the field in the Fields section.
  - Selecting "Yes" will display the field help icon on the Add, Edit or Task pages, to the left of each field that has Field Help text configured in the "Help Description" property in the Fields section. The Add Page image in the Adding Records section of the User Guide shows an example of a Help Field icons appearing next to the fields.
  - Selecting "No" will prevent any field help icons from being displayed on the Add, Edit or Task Pages.
  - Selecting "Above Each Field" will display the field help text configured in the "Help Description" property for a field above the field on the Add, Edit and Task Pages. The Task Fields image in the Marking a Task Complete section of the User Guide shows an example of the Field Help appearing above the field.
  - Selecting "Below Each Field" will display the field help text configured in the "Help Description" property for a field below the field on the Add, Edit and Task Pages.

- Display Field Help for Standard Users
  Select an option with respect to displaying the field help text for Standard Users. Field Help is text that is customized per field to provide additional information about the purpose of the field on the form. To customize the Field Help text, configure the text in the "Help Description" property of the field in the Fields section.
  - Selecting "Yes" will display the field help icon on the Add, Edit or Task pages, to the left of each field that has Field Help text configured in the "Help Description" property in the Fields section. The Add Page image in the Adding Records section of the User Guide shows an example of a Help Field icons appearing next to the fields.
  - Selecting "No" will prevent any field help icons from being displayed on the Add, Edit or Task Pages.
  - Selecting "Above Each Field" will display the field help text configured in the "Help Description" property for a field above the field on the Add, Edit and Task Pages. The Task Fields image in the Marking a Task Complete section of the User Guide shows an example of the Field Help appearing above the field.
  - Selecting "Below Each Field" will display the field help text configured in the "Help Description" property for a field below the field on the Add, Edit and Task Pages.

- Display Field Help in View Page for Restricted Users
  Selecting "Yes" will display the field help icon on the View Page to the left of each field that has Field Help text configured in the "Help Description" property in the Fields section. The field help icon will only appear for Restricted users if enabled. The View Page image in the Viewing Records section of the User Guide shows an example of a Help Field icons appearing next to the fields.

- Display Field Help in View Page for Standard Users
  Selecting "Yes" will display the field help icon on the View Page to the left of each field that has Field Help text

configured in the "Help Description" property in the Fields section. The field help icon will only appear for Standard users if enabled. The View Page image in the Viewing Records section of the User Guide shows an example of a Help Field icons appearing next to the fields.

- Required Selection of New State Prompt
  Enter the value that should be displayed as the default option when the Status field is set as a required task field (this is done by setting "New State" to Prompt with State Group in the Properties of Transitions section). By default, "Please Select a Value" will be displayed.

- Required Selection of New Assignee Prompt
  Enter the value that should be displayed as the default option when the Assigned To field is set as a required task field (this is done by setting "New Assignee" to Prompt with User Group in the Properties of Transitions section). By default, "Please Select a Value" will be displayed.

Unregistered User Options

The following options are related to the use of the Submit via Web for Unregistered Users and Submit via Email features. Please review the Submit Page and / or Submit via Email Help sections for details about these features.

- Date Format
  Select a format for the Date from the pulldown menu. The format that you choose will be used to display fields that contain date information on the Submit Page and outgoing email notification messages sent to the users of the Submit Page and Submit via Email features.

- Time Format
  Select a format for the time from the pulldown menu. The format that you choose will be used to display all fields that contain time information on the Submit Page and outgoing email notification messages to the users of the Submit Page and Submit via Email features. Choosing 12 hour for the time format will display times followed by AM or PM to denote the appropriate 12 hour period, such as 02:05:38 PM. Choosing 24 hour as the time format will display times without the AM or PM designation, such as 14:05:38.

- Time Zone
  Select a time zone from the pulldown menu. The time zone that you choose will be used to display all fields that contain time information on the Submit Page and outgoing email notification messages to the users of the Submit Page and Submit via Email features. For a list of available time zones in your operating system, please to the following section:
  Windows Time Zones

- Adjust To Daylight Saving Time (DST)
  Check this box if you wish to have Tracker adjust time information to account for daylight saving time. If you selected a time zone in which daylight saving time is observed, we recommend that you enable this option.

- User Groups
  This option determines which Projects and Forms are visible to Unregistered Users on the Submit Page. Any Projects and Forms visible to the selected user groups will be available on the Submit Page. To see which user groups have visibility to a Project (and its respective form(s)), check the Project's Form Visibility section.

  This option also determines which set of privileges will be used to send email notifications to the users submitting issues via the Submit Page or Submit via Email features. The group(s) selected will determine what fields and other content (greeting, introduction, link, history comment, etc.) are included in the outgoing email notification messages. For more information on how fields are included in email notification messages for each user group, please review the User Groups - Field Visibility section. For more information on how other email content is included in email notification messages for each user group, please review the Privileges - Email Content section.

  Select one or more user groups for this option. To select multiple user groups, hold down the Ctrl button on your keyboard as you click on the user groups.

- Send Email Notifications On
  Select the actions that will result in email notifications being sent to users of the Submit Page and Submit via Email features. Selecting "Submit via Web" will send email notification messages to users who submit issues via the Submit Page. Selecting "Submit via Email" will send email notification messages to users who submit issues via the Submit via Email

feature. Selecting "Updates After Submit" will send email notification messages for any operation after an issue has been added (e.g. edited, change of status, change of assignment, etc.) to the email address captured in the "Unregistered User Email" field. Selecting <None> will not send any email notification messages to users of the Submit Page or Submit via Email features or to the email addresses in the Unregistered User Email field. For more information on actions after adding an issue that will result in email notifications, please review the Email Rules section.

Record Visibility Options

Record Visibility allows a Tracker administrator to set up an environment where access to records is restricted on a user group basis. Disabling record visibility can have the benefit of faster performance since enforcing record visibility restrictions requires more complex database queries. Please review the Configuring Record Visibility section below for more information about setting up this feature.

Use the options below to enable and configure Record Visibility settings. Then, set the related user group privileges in the User Accounts section for internal user groups. If there are already records entered into the workgroup, you may wish to edit the record visibility of those records using the Edit Results operation in the Query page.

NOTE: Record Visibility is not applied to Restricted users since by design these users are already limited to accessing only those records which they themselves have submitted. If you have a mix of Standard (Static or Floating) and Restricted users in your system and you want to limit what records restricted users can access, but all of the standard users are allowed to see any record, you don't need to enable Record Visibility. Restricted users can only access the records they themselves have submitted. Record Visibility is not needed to ensure that Restricted users can only see certain records.

- Enable Record Visibility
  Selecting "Yes" for this option will enable the Record Visibility feature, which will restrict the records a user can access based on his/her user group membership.

- Limit Record Visibility Selection To A User's Own Groups
  For those users with the ability to edit the visibility of a record, this option selects whether they should only be able to select from user groups that they are a member of (Yes), or whether they should be able to pick any user group (No). For maximum security, it is recommended that this preference be set to "Yes". The user group privilege "Override Record Visibility" will override this property, meaning any user group with this privilege enabled will see all standard user groups available for selection in the "Make Visible to User Groups" field on the Add and Edit pages.

- Visibility for Records Submitted by Unregistered Users via Web
  Since there is no registered user associated with issues reported via the Submit Page, this option allows you to configure the Record Visibility for issues submitted via the Submit Page. If the Submit Page and Record Visibility are enabled, select the user groups which should be able to access records submitted via the Submit page. The Admin user group is not available for selection in this field because the Admin user group can always access any record added via the Submit page. To select multiple user groups, hold down the Ctrl button on your keyboard while selecting the user groups.

- Visibility for Records Submitted by Unregistered Users via Email
  When processing incoming emails, Tracker may not be able to map an incoming email to a user account (there is no user account with the same email address). In that case, this option allows you to configure the Record Visibility for issues submitted via email. If the Submit via Email feature and Record Visibility are enabled, please select the user groups which should be able to access records submitted via email. The Admin user group is not available for selection in this field because the Admin user group can always access any record added via email. To select multiple user groups, hold down the Ctrl button on your keyboard while selecting the user groups. If the option "Action for Unmapped Emails" is set to "<Delete Email>" in the Incoming Email Settings for a form, this option does not apply since it is only used for unmapped emails. For further information please review the Record Visibility for Records Submitted via Email help section.

Configuring Record Visibility

Record Visibility is a feature that restricts the records a user is able to access based on user group membership. This is useful in environments where you need to limit the records that are accessible to customers or external users while still allowing these users to access records that are pertinent to their company or account.

Before enabling Record Visibility, decide whether you really need it. Record Visibility should only be enabled if it is really needed because it involves extra configuration. If the configuration is not set up correctly, users will not be able to access records you

intend for them to access.

If you have a mix of Standard and Restricted users in your system and you want to limit what records restricted users can access, but all of the standard users are allowed to see any record, you don't need to enable Record Visibility. Record Visibility is not applied to Restricted users since by design these users can only access the records they themselves have submitted. Record Visibility is not needed to ensure that Restricted users can only see certain records.

If you want to keep some of your Standard users from being able to access records added by other Standard users, you can use Record Visibility to achieve this. For example, if you have external customers, vendors or partners configured as Standard users and you don't want users from Company A to be able to see records added by users in Company B, Record Visibility can be used to be sure that users from Company A can only see records added by Company A.

To configure Record Visibility, please use the basic steps below or refer to the following Record Visibility Knowledge Base article for additional detail and examples: http://kb.nrtracker.com/Item.asp?id=79

1. Enable the feature and set the Record Visibility options in the General Preferences section described above
2. Set the Record Visibility privileges in the Privileges section
3. For any user that is not a member of a user group with the privilege "Override Record Visibility" (most likely all external users or customers), add the user to at least one user group other than the "Users" group so that this user can see the records he/she reported. For example, you may choose to create a user group for each company, vendor, or external user. This is required because one of the basic principles of Record Visibility is that by default records are not visible to the Users group since that includes every standard user in the workgroup. If the user is a member of only "Users" group, then he/she cannot even view the records they submitted. When a user has been added to another user group, when he/she adds a record, it will be made visible to the members of that user group. Refer to the User Groups section for details on creating user groups and adding users as members.
4. Set the visibility for any existing records in the workgroup. If you are enabling Record Visibility after records have already been added to the workgroup, you should set the visibility for existing records. You can use the Edit Records operation on the Query Results page. To use the Edit Records operation and set the visibility for records, you must be a member of a user group with the "Edit Query Result Set" and "Edit Record Visibility" privileges enabled. More information can be found in Privileges Help section. It is recommended that you enable these privileges for the Admin user group to perform the steps below.

   To set the visibility for existing records: Note: Please ensure you have a backup of your workgroup database and attachments as the Edit Records operation cannot be undone.

   a. Login to the workgroup as Admin (or a user with the required privileges mentioned above)
   b. Click on the Query icon
   c. Click on the Clear button
   d. Enter criteria to return the set of records for which you wish to change the visibility. For example, if you have configured one user group for each company of external users, you may want to search for records reported by any member of a particular user group (by selecting the appropriate user group in the "Reported By" field), then select that user group in the Make Visible to These User Groups field in a later step. Or, if you wish to return all records, do not enter any criteria.
   e. Click on the Run Query button
   f. Click on the Edit Records in the upper right corner
   g. In the field Make Visible to These User Groups, select the user group(s) to which you wish to make this set of records visible. To select multiple user groups, hold down the Ctrl button on your keyboard as you select the user groups.
   h. Click OK to save the change and click OK to confirm the operation

Record Visibility and Metrics

Record Visibility is not enforced in the Metrics section. Metrics by their nature tend to be global. They are usually used by managers with access to most of the data. For situations where someone should have limited, you can use the Home Page Only user group privilege to show the user a defined set of charts that they can access from their Home Page.

Source Code Control Options

The following options are related to enabling the Source Code Control Integration feature. Please review the Overview and

Requirements for more information about this feature.

- Enable Source Code Control Integration
  Setting this option to Yes allows your database to interact with the Source Code Control system specified in the next 3 options.

- Source Code Control Product
  Microsoft Visual Source Safe is the only product that can be used for Source Code Control Integration at this time.

- Path to srcsafe.ini
  Specify the path to the srcsafe.ini file that is present on the server machine where Tracker is installed.

- Path to ss.exe
  Specify the path to the ss.exe file that is present on the server machine where Tracker is installed.

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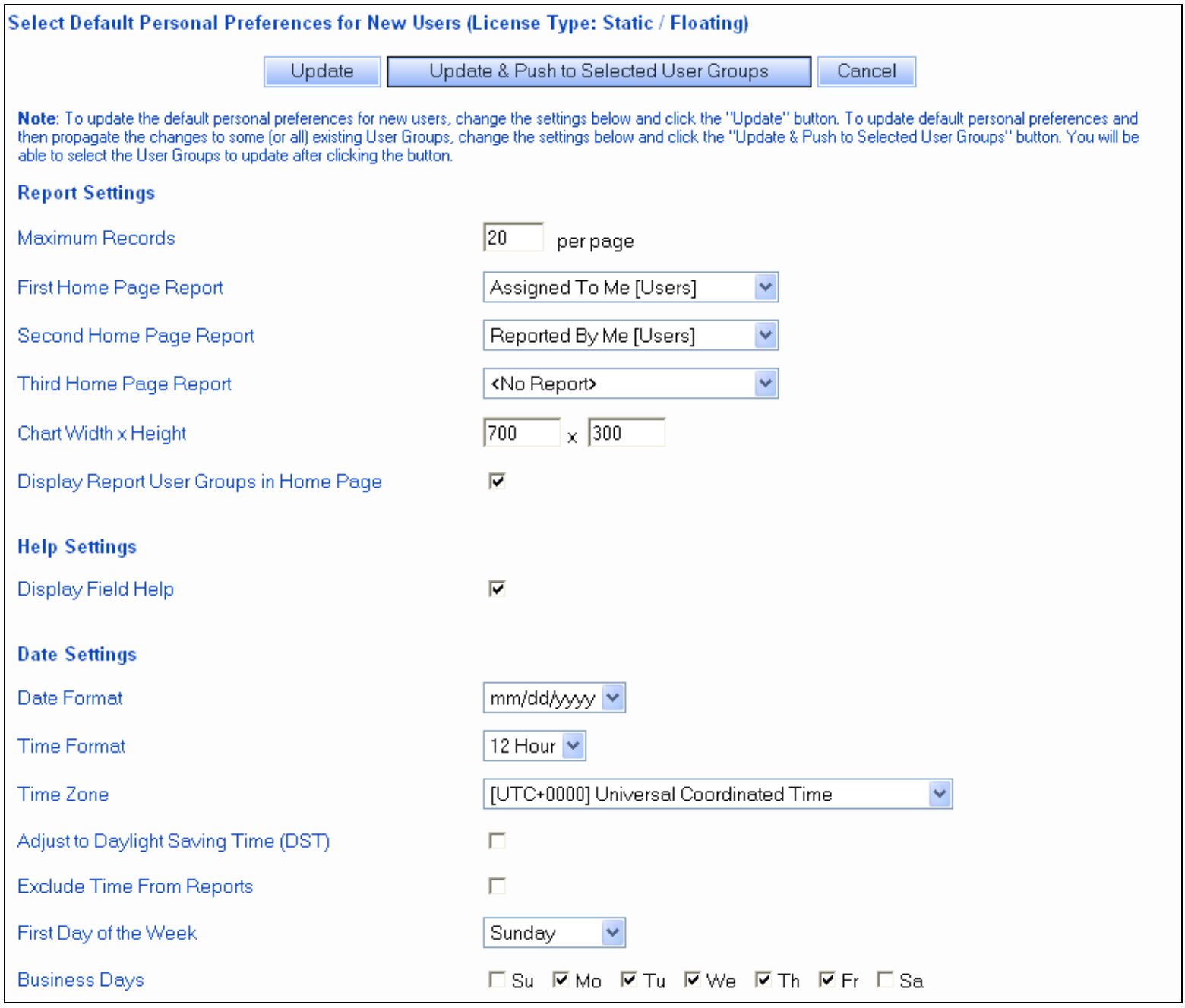
NetResults Tracker Help

User Preferences

Default Preferences for New Users

A set of preferences can be applied by default to a user account that is added to the workgroup. Each user can modify his or her own preferences in the Preferences section. There are different preferences available depending on the user's license type (Static / Floating or Restricted).



To modify the default preferences for new users:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Preferences link
4. Select the User License Type, then click on the Continue button
5. Set the preferences (each option is described in detail below)
6. Click Update to save your selections or click Update & Push to Selected User Groups to push some or all of the user

preference settings to some or all user groups. The Push User Preferences section has more information about this operation.

Report Settings

- Maximum Records per Page
  This option restricts the maximum number of records to be displayed in the results of Home and Query reports. The default is 20 records per page. The maximum value for this setting is 100 records per page.

- First, Second, and Third Home Page Reports
  These options specify the saved queries or charts which will be displayed on the Home Page by default. In most cases, the saved query Assigned To Me [Users] is selected for the First Home Page Report by default, which will display all records assigned to the login user and the saved query Reported By Me [Users] is selected for the Second Home Page Report, which will display all records created by the login user. <No Report> is selected for the Third Home Page Report by default. If you do not want a report displayed for the First, Second or Third reports, select the option <No Report>. If this option is selected for all 3 Home Page reports, the following message will be displayed on the Home Page: "No Home Page Reports are configured. If you would like a report to appear here, click the Preferences link above, select one or more Home Page Reports, and click OK."

  When setting the preferences for Static / Floating users, all saved queries and charts for the [Users] group within your database will appear in the pulldowns for the Home Page reports. When setting the preferences for Restricted users, saved queries and charts for the [RestrictedUsers] group will be available. Saved charts cannot be selected for the Home Page reports for Restricted users. To modify saved queries, please see the section Using Saved Queries & Reports. To modify saved charts, please review the section Metrics section.

- Chart Width x Height
  Enter the width and height that should be used to display a saved chart on the Home Page. 700 x 300 is entered by default. This option is available for Static / Floating users only.

- Display Report User Groups in Home Page
  Checking the box for this option will display the user name in brackets after the report name for group saved reports in the pulldown for each Home Page report. For example, the "Assigned to Me" report will be displayed as "Assigned to Me [Users]" in the pulldown for each Home Page report when this option is enabled. For Restricted users or users that only belong to one or two groups, it is recommended that this option be disabled (unchecked).

Help Settings

- Display Field Help
  Check the box to display the Field Help. Depending on what is configured by your Tracker Administrator, the field help can appear as small text above the field, below the field, or as a yellow question mark next to the name of the fields on the Add, Task, and Edit pages. When the Field Help icon is displayed, you can move your cursor over this icon to get an explanation about the field.

Date Settings

The following settings govern the way date and time fields are displayed for users by default.

- Date Format
  Select a format for the Date from the pulldown menu. The format that you choose will be used to display fields that contain date information within Tracker.

- Time Format
  Select a format for the time from the pulldown menu. The format that you choose will be used to display all fields that contain time information within Tracker. Choosing 12 hour for the time format will display times followed by AM or PM to denote the appropriate 12 hour period, such as 02:05:38 PM. Choosing 24 hour as the time format will display times without the AM or PM designation, such as 14:05:38.

- Time Zone
  The time zone selected will be used for all data in the workgroup. The time zone you select for this option will also be used as the default for new users. To see a complete list of time zones available, please refer to the following section:
  Windows Time Zones

- Adjust to Daylight Saving Time (DST)
  Checking the box here will enable the system to adjust the workgroup data to account for daylight saving time. If you selected a time zone for the workgroup where daylight saving time is observed, it is recommended that you enable this option.

- Exclude Time From Reports
  Check this box if you wish to have Tracker display date information in the reports on the History, Home and Query pages without the time information included. Enabling this preference will also exclude the time information from History, Home and Query reports when they are exported or printed. Enabling this preference does not change how report results are sorted when a date field is selected as one of the "Sort By" fields. When a date field is selected as one of the Sort By fields, the time information is still used for sorting the results even though the time information is not displayed in the report results.

- First Day of the Week
  Select the day of the week that you want to be displayed in the first column when using the calendar feature for date fields.

- Business Days
  Check the boxes to the left of the days of the week that should be considered business days by Tracker.

Export Settings

The following preferences are used when report data is exported from the Tracker Home, Query, and Metrics pages. Data is exported as a CSV (comma separated values) file. However, because there is no firm definition of a CSV standard, you may need to modify some export parameters to allow use of the exported data by other applications (spreadsheet, database, etc.). Tracker and your Tracker Administrator have set these values to defaults that should work in most environments. So in most cases, you should not need to change these settings. If you have an application that is not importing the data correctly, review the information below.

- Field Separator
  Choose one of the options to be used as the separator between the fields (values) of a report that is being exported. The available options are Comma, Semicolon, and Tab. If you are exporting English language (or Latin1) data in the United States, you should use Comma. If you are exporting English language (or Latin1) data in a country that uses a Comma in floating point numbers to separate the whole number from the fractional part (e.g. 45,125 for 45 and one eighth), you may need to set this to Semicolon. If workgroup has been configured to use the Unicode (UTF-8) character set for multi-language support, Tab will generally work best in most applications.

- Row Separator
  Choose one of the options to be used as the separator between the rows (lines) of a report that is being exported. The options are Carriage Return & Line Feed (Windows), Carriage Return (Mac OS), and Line Feed (Unix). Choose the appropriate option for the operating system that most of your users will are using on their desktop (the one running the web browser they are using). Users that are running a different operating system than the one selected in these preferences will need to change this option in their personal Preferences section which can be reached by clicking on the Preferences link in the Home Page.

- File Extension
  Choose one of the options to be used as the file extension when saving the file containing the exported data. The options are csv, txt, and No Extension. For English language (or Latin1) data, this should be set to csv. For Unicode (UTF-8, multi-language) data this should be set to txt. However, you can also choose No Extension if you wish to create a file without a file extension (without .csv or .txt at the end).

Note: When exporting data from a UTF-8 workgroup using the recommended settings listed above, misalignment of the data can occur when viewing the exported data in Excel if the file is not first saved to disk and then opened in one of the two ways listed below. Unfortunately, the default file open in Excel does not properly store multiple line text (as there may be in Tracker TextArea fields) in a single cell. Instead, it puts each line in its own cell which results in misalignment of the fields in the spreadsheet.

For UTF-8 data exported with Field Separator set to Tab, Row Separator set to Carriage Return & Line Feed, and File Extension set to txt, you can get Excel to properly place multiple line data in a single cell using one of the two operations below.

1. From Windows Explorer, select the file to be opened.
2. Right-click on the file and select Open With->Microsoft Excel.

OR

1. From Excel, select File->Open.
2. Locate and select the file that you want from the list (the file you created when you exported the data from Tracker).
3. Hold down the SHIFT key on your keyboard, and then click the Open button (if you do not hold down the SHIFT key, the file may not be processed correctly).

Query Page Pulldown Settings

- Enforce Dependencies
  This option determines whether the dependent relationships between pulldown fields configured in this workgroup will be enforced

when using the Query operations. Checking the box for this option will enforce the dependencies. This option cannot be enabled if you have the option Include Obsolete Items enabled. This preference can only be set for Static / Floating users.

- Include Obsolete Items
  This option determines whether the any option menu items that have been marked as obsolete are available in pulldowns so that they can be selected as search criteria on the Query Page. Checking the box for this option will include obsolete option menu items in the pulldowns on the Query Page. This option cannot be enabled if you have the option Enforce Dependencies enabled. This preference can only be set for Static / Floating users.

Multi-Line Field Settings

- Display Window
  Select the maximum number of lines that should be displayed when viewing the text within a TextArea field. By default, this will be set to 5 lines. If the contents of a TextArea field extend beyond the number of lines set in this preference, the user will have the ability to scroll to see the complete contents of the field. If the user is using Internet Explorer or Firefox as the browser, the option to expand the window to see the complete contents by clicking on the "+" will be available. The "-" icon is available for collapsing the contents to the original field size.

- Fully Expand on View Page
  Checking the box for this option will automatically expand the window for all TextArea fields on the View Page so that all contents of the field will be visible without having to click on "+" icon. The window will be fully expanded irrespective of the setting for the Display Window option.

Discussion Settings (Enterprise Edition Only)

These preferences apply to the Discussion feature, which is only available in Tracker Enterprise Edition. These preferences are only available for Static / Floating users.

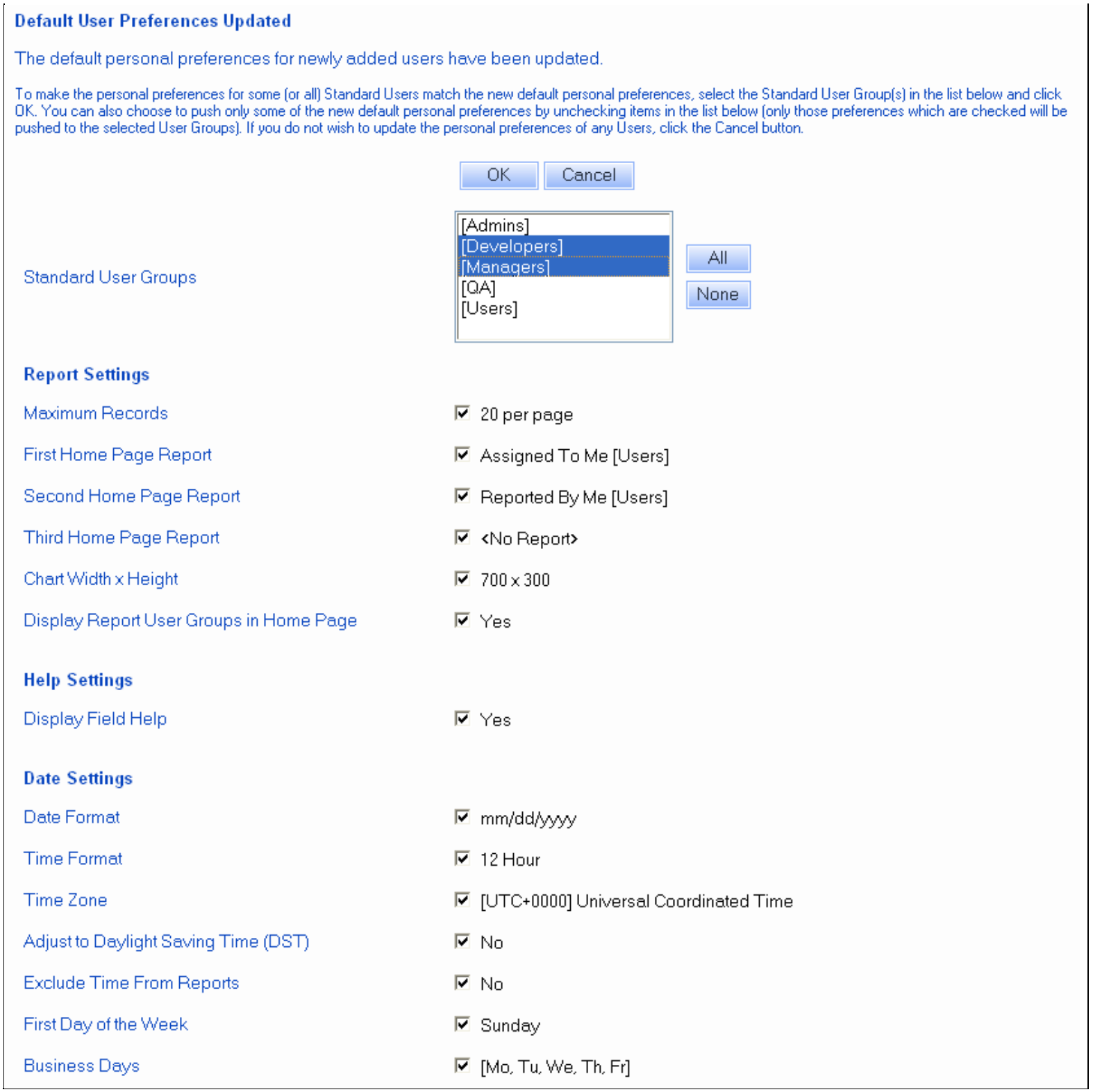
- New Post Notification
  This option determines when a user will be notified about discussions via email. Selecting No Email indicates that a user should not receive any email notification messages related to discussions. Selecting Receive Email for each New Post indicates that a user will receive one email message for each new post in a discussion to which he / she is subscribed. Selecting Receive Email for the first New Post to each Thread indicates that the user will receive one email for the first new post made to a discussion thread to which he / she is subscribed. Once the user browses to the message list of the thread, the next new post made to the thread will trigger another email to be sent to the user.

- Invitation Notification by Email
  This option determines whether a user should receive an email message when he / she has been invited to participate in a discussion initiated for a particular record. Selecting Yes indicates that the user should receive an email invitation for each new discussion.

- Message Display Window
  Enter the number of lines of text you wish to see when displaying a message within a discussion. If the contents of a Discussion message extend beyond the number of lines set in this preference, the user will have the ability to scroll to see the complete contents of the message. If the user is using Internet Explorer or Firefox as the browser, the option to expand the window to see the complete contents by clicking on the "+" will be available. The "-" icon is available for collapsing the contents to the original field size. The default setting is 5 lines of text.

Push User Preferences to Selected User Groups

The default user preferences can be applied to some or all user groups using the Update & Push to Selected User Groups operation that is available after updating the default user preferences. NOTE: You may wish to make a backup of your database prior to performing this operation as this operation cannot be undone.



To push the default preferences to selected user groups:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the User Preferences link
4. Select the User License Type, then click on the Continue button
5. Set the preferences as desired
6. Click the Update & Push to Selected User Groups button
7. Select the user groups In the Standard / Restricted User Groups field that should have the default preferences applied (Standard or Restricted user groups will be displayed based on the user license type you selected after clicking on the User Preferences link). To select multiple user groups, hold down the Ctrl button on your keyboard while clicking on the desired user

groups. Click All if you wish to select all user groups. Click None if you wish to de-select all user groups.

8. By default all user preferences will be checked (selected) to be applied to the selected user groups. If you only wish to apply certain user preferences, UNcheck the boxes for the preferences that should not be applied.
9. Click OK to apply the selected user preferences to the selected user groups

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NetResults Tracker Help

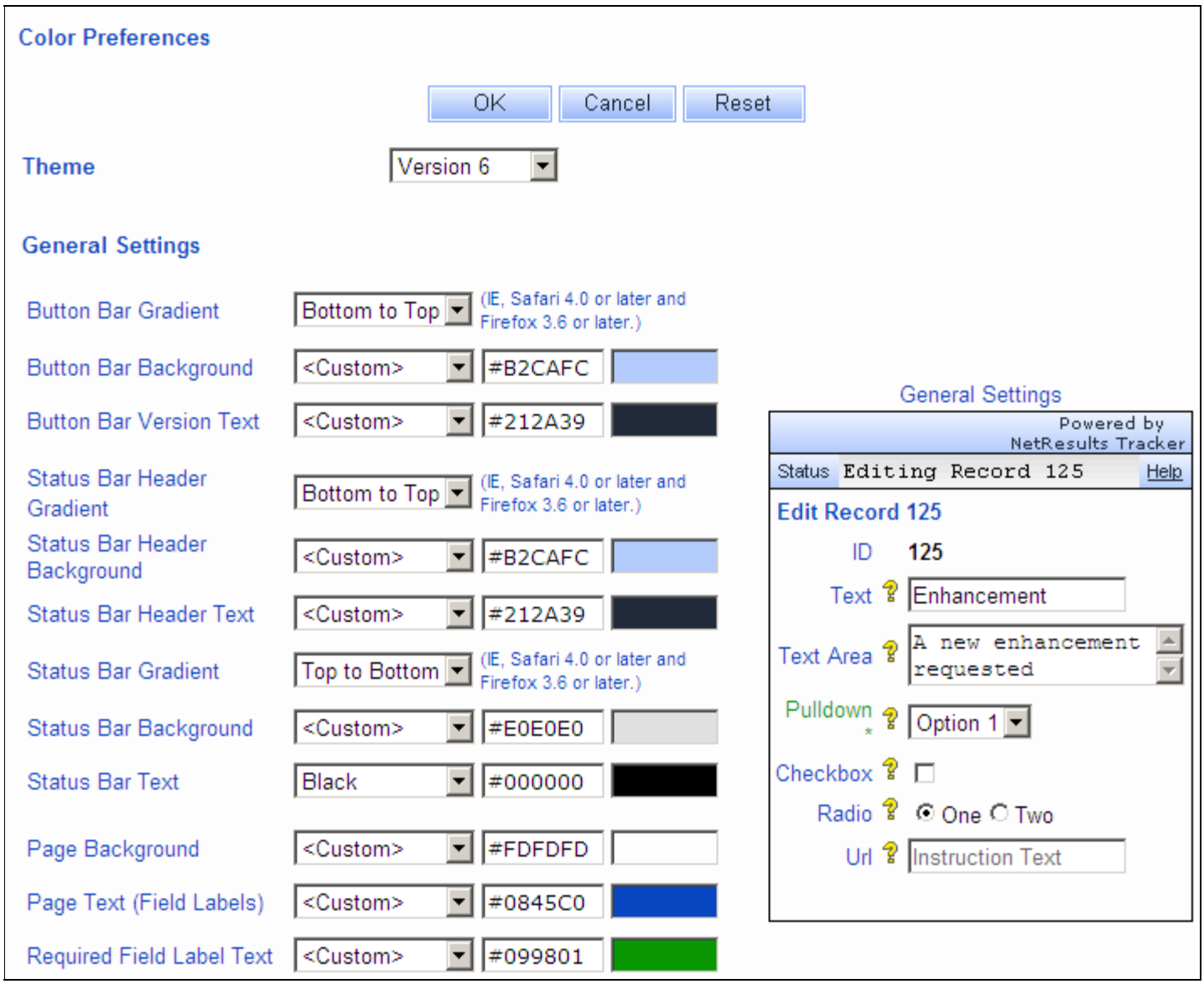
Color Preferences

Color Preferences can be set to customize the look and feel of the pages in Tracker. You may wish to change the color preferences from their defaults so that the Tracker pages reflect the color scheme of your web site or organization. Please note that setting color preferences may change some style elements that are default for your browser (e.g. If your browser displays buttons with a smooth edge, the smooth edge will be lost when applying color preferences to buttons using the options below).

To set the Color Preferences:

1. Login to the workgroup as Admin
2. Click on the Admin icon in the top button bar
3. Click on the Color Preferences link
4. To change the color of an item, select a color from the pulldown or select <Custom> to enter the Hex code or select <Default> to choose the browser's default value. Hex code must be in the format "#XXXXXX". An explanation of each item can be found in the Color Preference Options section. Your selections are displayed in a preview to the right of the preferences.
5. Click on the OK button to save the changes

A Reset button is available to reset the color preferences to their settings as of the last time the Color Preferences were saved. A Cancel button is available to return to the Admin section without saving any changes to the Color Preferences page.



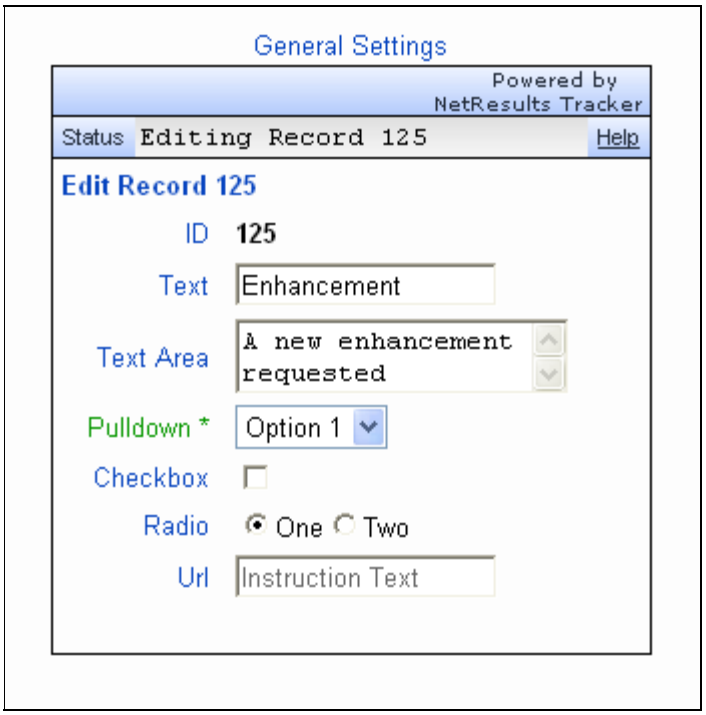
Color Preference Options

Theme

A set of pre-defined Themes is available. Each Theme has a set of color preferences configured to give Tracker a color scheme that is consistent throughout all pages. Selecting a Theme will update the samples displayed in the rest of the Color Preferences sections (General Settings, Browser Settings, etc.).

You can select a theme and accept its default color preference settings or you can choose a theme as a starting point and make changes to individual color preferences as desired. Version 6 is the default theme for new workgroups. Version 5 is the theme that has the color preferences that match the defaults for Version 5.x workgroups.

General Settings



- Button Bar Gradient
  Select a method for applying a gradient effect to the Button Bar color (e.g. "Bottom to Top" is the method selected in the Button Bar behind the text "Powered by NetResults Tracker" in the General Settings Sample). Selecting "None" will not apply the gradient effect to the Button bar color. This effect is only supported in Internet Explorer, Firefox 3.6 or newer and Safari 4.0 or newer.

- Button Bar Background
  The color used in the background of the Button Bar in the Tracker pages (e.g. the area displayed in a light blue color behind the text "Powered by NetResults Tracker" in the General Settings Sample).

- Button Bar Version Text
  The color used for the text of the Version text in the upper right corner of the Button Bar (e.g. the color of the text "Powered by NetResults Tracker" in the General Settings Sample).

- Status Bar Header Gradient
  Select a method for applying a gradient effect to the Status Bar Header color (e.g. "Bottom to Top" is the method selected in the Status Bar Header behind the text "Status" in the General Settings Sample). Selecting "None" will not apply the gradient effect to the Status Bar Header color. This effect is only supported in Internet Explorer, Firefox 3.6 or newer and Safari 4.0 or newer.

- Status Bar Header Background

The background color of the header in the Status Bar (e.g. the light blue color displayed behind "Status" in the General Settings Sample)

- Status Bar Header Text
  The color of the text in the Status Bar header (e.g. the color of the text "Status" in the General Settings Sample)

- Status Bar Gradient
  Select a method for applying a gradient effect to the Status Bar color (e.g. "Top to Bottom" is the method selected in the Status Bar behind the text "Editing Record 125" in the General Settings Sample). Selecting "None" will not apply the gradient effect to the Status Bar color. This effect is only supported in Internet Explorer, Firefox 3.6 or newer and Safari 4.0 or newer.

- Status Bar Background
  The background color of the Status Bar (e.g. the light gray color displayed behind "Editing Record 125" in the General Settings Sample)

- Status Bar Text
  The color of the text displayed in the Status Bar (e.g. the color of the text "Editing Record 125" in the General Settings Sample)

- Page Background
  The background color of all of the Tracker pages (e.g. the white color displayed in the background behind the Text, Text Area and Pulldown fields in the General Settings Sample)

- Page Text (Field Labels)
  The color of the text displayed on the pages in Tracker (e.g. the color of the field labels "Text" and "Text Area" in the General Settings Sample)

- Required Field Label Text
  The color of the field labels for fields that are marked as "Required" on the Add, Task or Submit Pages (e.g. the color of the field label "Pulldown*" in the General Settings Sample)

- Input Background
  The color displayed in the area of a field where text or information would be entered (e.g. the white color displayed in the background behind the text "A new enhancement requested" in the General Settings Sample) Selecting <Default> will use the browser's default color for the input background (white).

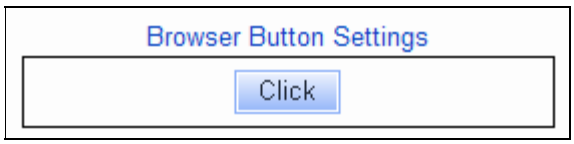
- Input Text (Field Values)
  The color of the text entered into a field (e.g. the color of the text "A new enhancement requested" in the General Settings Sample) Selecting <Default> will use the browser's default color for the input text (black).

- Instruction Text
  The color of the text that appears in Text, TextArea and Url fields configured to use instructional text. (e.g. the color of the text "Instruction Text" in the General Settings Sample)

- Field Help Description Text
  The color of the text that appears as the help description configured for the various Projects, Forms and Fields.

Browser Button Settings

These settings determine the colors of the buttons when the following browsers are used: Internet Explorer (IE), Firefox 3.6 or newer and Safari 4.0 or newer.



- Use Default Buttons (& Inputs)
  Checking the box for this option will apply the operating system's default color settings to the buttons. When this option is

enabled, the rest of the Browser Button Settings are disabled.

- Gradient
  Select a method for applying a gradient effect to the button color (e.g. "Bottom to Top" is the method selected in the Browser Buttons Sample). Selecting "None" will not apply the gradient effect to the button color. This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

- Background
  The color used in the background of the buttons in the Tracker pages (e.g. the light blue color behind the text "Click" on the button in the Browser Buttons Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

- Text
  The color of the text in the buttons in the Tracker pages (e.g. the color of the text "Click" in the Browser Buttons Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

- Border
  The color of the border of the button in the Tracker pages (e.g. the color of the light blue border around the "Click" button in the Browser Buttons Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Other Browser Button Settings

These settings determine the colors of the buttons when the following browsers are used: Firefox (versions older than 3.6) and Safari (versions older than 4.0)

- Use Default Buttons (& Inputs)
  Checking the box for this option will apply operating system's default color settings to the buttons. When this option is enabled, the rest of the Other Browser Button Settings are disabled.

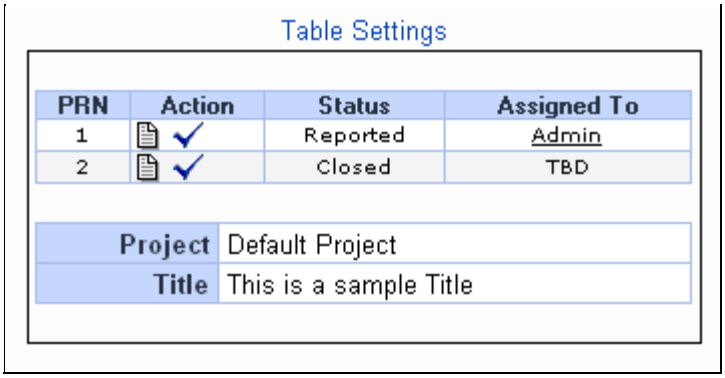
- Background
  The color used in the background of the buttons in the Tracker pages (e.g. the blue color behind the text "Click" on the button in the Other Browser Button Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

- Text
  The color of the text in the buttons in the Tracker pages (e.g. the color of the text "Click" in the Other Browser Button Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

- Border
  The color of the border of the button in the Tracker pages (e.g. the color of the black border around the "Click" button in the Other Browser Button Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Table Settings

Table Settings control the color preferences applied to tables present on View, Query, History, Metrics and Discussion Pages.



- Header Background
  The background color of the top line of a table (e.g. the blue color behind "PRN", "Action", "Status", "Assigned To" "Project" and "Title" in the Table Settings Sample). This also sets the background color behind the field names (left column) on the View Page (e.g. the color behind the text "Project" and "Title" in the Table Settings Sample).

- Header Text
  The color of the text in the top line of a table (e.g. the color of the text "PRN", "Action", "Status", "Assigned To" "Project" and "Title" in the Table Settings Sample). This also sets the color of the text of the field names (left column) on the View Page (e.g. the color of the text "Project" and "Title" in the Table Settings Sample).

- Odd Row Background
  The background color of each odd numbered row in a table (e.g. the background color of the row that starts with "1" in the Table Settings Sample). This also sets the background color behind the field values (right column) on the View Page (e.g. the color behind the text "Default Project" and "This is a sample Title" in the Table Settings Sample).

- Odd Row Text
  The color of the text displayed in each odd numbered row in a table (e.g. the color of the text "1", "Reported" and "Admin" in the Table Settings Sample). This also sets the color of the text of the field values (right column) on the View Page (e.g. the color of the text "Default Project" and "This is a sample Title" in the Table Settings Sample).

- Even Row Background
  The background color of each even numbered row in a table (e.g. the background color of the row that starts with "2" in the Table Settings Sample).

- Even Row Text
  The color of the text displayed in each even numbered row in a table (e.g. the color of the text "2", "Closed" and "TBD" in the Table Settings Sample).

- Border
  The color of the border around a table (e.g. the color of the border around both tables in the Table Settings Sample).

Login Page Settings

The Login Page settings are available for customizing the color of the Login Page and Self Registration Page (if applicable).

- Page Background
  The background color of the area behind the Login box (e.g. the white area behind the Login box in the Login Page Sample).

- Header Gradient
  Select a method for applying a gradient effect to the Header color (e.g. "Bottom to Top" is the method selected in the area behind the text "NetResults Tracker" in the Login Page Sample). Selecting "None" will not apply the gradient effect to the Header color. This effect is only supported in Internet Explorer, Firefox 3.6 or newer and Safari 4.0 or newer.

- Header Background
  The background color of the top section of the Login box (e.g. the blue color behind the text "NetResults Tracker" in the Login Page Sample).

- Header Text
  The color of the text in the top section of the Login box (e.g. the color of the text "NetResults Tracker" in the Login Page Sample).

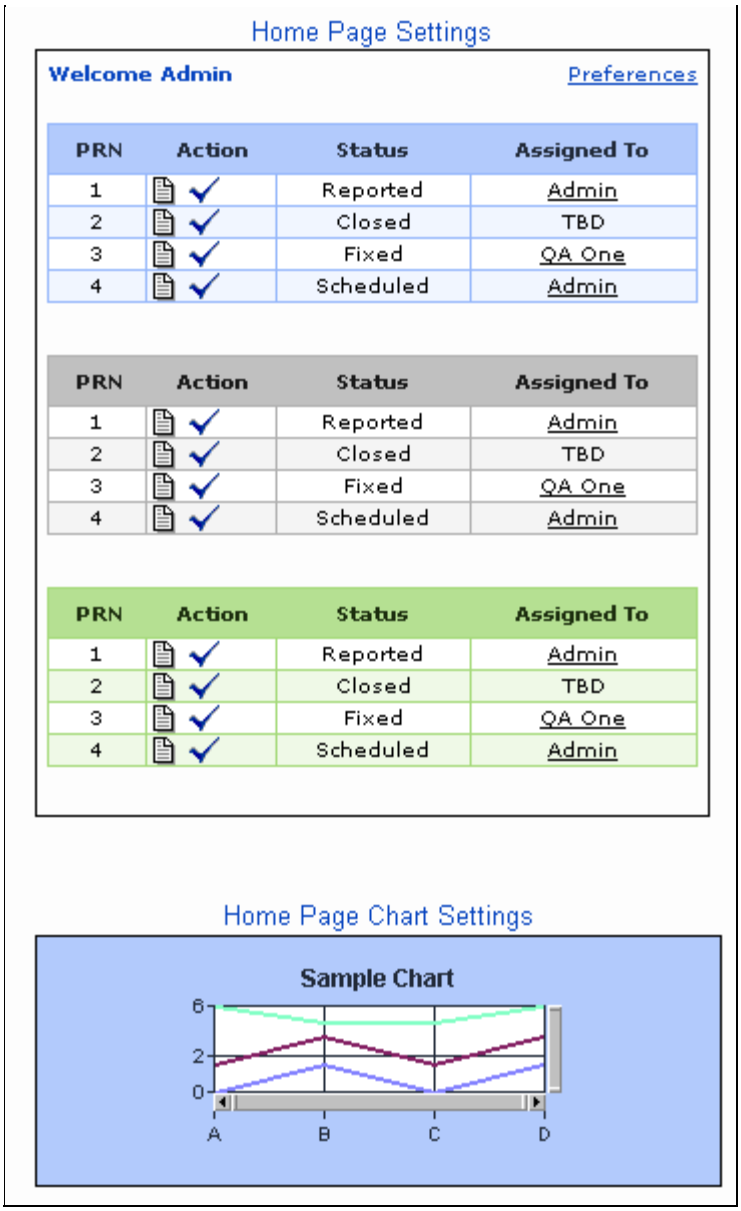
- Body Background
  The background color of the Login box (e.g. the white color behind the text "Enter your ID & password.", "User ID" and "Password" in the Login Page Sample).

- Body Text
  The color of the text in the Login box (e.g. the color of the text "Enter your ID & password.", "User ID" and "Password" in the Login Page Sample).

- Border
  The color of the border of the Login box (e.g. the color of the border around the Login box in the Login Page Sample).

Home Page Settings

The Home Page Settings are available for customizing the color preferences for the Home Page reports.



- Report 1 - Header Background
  The background color for the header of the first Home Page report (e.g. the blue background color behind the text "PRN", "Action" "Status" and "Assigned To" in the first (top) Home Page report in the Home Page Settings Sample).

- Report 1 - Header Text
  The color of the text in the header of the first Home Page report (e.g. the color of the text "PRN", "Action" "Status" and "Assigned To" in the first (top) Home Page report in the Home Page Settings Sample).

- Report 1 - Odd Row Background
  The background color of odd-numbered rows in the first Home Page report (e.g. the white background color of the row that starts with "1" in first (top) Home Page report in the Home Page Settings Sample).

- Report 1 - Odd Row Text
  The color of the text in the odd-numbered rows in the first Home Page report (e.g. the color of the text "1", "Reported" and "Admin" in the first (top) Home Page report in the Home Page Settings Sample).

- Report 1 - Even Row Background
  The background color of even-numbered rows in the first Home Page report (e.g. the background color of the row that starts with "2" in the first (top) Home Page report in the Home Page Settings Sample).

- Report 1 - Even Row Text
  The color of the text in the even-numbered rows in the first Home Page report (e.g. the color of the text "2", "Closed" and

"TBD" in the first (top) Home Page report in the Home Page Settings Sample).

- Report 1 - Border
  The color of the border around the first Home Page report (e.g. the blue color of the border around the first (top) Home Page report in the Home Page Settings Sample).

- Report 2 - Header Background
  The background color of the header of the second Home Page report (e.g. the silver background color behind the text "PRN", "Action", "Status" and "Assigned To" in the second (middle) Home Page report in the Home Page Settings Sample).

- Report 2 - Header Text
  The color of the text of the header in the second Home Page report (e.g. the color of the text "PRN", "Action", "Status" and "Assigned To" in the second (middle) Home Page report in the Home Page Settings Sample).

- Report 2 - Odd Row Background
  The background color of odd-numbered rows in the second Home Page report (e.g. the background color of the row that starts with "1" in the second (middle) Home Page report in the Home Page Settings Sample).

- Report 2 - Odd Row Text
  The color of the text in the odd-numbered rows in the second Home Page report (e.g. the background color of the text "1", "Reported" and "Admin" in the second (middle) Home Page report in the Home Page Settings Sample).

- Report 2 - Even Row Background
  The background color of even-numbered rows in the second Home Page report (e.g. the background color of the row that starts with "2" in the second (middle) Home Page report in the Home Page Settings Sample).

- Report 2 - Even Row Text
  The color of the text in the even-numbered rows in the second Home Page report (e.g. the color of the text "2", "Closed" and "TBD" in the second (middle) Home Page report in the Home Page Settings Sample).

- Report 2 - Border
  The color of the border around the second Home Page report (e.g. the silver color of the border around the second (middle) Home Page report in the Home Page Settings Sample).

- Report 3 - Header Background
  The background color of the header of the third Home Page report (e.g. the green background color behind the text "PRN", "Action" "Status" and "Assigned To" in the third (bottom) Home Page report in the Home Page Settings Sample).

- Report 3 - Header Text
  The color of the text in the header of the third Home Page report (e.g. the color of the text "PRN", "Action", "Status" and "Assigned To" in the third (bottom) Home Page report in the Home Page Settings Sample).

- Report 3 - Odd Row Background
  The background color of odd-numbered rows in the third Home Page report (e.g. the background color of the row that starts with "1" in the third (bottom) Home Page report in the Home Page Settings Sample).

- Report 3 - Odd Row Text
  The color of the text in the odd-numbered rows in the third Home Page report (e.g. the color of the text "1", "Reported" and "Admin" in the third (bottom) Home Page report in the Home Page Settings Sample).

- Report 3 - Even Row Background
  The background color of even-numbered rows in the third Home Page report (e.g. the background color of the row that starts with "2" in the third (bottom) Home Page report in the Home Page Settings Sample).

- Report 3 - Even Row Text
  The color of the text in the even-numbered rows in the third Home Page report (e.g. the color of the text "2", "Closed" and "TBD" in the third (bottom) Home Page report in the Home Page Settings Sample).

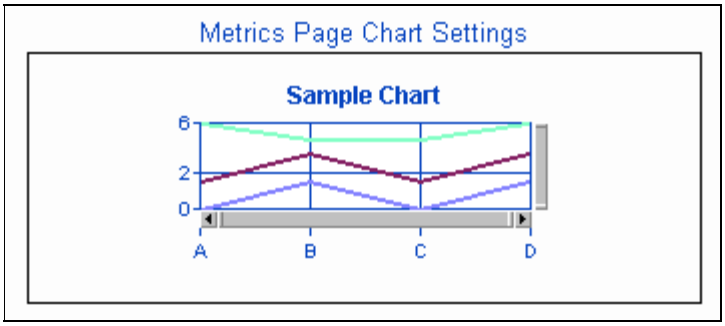
- Report 3 - Border
  The color of the border around the third Home Page report (e.g. the green color of the border around the third (bottom) Home Page report in the Home Page Settings Sample).

- Chart Background
  The background color when a chart is displayed on the Home Page. "<Transparent>" is available as a selection, indicating that the Chart Background Color will be the Header Background Color for Report 1, 2 or 3 (the position on the Home Page in which the chart is selected). In the Home Page Settings Sample, <Transparent> is selected.

- Chart Foreground
  The color of the text and foreground of a Home Page chart (e.g. x-axis and y-axis labels, chart title, gridlines, legend text). "<Text Color>" is available as a selection, indicating that the Chart Foreground Color will be the Header Text Color for Report 1, 2 or 3 (the position on the Home Page in which the Chart is selected). In the Home Page Settings Sample, <Text Color> is selected.
- Chart Grid Background
  The background color of the grid on bar and line charts displayed on the Home Page. "<Transparent>" is available as a selection, indicating that the Chart Background Color will be the Header Background Color for Report 1, 2 or 3 (the position on the Home Page in which the chart is selected). In the Home Page Settings Sample, the Chart Grid Background is white.

Metrics Page Chart Settings

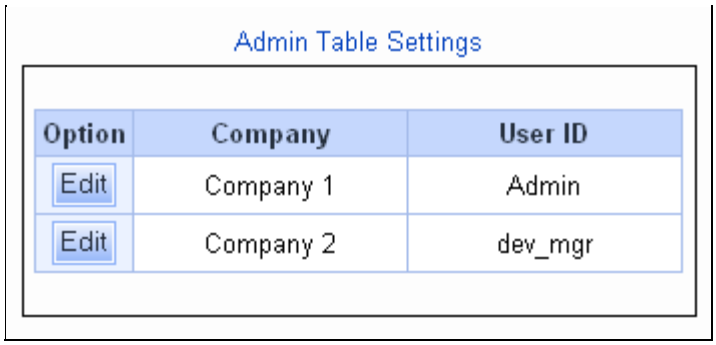
Metrics Page Chart Settings determine the color preferences for charts displayed in the Metrics Page.



- Background
  The background color of a chart. "<Transparent>" is available as a selection, indicating that the Background Color will be the Page Background Color as set in the General Settings section. In the Metrics Page Settings Sample, <Transparent> is selected.
- Foreground
  The color of the text and foreground of a chart (e.g. x-axis and y-axis labels, chart title, gridlines, legend text). "<Text Color>" is available as a selection, indicating that the Foreground Color will be the Page Text (Field Labels) Color as set in the General Settings section. In the Metrics Page Settings Sample, <Text Color> is selected.
- Grid Background
  The background color of the grid on bar and line charts. "<Transparent>" is available as a selection, indicating that the Chart Background Color will be the Page Background Color as set in the General Settings section. In the Metrics Page Settings Sample, the Chart Grid Background is white.

Admin Table Settings

Admin Table Settings determine the color settings for tables displayed in the Admin section (e.g. the list of fields in the Fields section, the list of users in the User Accounts section).



- Header Section Background
  The background color of the top row for tables displayed in the Admin section pages (e.g. the blue background color behind the text "Option", "Company" and "User ID" in the Admin Table Settings Sample).

- Header Section Text
  The color of the text in the top row for tables displayed in the Admin section pages (e.g. the color of the text "Option", "Company" and "User ID" in the Admin Table Settings Sample).

- Left/Button Pane Background
  The white background color of the left pane in the tables displayed in the Admin section pages (e.g. the background color behind the "Edit" buttons in the Admin Table Settings Sample).

- Right Pane Background
  The background color of the right pane in the tables displayed in the Admin section pages (e.g. the white background color behind the text "Company 1", "Company 2", "Admin" and "dev_mgr" in the Admin Table Settings Sample).

- Right Pane Text
  The color of the text in the right pane in the tables displayed in the Admin section pages (e.g. the color of the text "Company 1", "Company 2", "Admin" and "dev_mgr" in the Admin Table Settings Sample).

- Border
  The color of the border around the tables displayed in the Admin section pages (e.g. the blue color of the border around the table in the Admin Table Settings Sample).

Color Preferences for other Features

The color preferences for the following features can be found in other sections:

Submit via Web for Unregistered Users
Knowledge Base

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NetResults Tracker Help

Customizing the Login Page

Help Topics << >>

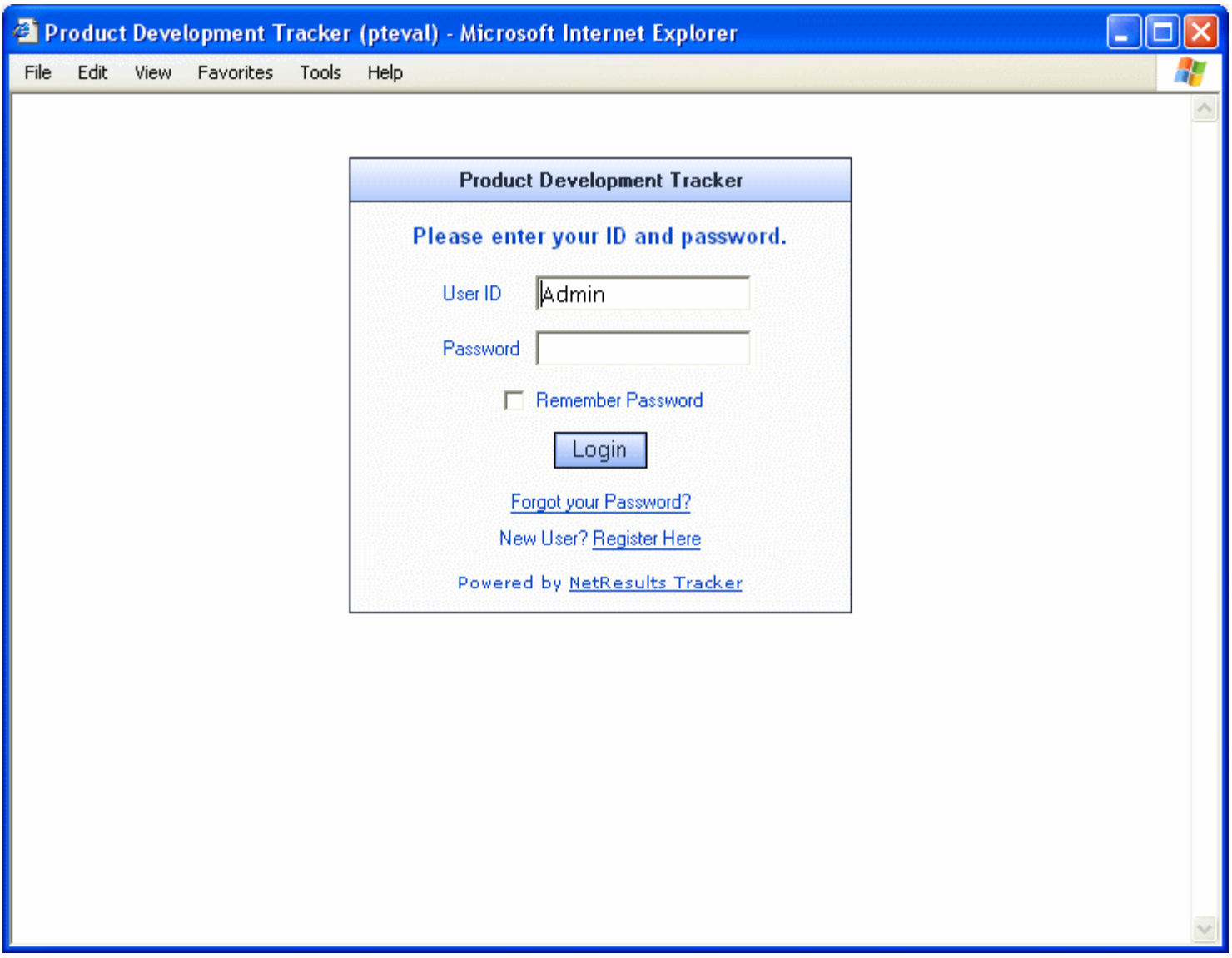
The Login Page

Tracker requires that all users first log into the system via a Login page. This page presents the user with a form with a User ID and password field. You can customize the top and bottom of this page with custom HTML (e.g. to add your company logo or other branding or add some instructions) and can set your own color preferences. This allows you to visually integrate Tracker with your company's Intranet look and feel or to provide users with information or an instructional message before logging in.

Customizing the Login Page

To customize the Login Page:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Login Options link
4. Customize the Login Page properties as desired. A detailed description of each can be found in the Login Page Settings sections.
5. Click OK to save the changes



Login Page Settings

Header Text
Enter text to be displayed at the top of the Login box (e.g. the header text in the Login Page Sample is "Tracker Login").

Instruction Text
Enter text to be displayed as instructions above the User ID and Password fields (e.g. the instruction text in the Login Page Sample is "Please enter your User ID"). Up to 255 characters can be entered for the Instruction Text. Only the first 25 characters of the instruction text will be displayed in the preview.

Enable Self-Registration
Selecting Yes for this option allows you to use the Self-Registration feature. Self registration allows end users to create their own Tracker user account without assistance from an Admin user by clicking on the New User? Register Here link on the Tracker Login Page. Information about use of this feature can be found in the Self Registration section.

Custom HTML (Top of Page)
Custom HTML (Bottom of Page)
Enter your own HTML code to customize the area above or below the Login box. Note that all file references must be fully qualified; relative paths will not work. Please do not enter any header tags into this area. Some examples of header tags are <HTML>, </HTML>, <BODY>, </BODY>. The custom HTML will not be displayed in the preview window. If you wish to display an image on the Login Page, you could upload the image as a global file attachment.

Password Settings

Enable Remember Password
Enabling the Remember Password feature will display an option called "Remember Password" on the Login Page or in the user's Preferences page. Checking the box for this option will set a user's browser to remember their password. When Remember Password is enabled for a user, the password field is automatically filled in when the user browses to the Login Page.

Enable Reset Password
Selecting "Yes" for this option will allow users to reset their password if it has been forgotten without intervention by a Tracker Administrator using the Forgot Your Password? link on the Tracker Login Page. When enabling this feature, please advise your users that they will need to set up a security question and answer in the Preferences section in order to be able to reset their password at a later time. This option cannot be used to reset the password for the "Admin" user in the workgroup.

Force Reset Password
To force the user to reset their Tracker password after a certain number of days, mark the check box and enter in the number of days in the provided field. When this feature is enabled, your users will be prompted to reset their password every time the specified number of days has expired. To disable this feature, uncheck the box. This option cannot be applied to password of the "Admin" user of the workgroup.

Allowed Bad Password Attempts
This allows you limit how many times a user can attempt to login. If the user attempts to login with a bad password for more than the number of times allowed, the user's account is locked for a specified duration. To use this feature, enter the number of attempts allowed and number of minutes the account will be locked when the number of attempts is exceeded. This option cannot be applied to password of the "Admin" user of the workgroup. Entering "0" for the number of minutes will lock the account indefinitely once the number of bad password attempts has been exceeded.

To unlock an account, the locked user must wait until the specified duration has expired until they can attempt to login again. A workgroup Administrator can also edit the user's profile to unlock the account. Only a user who is a member of the Admins user group can unlock a user account when "0" is entered for the number of minutes.

Notify Account Lock Information to
When an account is locked after the exceeding the allowed number of attempts, an automatic email notification regarding the locked account can be sent to user, as well as a user group or groups. Select the <Login User> for a notification to be sent to the user. Select the user group or groups, for a notification to be sent to the members of the group. To select multiple recipients, press the CTRL key on your keyboard and click on the desired choices. Select <None> to disable this feature.

Password Content
In creating or changing a password for a user account, various minimum requirements for the password can be enabled. To disable these requirements, uncheck the box for each requirement. This option cannot be applied to password of the "Admin" user of the

workgroup.

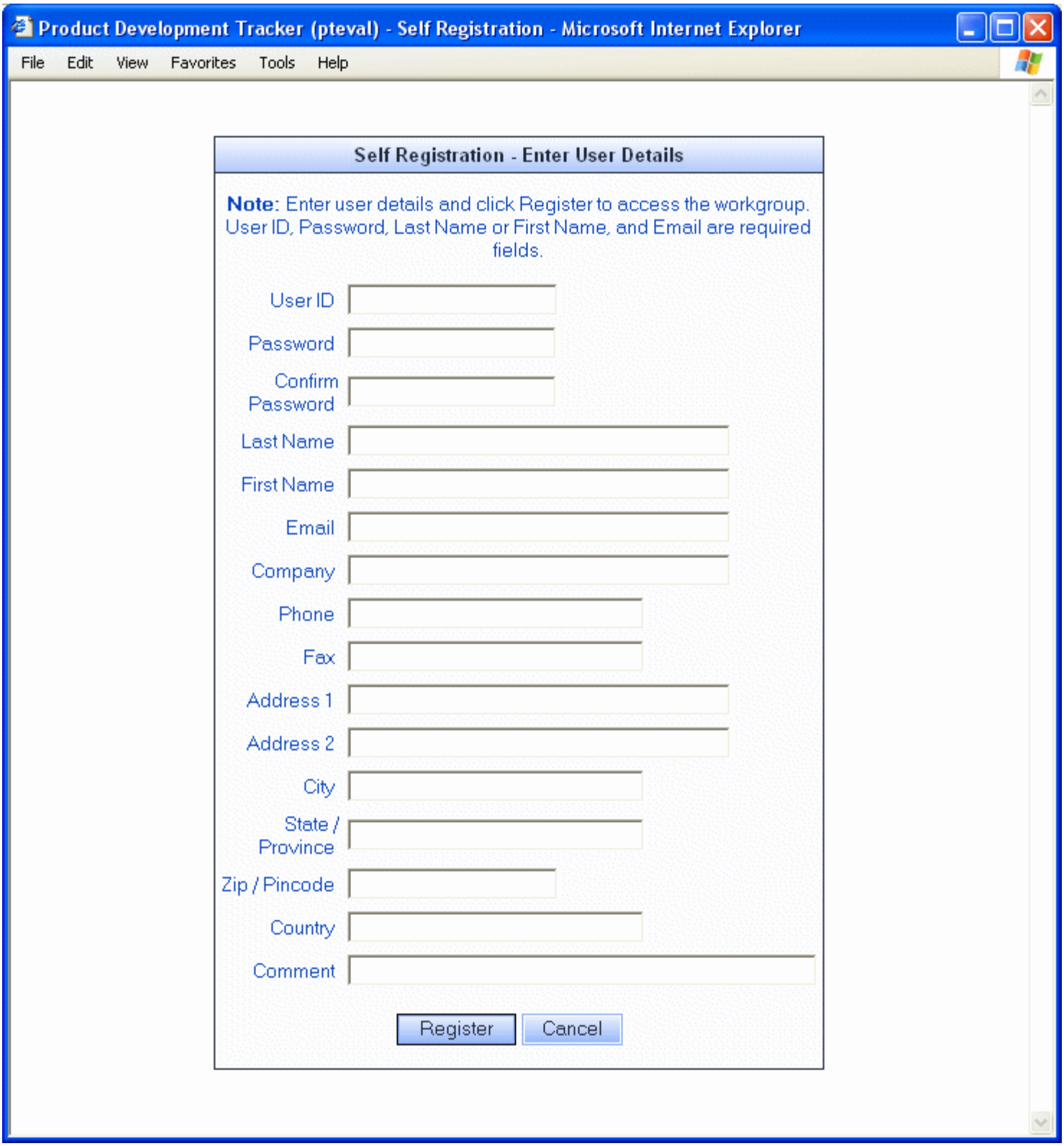
- To require that the password be at least a set number of characters in length, check the require at least ... characters option and enter a number that is less than or equal to 10 to specify the minimum number of characters.
- To require that the password contain a specified number of alphabetic characters, check the require at least ... alphabetic characters option and enter the minimum number of alphabetic characters.
- To require that the password contain a specified number of numeric characters, check the require at least ... numeric characters (0-9) option and enter the minimum number of numeric characters.
- To require that the password contain a specified numbers character from a specific list of characters, check the require at least ... characters from ... option. Enter the minimum number of specific characters required for the password in the first field. Then enter the characters, as the list of possible choices, in the second field. An explicit list of 20 characters can be entered into this field. The additional options similar to this one can be used for additional specific character requirements.
- To not allow the password to match the user ID, check the do not allow password to match user ID box.

Self Registration

Self Registration is a feature which allows your end users to create their own Tracker user account. This is useful in environments where there is a large number of end users and it is not known which of those end users will need a user account.

When activating this feature, the Tracker Administrator selects the default license type to be applied to all new user accounts created by this feature. Users can self-register provided that there are sufficient licenses available to create the new user accounts. When the license limit is reached, users will be prompted that they cannot self-register and should contact their Tracker Administrator.

To self register, a user browses to the Tracker Login Page and clicks on the "New User? Register Here" link. The user will be required to provide some information to create a user account. After the user account has been created, the user is directed back to the Login Page to enter the User ID and password of their new account. This new account is added to the User Accounts section.



Enabling Self Registration

The following steps are required to enable the Self Registration feature:

Enable the Self Registration feature in the Login Options section

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Login Options link
4. Set the option Enable Self Registration to "Yes"

5. Click OK to save the change

Set Options for Self Registered Accounts

You can make selections for the license type, user type, and user group of self-registered user accounts as well as provide instructions for end users and add custom HTML to be displayed at the top and bottom of the Self Registration form filled out by your end users.

To set the options related to the Self Registration form:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Login Options link
4. Make selections for the options available:

    - When selecting a User License Type, you must have the corresponding license key entered into the License Manager. In addition, you should ensure that you have not reached the maximum number of user accounts allowed for the license type selected as this will prevent users from being able to self-register. For a current snapshot of the total user accounts configured in your installation, please check the User Management System Home Page. Definitions of the license types are available in User Accounts section.
    - Select a User Group to which the self registered user accounts will be added as members. Adding self registered users to a particular user group will grant them all of the privileges enabled for the user group selected.

      If you selected Static or Floating as the User License Type:

        - You can select a Standard or Restricted user group for this field
        - If you select a user group other than "Users" for this field, the self registered accounts will also be added to the Users group by default

      If you selected Restricted as the User License Type:

        - You can only select a Restricted user group for this field
        - If you select a user group other than "RestrictedUsers" for this field, the self registered accounts will also be added to the RestrictedUsers group by default.

    - Enter text into the Header Text field to be displayed at the top of the Self Registration form.

    - Enter information into the Instruction HTML field to guide the end users about how to use the Self Registration form. The following text is entered by default:

      "<B>Note: </B> Enter user details and click Register to access the workgroup.
 User ID, Password, Last Name or First Name and Email are required fields."

    - Enter your own HTML code into the Custom HTML (Top of Page) or Custom HTML (Bottom of Page) field to customize the area above or below the Self Registration form. Note that all file references must be fully qualified, relative paths will not work. Please do not enter any header tags into this area. Some examples of header tags are <HTML>, </HTML>, <BODY>, </BODY>. If you wish to display an image on the Self Registration form, you can upload the file as a global file attachment.

5. Click OK to save your selections

Self Registration by End Users

To self-register, an end user should use the steps listed in the Self Registration section of the User Help Guide.

Administer Self-Registered Accounts

After a user has self-registered, the new account will be displayed in the User Accounts section.

IP Address Restrictions

Access to Tracker can be limited by IP address of the user attempting to access the workgroup. When this feature is enabled, a user will only be able to access the Login Page and other Tracker pages if the user's IP address matches one of the IP addresses

or IP Address ranges configured in the Allowed IP Addresses field. If the user's IP Address does not match a configured address or range, they will see an "Access Denied" message that can be customized with any desired wording and HTML code. This option only applies to the Login Page and other Tracker pages excluding the Submit Page for Unregistered Users and Knowledge Base pages as these features have their own sections for configuring IP Address restrictions. IP Address restrictions configured in this section take effect immediately after clicking OK to save the changes.

To enable IP Address restrictions:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Login Options link
4. Set the Enable IP Address Restriction option to "Yes"
5. Click on the Add button to add an IP address or range of addresses.

   For Type select "Single computer" to add a single IP Address or "Range of computers" to add a range of IP Addresses. For IP Address, enter the IP address, then click OK. For IP Address Range, enter the first IP Address in the range, then enter the last IP Address in the range and click OK. At least one IP Address or range must be entered when the this feature is enabled. The IP Address of the login user (the user making these changes) should also be added to the list as a single computer or within a range.

6. Enter any desired text or HTML into the Access Denied Message to customize what a user will see if they are denied access to the workgroup because their IP Address is not configured in the Allowed IP Addresses list. The variable "<ip_address>" can be used within this field such that it will be replaced with the actual IP address that was rejected when the Access Denied Message is displayed. Do not use the tags <HTML>, </HTML>, <BODY>, </BODY> or any other header tags in this field. When this feature is enabled, the Access Denied Message cannot be empty.
7. Click OK to save the changes

To edit an IP address/range in the Allowed IP Addresses list:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Login Options link
4. Click on the IP address/range you wish to modify and click on the Edit button. Make any desired changes, then click OK.
5. Click OK to save the changes

To remove an IP address/range in the Allowed IP Addresses list:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Login Options link
4. Click on the IP address/range you wish to remove and click on the Remove button
5. Click OK to save the changes

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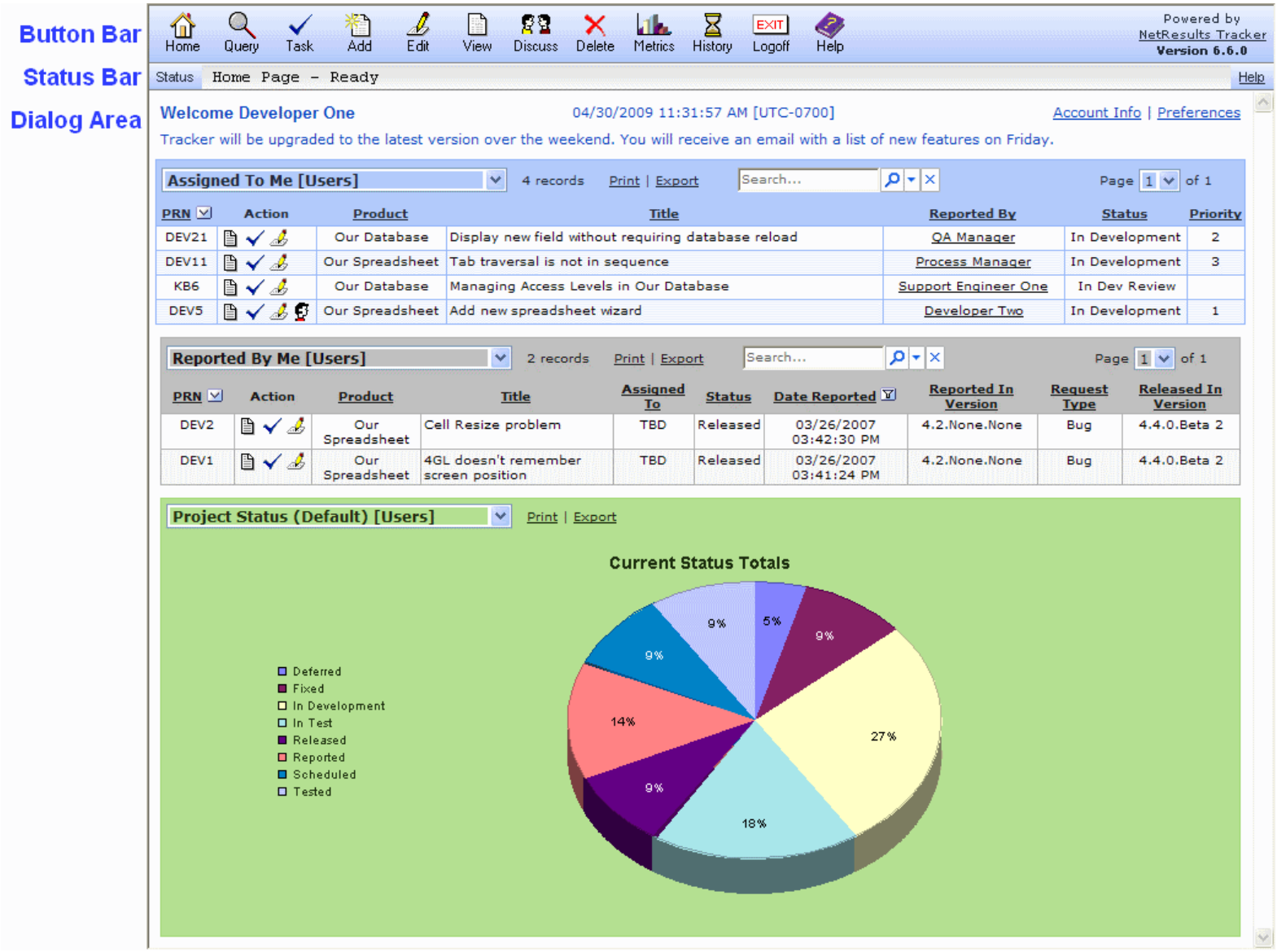
NetResults Tracker Help

Customizing The Home Page

After logging in, each user is presented with their home page. By default, this page displays a report displaying the records assigned to the user and the records reported by the user.



Home Page Reports

The Tracker Home Page displays reports generated by saved queries or charts. Any saved query or saved chart can be displayed on the Home Page. The saved queries and charts that can be displayed for each particular user depend on the user type (non-Restricted or Restricted) and on the user's group membership.

Up to three reports can be displayed on the Home Page. The results of each report are generated by the saved query or saved chart selected. The format of each report (e.g. column headings, sort order, chart properties) is determined by the saved report layout or saved chart layout associated with the saved query or chart selected.

By default in most Tracker templates, the following saved group queries are displayed on the Home Page:

For non-Restricted users

- The First Home Page Report is called "Assigned To Me" and is generated by a saved group query called "Assigned To Me [Users]". This saved group query is accessible to all non-Restricted users and returns all records assigned to the user currently logged into Tracker. The saved report layout associated with this report is called "Home Report 1 [Users]".
- The Second Home Page Report is called "Reported By Me" and is generated by a saved group query called "Reported By Me [Users]". This saved group query is accessible to all non-Restricted users and returns all records added by the user currently logged into Tracker. The saved report layout associated with this report is called "Home Report 2 [Users]".

For Restricted users
The First Home Page Report is called "Added By Me [RestrictedUsers]". The saved report layout associated with this saved query is "Added By Me [RestrictedUsers]".

Customizing the Home Page

The following elements of the Home Page reports can be customized. Click on one of the items listed below to see details:

- Saved queries or charts selected for each of three Home Page reports
- Criteria used to generate a particular saved query or chart
- Layout associated with a saved query or chart

Selecting a Saved Query or Chart for one of the Home Page Reports

To temporarily select a different saved query or chart to be displayed for any of the Home Page reports while you are logged in, you can click on the pulldown menu displayed at the top of one of the Home Page reports. All personal and group saved queries and / or saved charts to which you have access will be displayed in the pulldown.

To select a different saved query or chart to be displayed for any of the Home Page reports by default when you log in, you can select the reports by clicking on the Personal Preferences link in the upper right corner of the Home Page. In the Personal Preferences page, scroll down to the Report Settings section. Select one of the saved queries or saved charts listed in the pulldown menu for either the First , Second, or Third Home Page Report fields. Click OK to save your selection. You also have the option to select "<No Report>" for the Second and Third Home Page Report fields.

To set the Home Page reports to be displayed by default when any new user accounts are added to the workgroup, set the First, Second, and Third Home Page Report fields in the User Preferences section.

You also have the option of creating your own saved query or saved chart to be used as one of the Home Page reports. Instructions for creating a new saved query can be found in the Using Saved Queries & Reports Help section. Steps for creating a new saved chart can be found in the Metrics Help section.

Changing the criteria used to generate a Saved Query or Saved Chart displayed as one of the Home Page Reports

To modify the criteria in a Saved Query, review the information in the section Edit a Saved Query. To modify the criteria in a Saved Chart, review the information in the section Edit a Saved Chart section.

When a Saved Query is selected as one of the Home Page Report, the way this report is displayed (columns, field order, sort order) on the Home Page is based on the settings of the saved report layout associated with the Saved Query selected. You can either choose a different report layout to be associated with a Saved Query or you can edit the report layout already associated with a Saved Query. For information on either of these options, please review the Saved Reports section.

Similarly for the Saved Charts, each Saved Chart has a Chart Layout associated. You can choose a different chart layout or edit an existing chart layout to change the chart's formats (e.g. whether it is a bar chart or pie chart, whether it has a legend, etc.). Information on Chart Layouts can be found in the Metrics section.

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NetResults Tracker Help

Maintenance Overview

The Maintenance section contains tools and utilities that are typically used on very rare occasions. The Change User Mode section allows you to put the workgroup into a mode where only a single user can login to customize the system or other maintenance activities. The Delete Records section allows you to permanently delete a set of records from the workgroup. This is intended to be used to delete test records added before a workgroup is rolled out and used in production.

The items in the Utilities section should only be used under the direction of NetResults Technical Support. Use of these utilities without the explicit direction of Technical Support may result in permanent damage or loss of data.

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When performing maintenance or making administrative changes to your workgroup, you may find it useful to block the workgroup from user access. The Single User-Mode is a facility for you to logoff any active user sessions and block the workgroup, so that only you are the only admin user that can access it.

Change User Mode

To enable Single-User Mode in the workgroup.

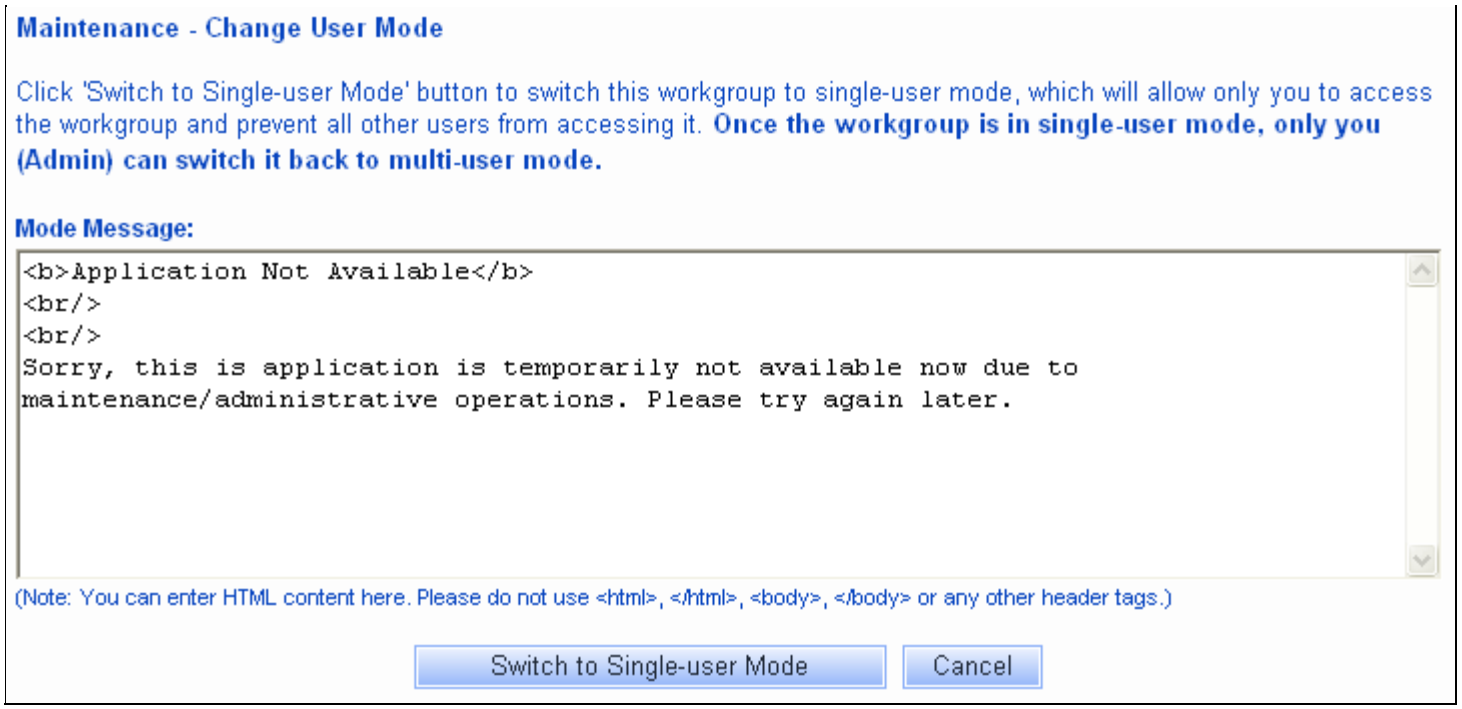
WARNING: Once the Workgroup is in Single-User Mode, only the user that placed the workgroup in this mode has the ability to switch it back, unless it is done through WMS. Any user that has Admin privileges will have this feature available. For example, if the QA Manager has the Admin privilege, and is the user that enables Single-User mode for the workgroup, the QA Manager would then be the only user that can switch the workgroup back to Multi-User Mode.

1. Login to the workgroup as the Admin
2. Click the Admin icon in the button bar
3. Click on the Maintenance link
4. Click on the Change User Mode button
5. If you would like for users who attempt to browse to the workgroup to see a custom message. (Rather than the default message that appears in the Mode Message Box) Enter a message in the Mode Message Box. The text you are entering will be treated as raw HTML. (So you can include links to other places) . However, please do not include <HTML>, </HTML>, <BODY>, </BODY>, or other HTML header tags as this HTML will be embedded in a web page that already has those tags.
6. Click Switch to Single-User Mode
7. Click OK to confirm the change
8. Click OK to accept the acknowledgment page

When other users attempt to login to a blocked workgroup, the custom message will be displayed and users will not be able to login. The User-Mode must then be changed to allow users to login to the workgroup again. Active users who were using the system when Single-User Mode was enabled, will get a session expired message and have to login again to use the workgroup.

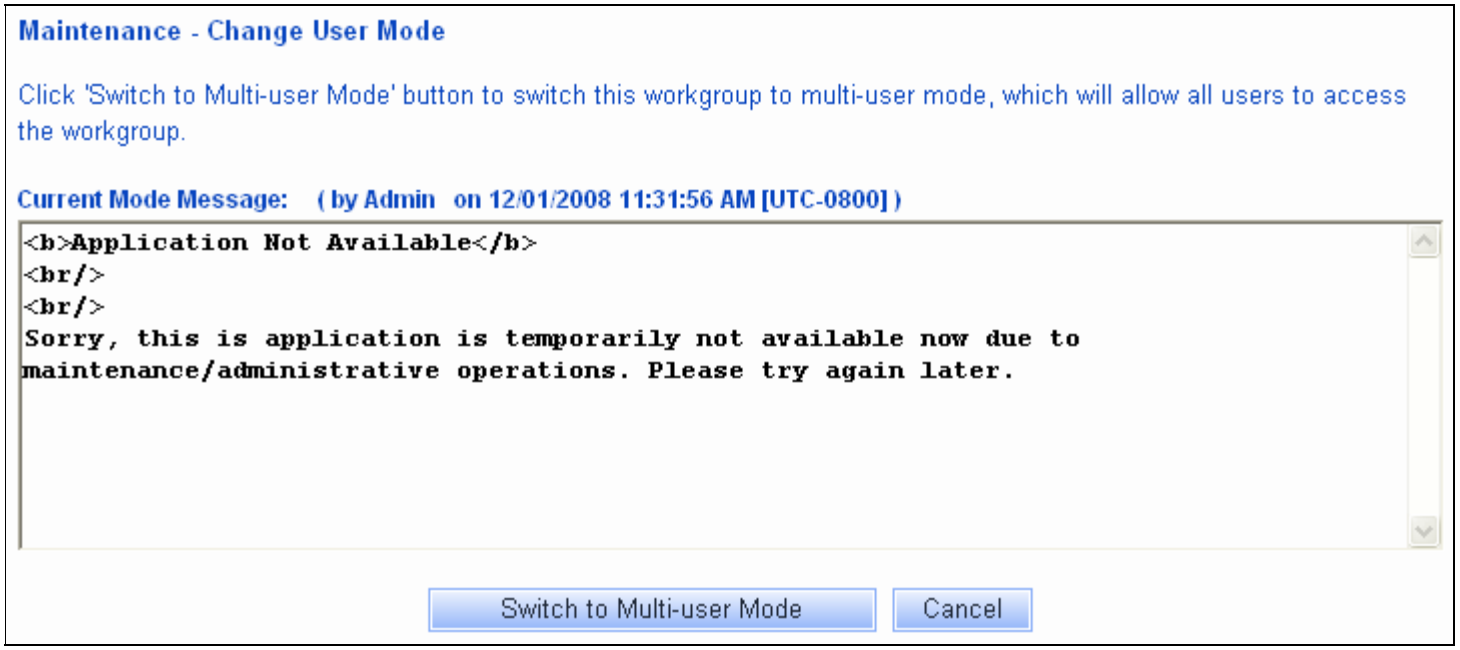
When enabling Single-User Mode, the following features will become unavailable, until the workgroup is placed back into Multi-User mode. Browsing to the Submit via Web or KB pages will result in the Mode Message being displayed.

- Self Registration
- Submit via Web page
- Knowledge Base (search, results and item pages)
- API / SDK (data, pulldown and user imports)
- Submit via Email
- Alerts



To change the workgroup back to Multi-User Mode

1. Login to the workgroup with the user account that was used to enable single-user mode
2. Click on the Admin icon
3. Click on the Maintenance link
4. Click on Switch to Multi-user Mode button
5. Click on OK to confirm the switch
6. Click OK for the acknowledgement page



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Overview

For various reasons you may wish to permanently remove records from the Tracker database. There are a few ways this can be done. First, you can remove all records. This is typically done when you finish an evaluation. Or, you can selectively delete some records that match certain criteria. This is done when you wish to remove records related to an old project or obsolete release. Each method is described in detail below.

Delete Records via the Maintenance Option

Caution: This operation is permanent. It cannot be undone. Please make a backup of your database prior to performing this operation.

While this operation will remove all records, attachments, and history, it will leave other Tracker configuration unchanged (customized fields, option menus, workflow, users, user groups, email configuration, etc.).

This operation is typically used at the end of an evaluation to remove all test records.

To delete all records as well as all attachments and all record history:

1. Login to the workgroup as Admin
2. Click the Admin icon in the button bar
3. Click on the Maintenance link
4. Click on the Delete Records button
5. Choose the radio button for one of the options below to select which records should be permanently deleted from the workgroup:

   Delete <option> records
   This option allows you to delete all records or delete only those records that were added using a certain form. Choosing the pulldown item "<all forms>" for this option will permanently delete all records. Choosing the pulldown item "<all> <Form Name> form" will permanently delete the records that were added using the selected form. The forms listed are the forms that have been created in the Forms section.

   Delete <option> records with History Date on or After <date> and Before <date>
   This option allows you to delete all records that contain an entry in the Record History with a date within a certain range.

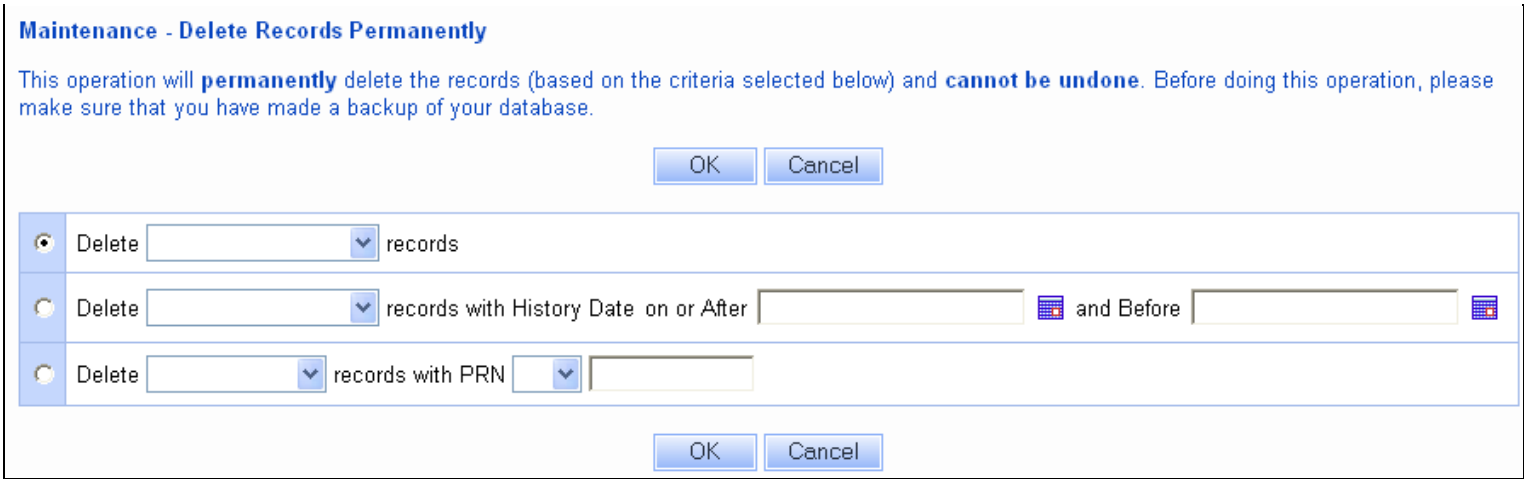
   Choosing the pulldown item "<all forms>" for this option will permanently delete all records that contain a History entry within the selected date range. Choosing the pulldown item "<all> <Form Name> form" will permanently delete the records that were added using the selected form that contain a History entry within the selected date range. The forms listed are the forms that have been created in the Forms section.

   You can click on the calendar icon to select a date or you can manually enter a date in the appropriate format (e.g. "mm/dd/yyyy HH:MM:SS AM/PM" or the date & time format selected in the Preferences section.). The time component is optional. Click on the day to select the date to be entered into the date field. Click < or > to move backward or forward one month or click << or >> to move backward or forward one year. Click Now to set the date field to be the current date and time. click Set Time if you wish to include the current time information in the field. Click on Exclude Time if you want to exclude the time information from being included in the date field. Click OK to choose the highlighted date to be entered into the date field. Date will be selected and calendar dismissed when a date is clicked when the time is excluded. Dates displayed in red are non-business days according to the Business Days option in the Preferences section. Click Cancel to dismiss the calendar without saving changes.

   Delete <Form Name> records with PRN <operator> <PRN>
   This option allows you to permanently delete records created using a certain form that have particular PRN or a PRN in a selected range. The forms listed are the forms that have been created in the Forms section. Select "=" to select a particular PRN to be deleted or select one of the other operators to specify a range of PRNs to be permanently deleted. For example, selecting "Delete Record Form records with PRN <= 20" will permanently delete all records from PRN 0-20 where "0" is the First Record Number specified for the form in the Forms section.

6. Click on the OK button to proceed with permanently deleting the selected records. Click OK when prompted to confirm the operation. Click OK when a confirmation page is displayed to reflect the operation is complete.

Once this operation is complete, newly added records will start with the First Record Number specified for each form in the Forms section.



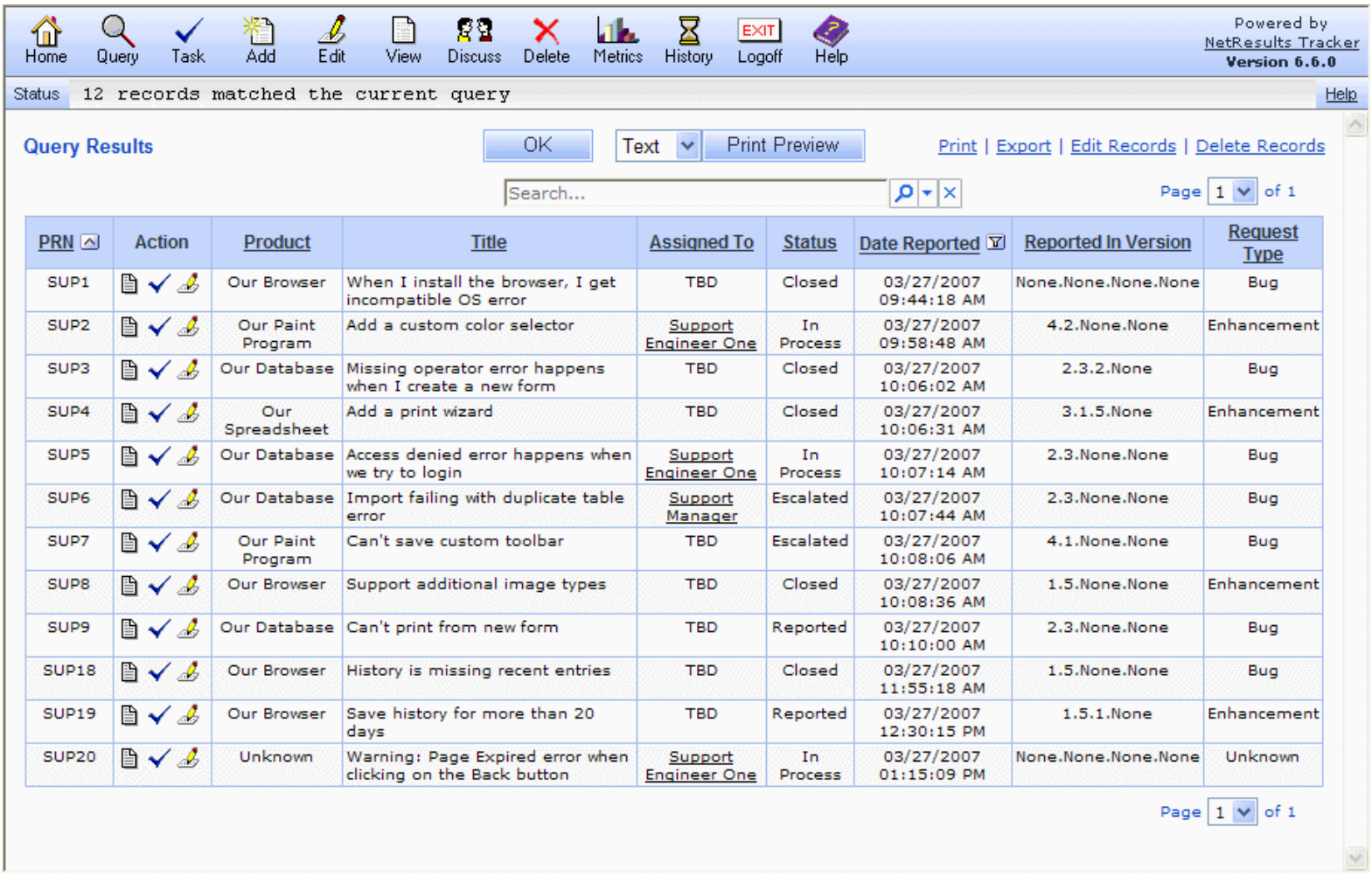
Selectively Delete Records via the Query Page

Caution: This operation is permanent. It cannot be undone. Please make a backup of your database prior to performing this operation.

This operation will delete the records that match certain criteria as well as the attachments to those records. It will also delete all record history associated with those records, except for one history entry (per deleted record) which is created to indicate when (and by which user) the records were deleted. This operation can be used to remove all "closed" records or records from an old release or project that has been completed.

To selectively delete some records please follow the instructions below.

1. Login to the workgroup as Admin
2. You may need to configure your system (at least temporarily) to allow this operation (as by default it is disabled).
   - The option Remove Records from Database on 'Delete' Operation in the General Preferences page should be set to "Yes" (by default it is set to No). This will make the change permanent (data will be deleted from the database).
   - The user you are logged in as (e.g. Admin) must be a member of at least one User Group that has the "Edit Query Result Set" privilege. Verify that the Admins group has the Edit Query Result Set privilege (by default it does). This will allow you to perform an operation (in this case Delete) on all records that match a Query.
   - The user you are logged in as (e.g. Admin) must be a member of at least one User Group that has the "Delete" privilege. Verify that Admins group has the Delete privilege (by default it does). This will allow you to delete records.
3. Click the Query icon in the button bar.
4. Enter the criteria for the records you wish to delete and click on the Run Query button
5. On the query results page, click the Delete Records button.
6. Click OK for the confirmation dialog and ALL the records matching the current query will be deleted permanently from the database. Note: Even though only the first page of records is displayed, the Delete Records operation will delete all the records returned by the query. The total number of records returned by the current query will be displayed in the status area just below the button bar.
7. If you changed the Remove Records from Database on 'Delete' Operation to "Yes", you may wish to change it back to No so that any other Delete operations are not permanent.



PRN	Action	Product	Title	Assigned To	Status	Date Reported	Reported In Version	Request Type
SUP1		Our Browser	When I install the browser, I get incompatible OS error	TBD	Closed	03/27/2007 09:44:18 AM	None.None.None.None	Bug
SUP2		Our Paint Program	Add a custom color selector	Support Engineer One	In Process	03/27/2007 09:58:48 AM	4.2.None.None	Enhancement
SUP3		Our Database	Missing operator error happens when I create a new form	TBD	Closed	03/27/2007 10:06:02 AM	2.3.2.None	Bug
SUP4		Our Spreadsheet	Add a print wizard	TBD	Closed	03/27/2007 10:06:31 AM	3.1.5.None	Enhancement
SUP5		Our Database	Access denied error happens when we try to login	Support Engineer One	In Process	03/27/2007 10:07:14 AM	2.3.None.None	Bug
SUP6		Our Database	Import failing with duplicate table error	Support Manager	Escalated	03/27/2007 10:07:44 AM	2.3.None.None	Bug
SUP7		Our Paint Program	Can't save custom toolbar	TBD	Escalated	03/27/2007 10:08:06 AM	4.1.None.None	Bug
SUP8		Our Browser	Support additional image types	TBD	Closed	03/27/2007 10:08:36 AM	1.5.None.None	Enhancement
SUP9		Our Database	Can't print from new form	TBD	Reported	03/27/2007 10:10:00 AM	2.3.None.None	Bug
SUP18		Our Browser	History is missing recent entries	TBD	Closed	03/27/2007 11:55:18 AM	1.5.None.None	Bug
SUP19		Our Browser	Save history for more than 20 days	TBD	Reported	03/27/2007 12:30:15 PM	1.5.1.None	Enhancement
SUP20		Unknown	Warning: Page Expired error when clicking on the Back button	Support Engineer One	In Process	03/27/2007 01:15:09 PM	None.None.None.None	Unknown

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NetResults Tracker Help

Global File Attachments

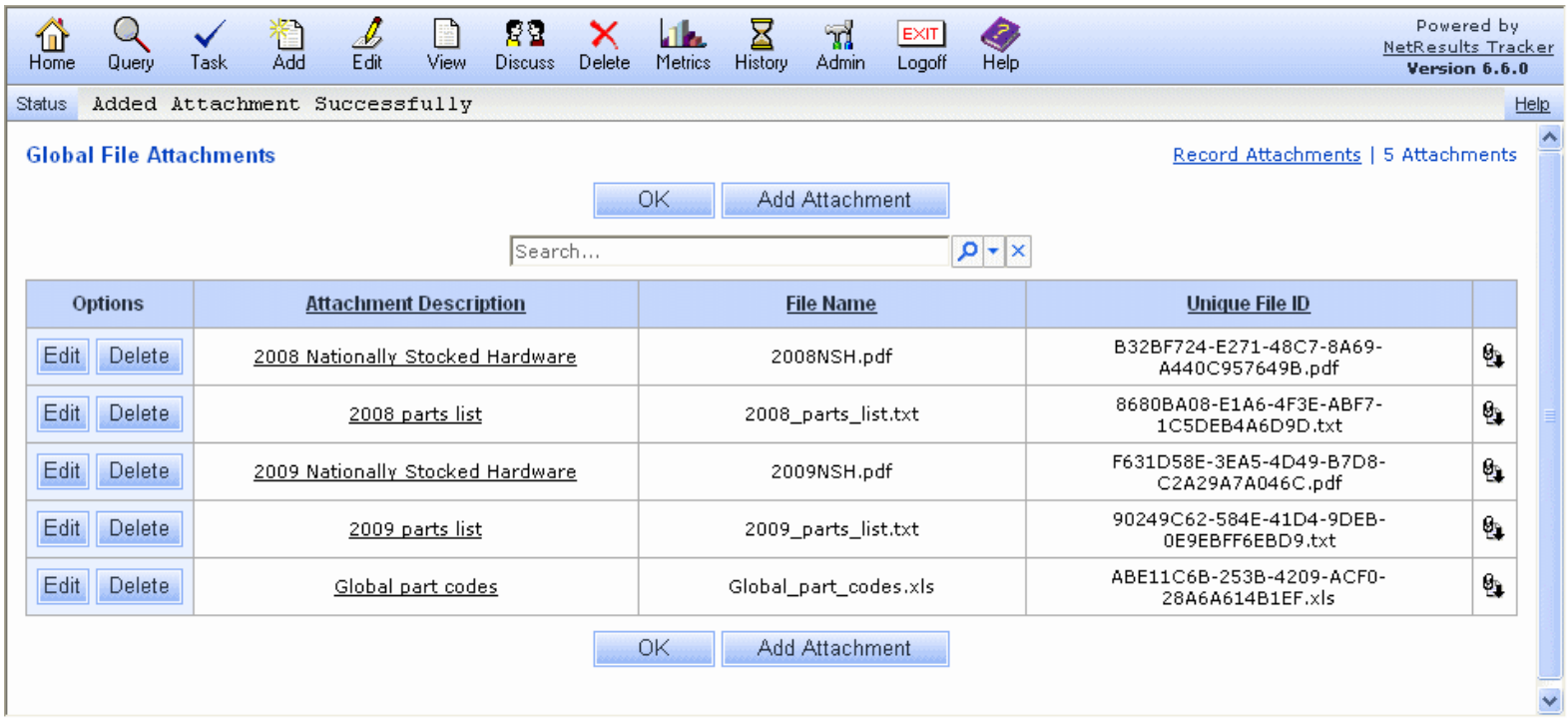
In Tracker, there are 2 types of attachments, Global file attachments and record attachments. global file attachments are file attachments that can be accessed by anyone, including unregistered users who do not have the ability to login to the workgroup. Global attachments are not associated with one particular record. Record attachments are file or URL attachments that are associated with one particular record. Record file attachments can only be accessed by a user with a Tracker user account who is actively logged into the workgroup.

Global File Attachments List

A complete list of global file attachments is available in the Admin section. Actions such as viewing, editing, deleting and downloading global file attachments can be done using the buttons and links for the attachment entry. A link to the Record Attachments list is also available in the upper right corner of this page.

To view the Global File Attachments List:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Global File Attachments link



The list shows all global file attachments for the entire workgroup. The list can be sorted by clicking on one of the column headings. The first click on a column heading will sort the list in ascending order. The second click on the same column heading will sort the list in descending order.

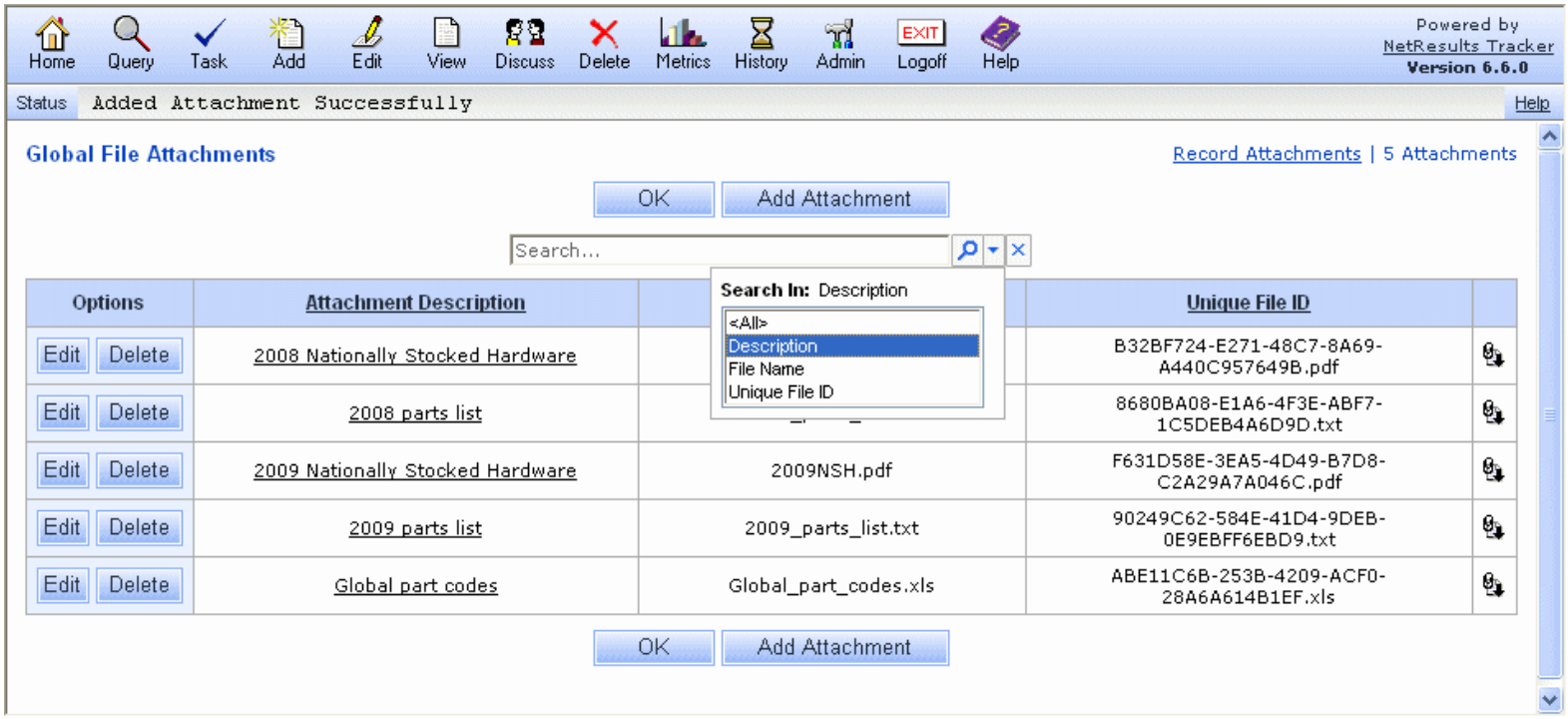
Attachment Description
A description of the file attachment. The text displayed here is entered when the global file attachment is created. It can be edited at any time.

File Name
The actual name of the file that was attached.

Unique File ID
An alphanumeric string that uniquely identifies the file that was attached. This is set at the time the file is attached.

Searching for Global File Attachments

You can search for attachment(s) using the Search section at the top of the Global File Attachment List.



To search:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Global File Attachments link
4. Type in a key word(s) or phrase into the Search text box
5. If desired, click on the dropdown icon to select in which fields you wish to search. Selecting "<All>" will search all fields for the key word(s) or phrase entered (this is the default selection). Or, you can search in "Description", "File Name" or "Unique File ID". You can select multiple fields by holding down the Ctrl button on your keyboard as you make your selections.
6. Click on the Search icon to run the search. Any matches will be displayed.

You can click on the remove icon to remove the search criteria and reset to the defaults (no key word(s) or phrase in Search text box and "<All>" selected). This will also display the full list of global file attachments.

Adding a Global File Attachment

Global file attachments can only be created by a user with the Admin privilege.

To add a global file attachment:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Global File Attachments link
4. Click on the Add Attachment button
5. Enter a meaningful description of this attachment in the Attachment Description field
6. Click on the Browse button to select the file you wish to attach
7. Select the file and click on the Open button
8. Click on the OK button to save the global file attachment

Viewing a Global File Attachment

A global file attachment can either be viewed from the Global File Attachments List or it can be viewed using a direct URL which can be accessed by any user (including those who do not have a Tracker user account).

To view a global file attachment from the Global File Attachments List:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Global File Attachments link
4. Click on the link in the Attachment Description column

To view a global file attachment using a direct URL which can be accessed by any user (including those who do not have a Tracker user account), use the

following URL:

http://***servername***/***workgroupname***/viewattachment.asp?id=<***Unique File ID***>

where ***servername*** is the TCP/IP host name of the machine where Tracker is installed and ***workgroupname*** is the name of the workgroup where the attachment is located and ***Unique File ID*** is the Unique File ID of the global file attachment you are trying to access. For example, using the first global file attachment listed in the sample image of the File Attachments List and assuming the TCP/IP host name of the Tracker is "MYSERVER" and the workgroup name is "pteval", the direct URL to view this attachment would be:

http://myserver/pteval/viewattachment.asp?id=A037C6B2-A6E0-4845-840B-5DFA8FB42751.pdf

Downloading a Global File Attachment

To download a global file attachment, click on the download icon to the right of the attachment. Click on the Save button to save the file. You will be prompted to select the location where you wish to save the file.

Editing a Global File Attachment

The Attachment Description for a global file attachment can be edited at any time.

To edit the attachment description of a global file attachment:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Global File Attachments link
4. Click on the Edit button to the left of the attachment you wish to edit
5. Make any desired changes to the Attachment Description and click OK

Deleting a Global File Attachment

You may wish to delete a global file attachment.

To delete a global file attachment:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Global File Attachments link
4. Click on the Delete button to the left of the attachment you wish to delete
5. Click OK to confirm

Record Attachments

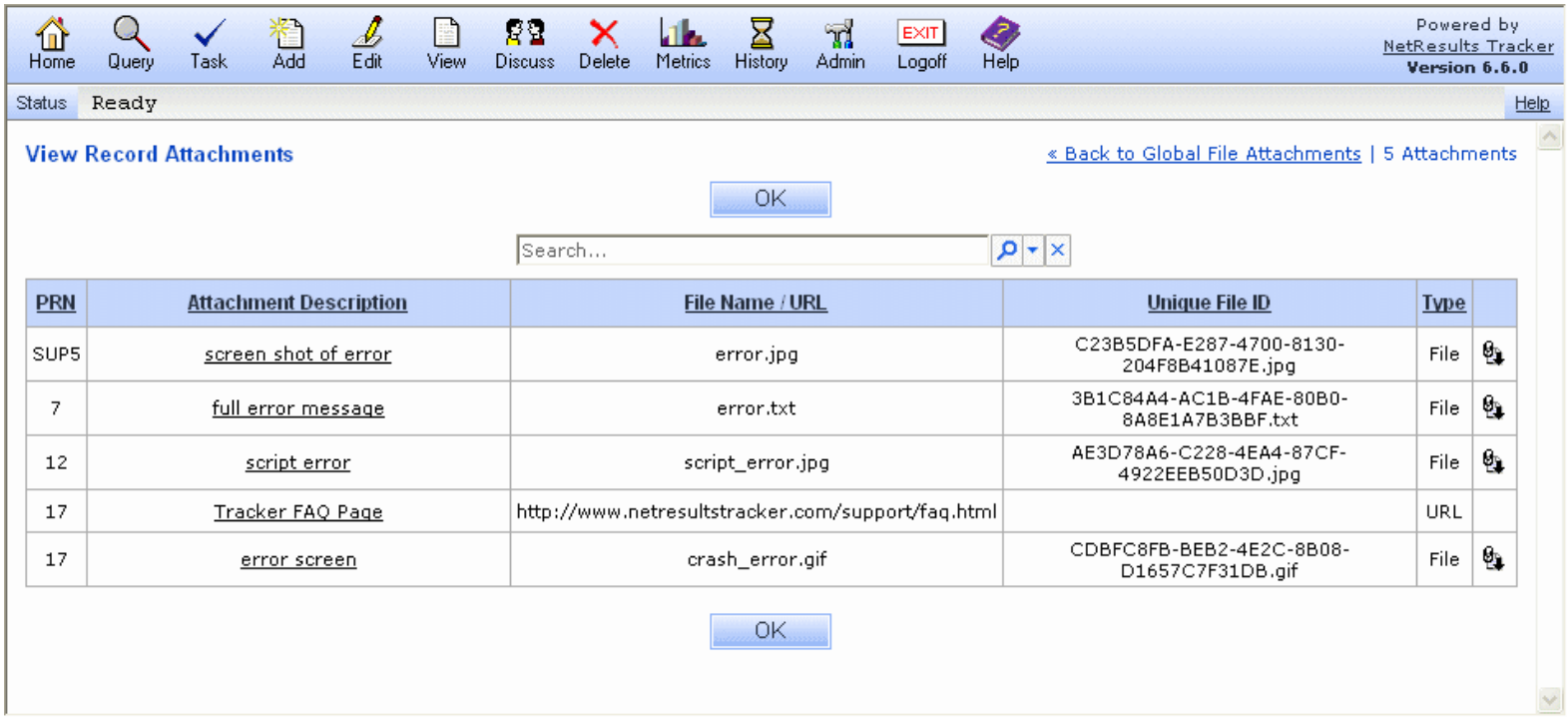
Record attachments are file or URL attachments that are associated with one particular record. Record file attachments can only be accessed by a user with a Tracker user account who is actively logged into the workgroup. The only exception is when the Knowledge Base feature is enabled. In that case, any record file attachments that are associated with a record that is published in the Knowledge Base can be accessed by any user, including unregistered users who do not have a Tracker user account.

Record Attachments List

A complete list of record attachments is available in the Admin section. Actions such as viewing and downloading record attachments can be done using the buttons and links for the attachment entry. Record attachments can only be added, edited and deleted from the Edit Attachments section within a particular record. Those actions are described in the Record Attachments section of the User Guide. A link to the Global File Attachments list is also available in the upper right corner of this page.

To view the Record Attachments List:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Global File Attachments link
4. Click on the Record Attachments link in the upper right corner of the page



The list shows all record attachments for the entire workgroup. The list can be sorted by clicking on one of the column headings. The first click on a column heading will sort the list in ascending order. The second click on the same column heading will sort the list in descending order.

PRN
The record number to which the attachment belongs. To go to the View Page of the associated record, click on the PRN.

Attachment Description
A description of the file attachment. The text displayed here is entered when the attachment is created. It can be edited at any time via the Edit Attachments page.

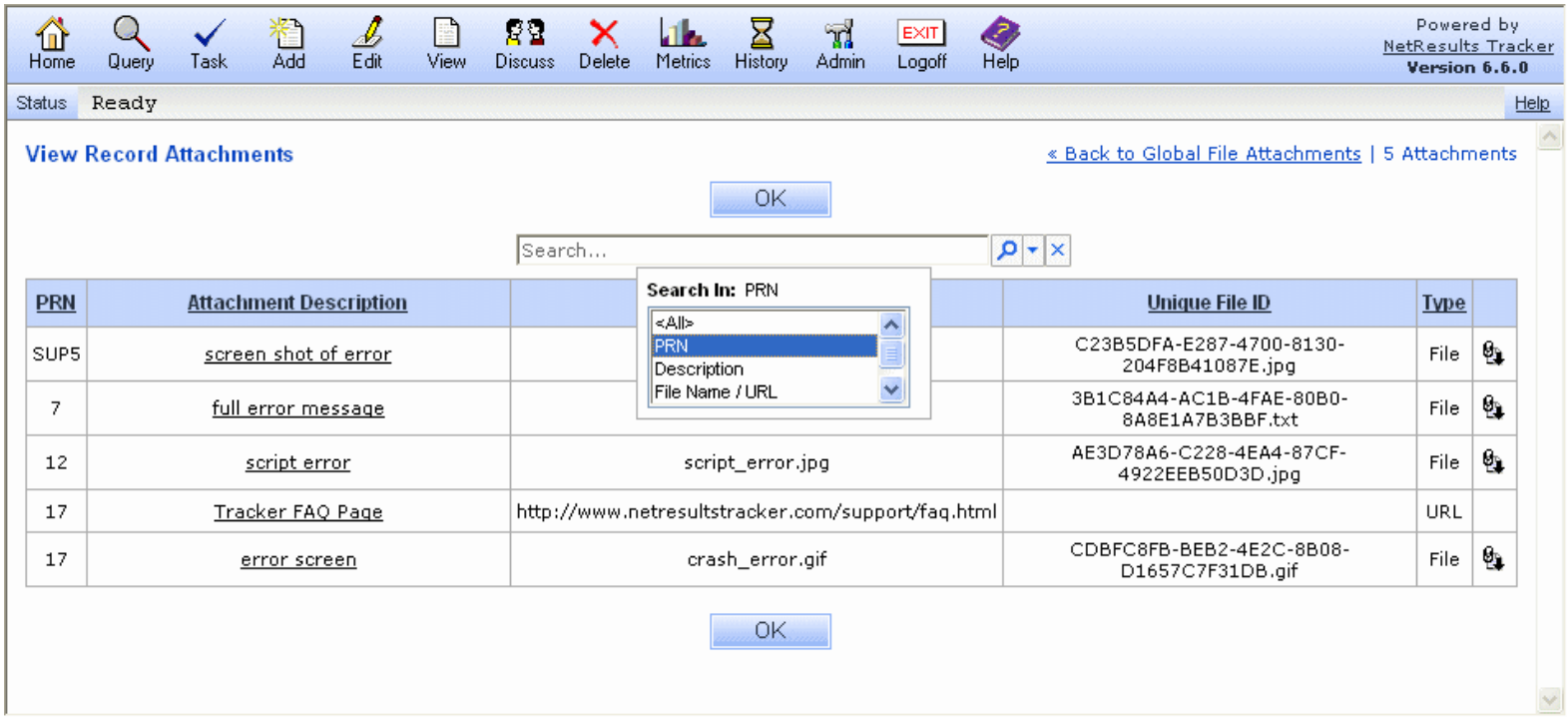
File Name/URL
If Type is "File", the File Name/URL is the actual name of the file that was attached to the record. If Type is "URL", the File Name/URL is the actual URL that was attached to the record. For URL attachments, the URL can be edited at any time via the Edit Attachments page.

Unique File ID
An alphanumeric string that uniquely identifies the file that was attached. This is set at the time the file is attached. A unique file ID is not created for URL attachments.

Type
This notes the kind of attachment: File or URL.

Searching for Record Attachments

You can search for attachment(s) using the Search section at the top of the Record Attachment List.



To search:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Global File Attachments link
4. Click on the Record Attachments
5. Type in a key word(s) or phrase into the Search text box
6. If desired, click on the dropdown icon to select in which fields you wish to search. Selecting "<All>" will search all fields for the key word(s) or phrase entered (this is the default selection). Or, you can search in "PRN", "Description", "File Name/URL" or "Unique File ID". You can select multiple fields by holding down the Ctrl button on your keyboard as you make your selections.

   When searching in the PRN field, the short name of a form cannot be used as part of the search criteria. Therefore, if you are searching for KB22, enter the number "22". However, this will return similar matches in other forms (e.g. SUP22, DEV22) and will also return other records with a similar PRN like KB122, KB222, KB322, etc.

7. Click on the Search icon to run the search. Any matches will be displayed.

You can click on the remove icon to remove the search criteria and reset to the defaults (no key word(s) or phrase in Search text box and "<All>" selected). This will also display the full list of record attachments.

Viewing a Record Attachment

To view a record attachment, click on the link in the Attachment Description column.

Downloading a Record Attachment

To download a file attachment, click on the download icon to the right of the attachment. Click on the Save button to save the file. You will be prompted to select the location where you wish to save the file.

Editing a Record Attachment

The Attachment Description for a record attachment can be edited at any time via the Edit Attachments page.

Deleting a Record Attachment

A record attachment can be deleted via the Edit Attachments page.

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NetResults Tracker Help

Importing Pulldown Items into Tracker

Overview

Option menu items can be imported into Tracker from a Microsoft Excel spreadsheet or a Microsoft Access database. For example, you may have a large number of option menu items that are listed in a legacy database. You can import those items into Tracker to avoid having to manually create each item. Items can be imported into any pulldown field except those configured as a user pulldown.

Preparing to Import Data

The following items will guide you through preparing for the data import:

Configure the Workgroup

Before starting the import process, Tracker must be configured with the necessary pulldown fields that you wish to use.

Prepare the Data File

Data can be imported from Access or Excel. The data file is the Access table or Excel sheet that holds the pulldown items to be imported. In the Item data file, the first row should be a header row to identify the name of each column in the data. All other rows are the actual data to be imported as shown in the example below. You do not have to use the column names as listed below as you will be able to map each column to a property during the pulldown import process. Only a column with the item labels is required (the "Label" column in the example below). However, you can include additional columns if you wish to specify any of the following properties for each item:

Order - The order in which the item is displayed in the pulldown field relative to the other items. Any non-negative integer can be specified. When multiple items share the same order, the items are sorted alphabetically.

Value is Public - This property determines whether an item is displayed in the pulldown field when the field is displayed on the Submit Page or the Knowledge Base. If you wish to "hide" certain items from being displayed on these pages which are available to unregistered users, enter "No" as the value for this property. Otherwise, enter "Yes".

Obsolete - This property determines whether an item is available for selection on the Add, Edit and Task pages. Marking an item as obsolete indicates that it should not be selected for any new records and should not be available for selection when updating existing records, but records that already have the item selected should remain unchanged. If you wish to mark an item as obsolete, enter "Yes" for this property. Otherwise, enter "No". If an existing item is updated via the import tool to mark it as obsolete (value = "Yes"), any existing pulldown dependencies that involve the item will be removed.

Label	Order	Public	Obsolete
Product A	1	Yes	No
Product B	2	Yes	No
Other	99	Yes	No

Use the Import Standards section to make sure the items data is valid and is displayed in the right formats. This step is crucial as it will minimize the effort involved in running the import. If the data is not valid, the import will fail and you will have to correct the data and perhaps restart the import tool more than once each time invalid data is found.

Enabling the Create Pulldown Items Privilege

The Create Pulldown Items privilege is available for the Import feature and is disabled by default. It can be enabled for the Admins user group. This privilege allows option menu items to be imported from a data file. When this privilege is enabled, an "Import" link will be available in the Manage Menu Items page for each pulldown field.

To enable this privilege:

1. Login to the workgroup as Admin

2. Click on the Admin icon
3. Click on the User Accounts link
4. Click on the Manage Groups button
5. Click on the Edit button to the left of the Admins user group
6. Check the box for the Create Pulldown Items privilege, then click OK to save.
7. A user will have to logoff and log back in for the change to take effect

---

File Structure

Each workgroup has an "Import" folder at:

installDir\workgroup\Import

where *installDir* is the directory where Tracker was installed (by default, C:\Inetpub\wwwroot\NetResultsTracker\).

When a user logs in and attempts to import data, a user-specific folder is created in the Import folder. For the Admin user, this folder is called "Admin". For all other users, the folder is labeled with a number. Under the user-specific folders are these folders:

Data
This folder contains the data files that are selected during each import attempt. A sub-folder called "PldnItems" is where the data files for pulldown items are copied when selected during the import process.

Logs
This folder contains the log files for each import attempt. Log files can be viewed from within Tracker using the steps in the Logs section.

A sub-folder called "PldnItems" is where the log files for pulldown items are saved during the import process. The file called "ptitemimportlatestlog.txt" is the log file that contains the information for the latest import attempt and "ptitemimportlog.txt" is the full log.

Logs

The full details of each import attempt are logged.

To view a log file from a Pulldown Item Import:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the desired field
5. Click on the Import link in the upper right corner
6. Select the option View Log File
7. In the pulldown, select whether you wish to view the "Latest Log", which will show only the information for the last pulldown item import attempt, or "Full Log", which will show the entire log for all pulldown item import attempts
8. Click Back to return to the Import Pulldown Items menu

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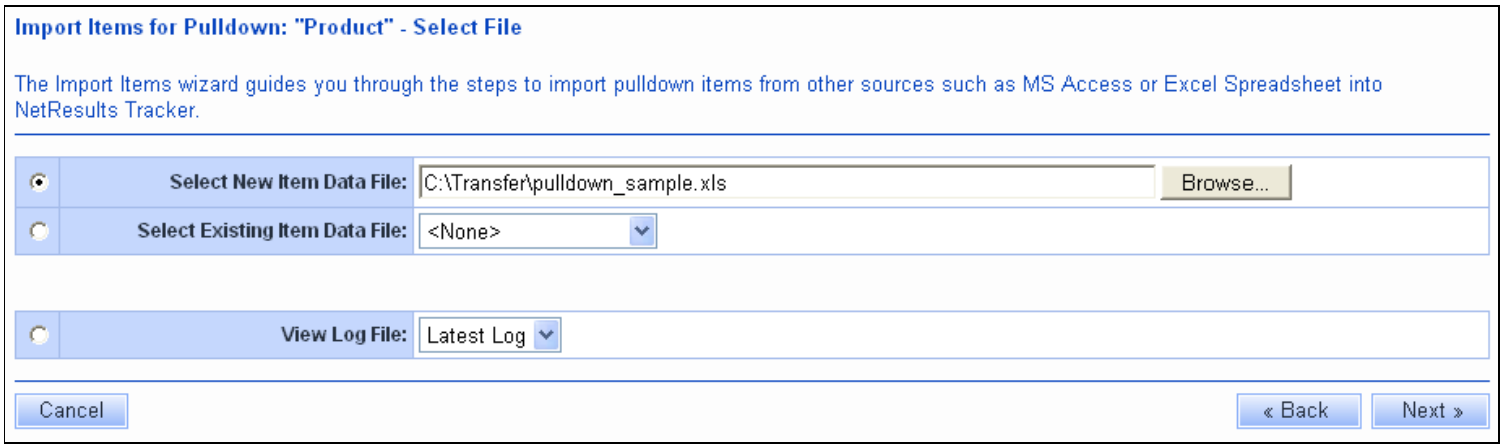
Pulldown Import Process

Use the following steps to import option menu items into a pulldown field.

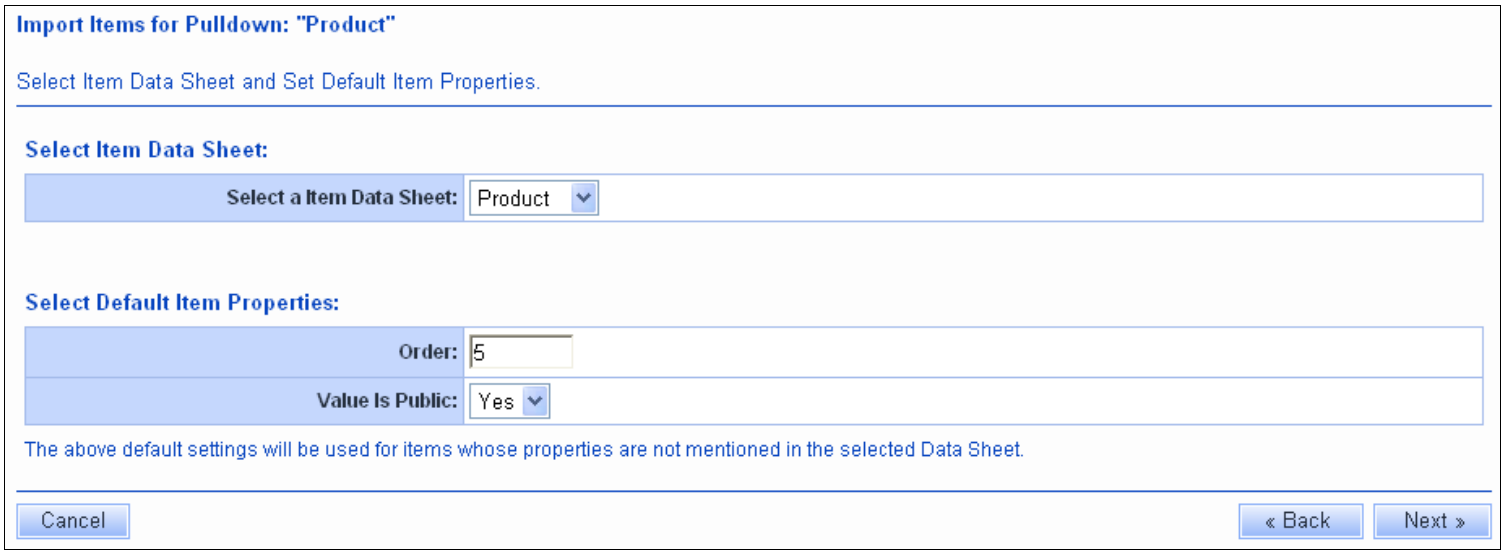
1. It is important that your system be backed up before you import pulldown items as there is no way to undo this operation. If Tracker is installed on your own server, please refer to the Backup Knowledge Base article. If you are a customer of the hosted service (NetResults hosts Tracker on your behalf), please refer to the NRTO Backup KB article instead.
2. Login to the workgroup as a user that is a member of a user group with the necessary privileges
3. Place the workgroup into Single User Mode. The workgroup must be in single user mode before data can be imported.
4. Click on the Admin icon
5. Click on the Fields link
6. Click on the Items button to the left of the pulldown field which will receive the data
7. Click on the Import link in the upper right corner of the page. The Import link will not be available for a pulldown field that is configured as a user pulldown.
8. A page where you can select the data file to be used will be displayed



If you would like to import data from a new file, select the "Select New Item Data File" option and click Browse to browse to the location of the data file (the Microsoft Access database or Microsoft Excel spreadsheet that contains the data you wish to import). The file you selected will be copied into the import folder that corresponds to the user who is logged in.

Or, if you would like to import data from a file that was used for a previous import attempt, select the option "Select Existing Item Data File", then select a file in the pulldown.

9. Click Next to proceed
10. The following page will be displayed



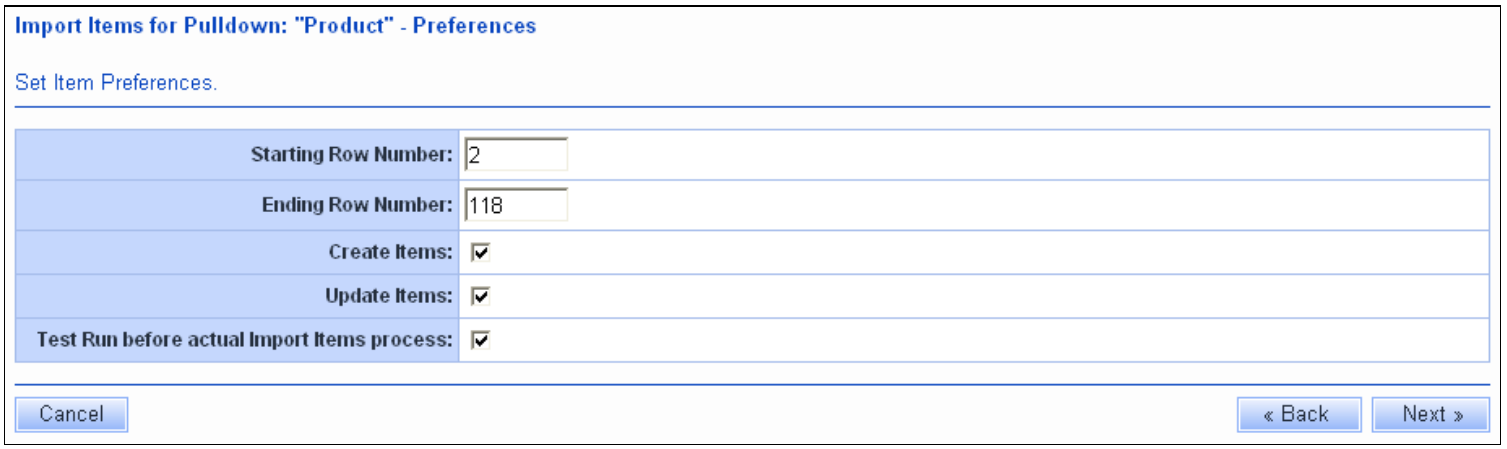
For Select an Item Data Table/Sheet, select the table/sheet in the Item data file that contains the option menu items that you wish to import.

In the Select Default Item Properties, make selections for properties the option menu items will inherit if they are not specified in the Item data file. For Order, enter a non-negative integer to specify the order in which the item should be displayed relative to other items. For Value is Public, select "Yes" if the items should be available for selection when the pulldown is displayed on the Submit Page or on the Knowledge Base Search Page. Select "No" if the items should not be available on these pages that are available to unregistered users.

11. Click Next to proceed
12. A page where you can map the columns in the Item Data file to the item properties in Tracker will be displayed.

For Source Item Data Table/Sheet Fields, select the column heading that corresponds to the property in the Expected Fields column. If the Item data file does not contain columns for the Order, Value is Public or Obsolete properties, select "<Ignore>". When selecting <Ignore> for Order or Value is Public, the items will inherit the settings selected for Select Default Item Properties on the previous page. When selecting <Ignore> for Obsolete, the items will be set such that they are not obsolete.

13. Click Next to proceed
14. A preferences page will be displayed



Starting Row Number
Enter the number of the first row in the user data file that contains the data you wish to import. This is generally "1" (the first row after the column name row) unless you wish to import only some of the data in the user data file.

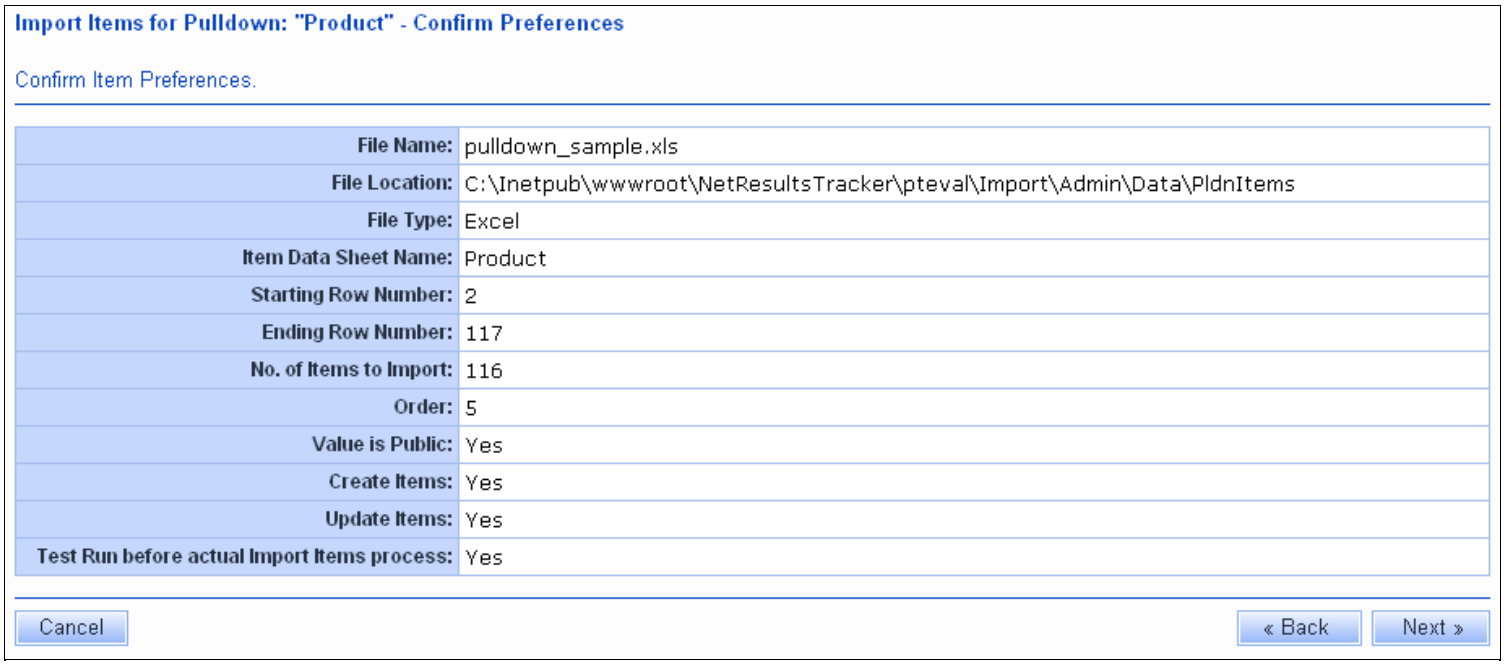
Ending Row Number
Enter the number of the last row that contains the data you wish to import from the data file

Create Items
Check the box for this option if you want the import tool to create a new item in the pulldown field for each item in the Item data file that does not match an item that already exists in the pulldown field

Update Items
Check the box for this option if you want the import tool to update any item in the Item data file that matches an item that already exists in the pulldown field. For example, let's say the value "Product A" already exists in the pulldown and has Order set to "10" and Value is Public set to "Yes" and the Item data file contains a row for "Product A" with Order set to "5" and Value is Public set to "No". If the "Update Items" box is checked, the import tool will change the properties for the item "Product A" to reflect what is specified in the Item data file (Order will be changed from "10" to "5" and Value is Public will be changed from "Yes" to "No").

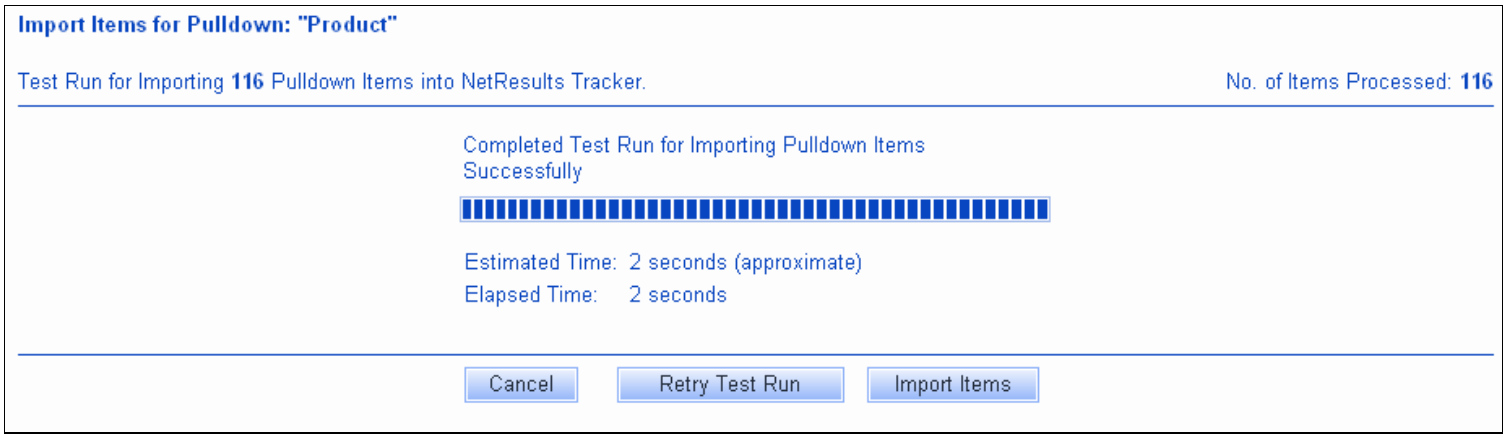
Test Run before actual Import Items process
Checking the box for this option will configure the import tool to run a test of the import and display the results before actually importing any items into the workgroup. Enabling this option is recommended as it will help you find any data inconsistencies that might have been missed during the data preparation process.

15. Click Next to proceed
16. A confirmation page will be displayed.

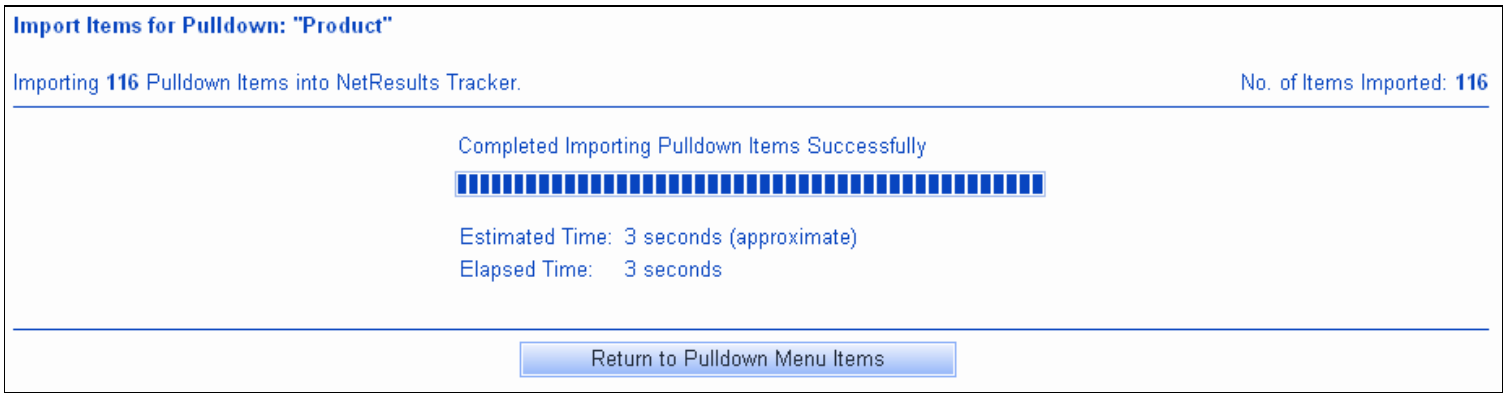


Click on the Back button if you wish to make any changes to the import settings, click Cancel if you wish to cancel the import or click Next to proceed.

17. If you chose to enable the Test Run option, click on the Test Run button. Once the test is complete, the results will be displayed. If the test run was unsuccessful, details will be displayed. Review the details for information about how to correct the issues. In most cases, it is a matter of correcting the data so it adheres to the data standards. After making corrections to the data file that is in the PldnItems folder, you can click on the Retry Test Run button to attempt the test run again. The test run will begin from the first problem item. For example, if you tried to import rows 1 - 10 and row 5 triggered an error, when you click on the Retry Test Run button, the test run will begin with row 5 instead of starting from row 1.



If the test run was successful or you did not enable the Test Run option, click on the Import Items button to run the actual import. The results will be displayed. Click on the Return to Pulldown Menu Items button to return to the items list.



If the import was unsuccessful, details will be displayed. Review the details for information about how to correct the issues. In most cases, it is a matter of correcting the data so it adheres to the data standards. After making corrections to the data file that is in the PldnItems folder, you can click on the Retry button to attempt the import again. The import will begin from the first problem item. For example, if you tried to import rows 1 - 10 and row 5 triggered an error, when you click on the Retry button, the import will begin with row 5 instead of starting from row 1.

Standards and Requirements for Data to be Imported

Preparing your data so that it adheres to the following standards prior to attempting to import the data will minimize the effort involved in the import. Data that does not comply to these standards will cause the import to fail. For each column in the pulldown data you plan to import, compare it to the information in the following table to ensure that the data adheres to the following standards. Please note that the import option is not available for a pulldown field configured as a user pulldown.

Item Data Column	Standards / Requirements
Label	• Should be a valid option menu item from the list of items for that pulldown (unless the option Create Items will be enabled during pulldown item import). If an option menu item is added on the fly by the import tool, it must adhere to the standards listed below. • Cannot have empty/null value • Characters " (quote), \ (backslash) and ~ (tilde) cannot be used • A maximum of 50 characters are allowed
Order	• Should only have characters 0 - 9 • Maximum value is 99999
Public	• The only valid values are "Yes" or "No"
Obsolete	• The only valid values are "Yes" or "No"

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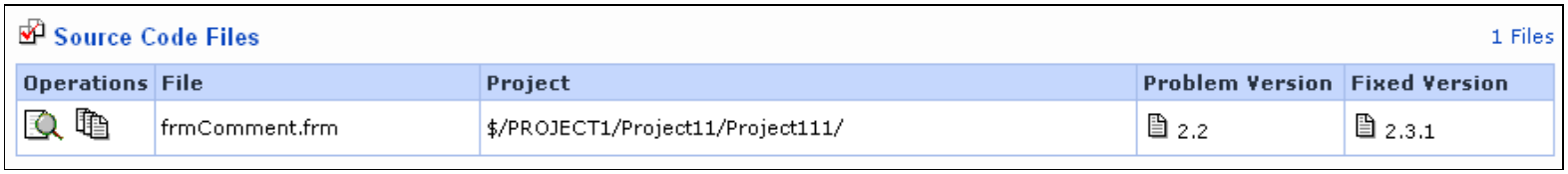
NetResults Tracker Help

Source Code Control Integration

Overview and Requirements

Source Code Control Integration allows you to associate source code files to problem records within your Tracker database. This is useful in order to denote which source code files were changed during the course of processing a problem record.

Additionally, Tracker allows you to note the version of the source code file where a problem was found, and subsequently, fixed. This facilitates the ability to track the source code files that are affected by a particular problem or bug fix.



Source Code Files — 1 Files

Operations	File	Project	Problem Version	Fixed Version
	frmComment.frm	$/PROJECT1/Project11/Project111/	2.2	2.3.1

The Source Code Control Interface within Tracker has the ability to compare versions of a source code file to show the differences in the content between versions.

The history of each source code file maintained by your source code control database can be accessed via Tracker. The history information provides easy access to details related to each version of the source code file. Information such as file type, type and date of action, user who performed action, and comments about the action are displayed in the history entry for each version.

Various actions related to the Source Code Control Interface have been added as privileges, allowing you to control which functions user groups can access such as, viewing and editing the list of source code files associated with a problem record.

Requirements for Source Code Control Integration

Microsoft Visual SourceSafe Version 6.0 (Server or Client) must be installed on the server machine where Tracker is installed. If your Microsoft Visual SourceSafe database is installed on a machine other than your Tracker server, please refer to the following Knowledge Base article for special instructions:

http://kb.nrtracker.com/Item.asp?id=11

For the latest information about the requirements for using Source Code Control Integration, please refer to the following page on our web site:

http://www.nrtracker.com/product/system_requirements.html

Each person who uses the Source Code Control Integration feature must be a licensed user of Microsoft Visual SourceSafe. Indirect use of Microsoft Visual SourceSafe via Tracker does not release you from your legal obligations under the Microsoft Visual SourceSafe license agreement. Tracker does require that each user of source code control integration enter a Microsoft Visual SourceSafe User ID and Password. However, it is still your responsibility to ensure that all users are in full compliance with the Microsoft Visual SourceSafe license agreement. Please review your Microsoft Visual SourceSafe license agreement for details.

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Source Code Control Options

To enable Source Code Control within Tracker:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the General Preferences link
4. Set the following options related to Source Code Control:
    - Enable Source Code Control Integration
      Select Yes to enable Source Code Control Integration
    - Source Code Control Product
      Microsoft Visual SourceSafe Version 6.0 will appear in this section and cannot be changed
    - Path to srcsafe.ini
      Enter the path for the srcsafe.ini file on the server machine where Tracker is installed. Alternatively, if you click on the Find button, the path will be detected based on your registry settings related to Microsoft Visual SourceSafe. If there is more than one Microsoft Visual SourceSafe ini file on your machine, the Find button may not detect the one that you want to use. In this case, you can type in the path of the ini file you wish to use.
    - Path to ss.exe
      Enter the path for the ss.exe file on the server machine where Tracker is installed. Alternatively, if you click on the Find button, the path will be detected based on your registry settings related to Microsoft Visual SourceSafe. If there is more than one Microsoft Visual SourceSafe ini file on your machine, the Find button may not detect the one that you want to use. In this case, you can type in the path of the ini file you wish to use.
5. Click OK to save the changes made to the Source Code Control Options
6. Set up the file system permissions related to Source Code Control Integration using the following Knowledge Base article:

   http://kb.nrtracker.com/Item.asp?id=11

Source Code Control User Privileges

In order for a user to access any information related to Source Code Control, they must be members of a group with the appropriate privileges assigned in the User Group Privileges section. User Privileges related to Source Code Control include:

- View Source Code List
  Members of groups with this privilege are allowed to view the list of Source Code files associated with a record
- Edit Source Code List
  Members of groups with this privilege are allowed to edit the Source Code List, including adding new files to be associated with a record

Source Code Control Login Settings

Each user must supply their SourceSafe Login Settings in order to edit the source code list.

To enter the login information, each user should:

1. Login to the workgroup
2. Click on the Preferences link
3. In the SourceSafe Login Settings section, enter the User ID and Password he or she uses to access the Microsoft Visual SourceSafe database
4. Click OK to save these settings

NetResults Tracker Help

Customizing Alerts (Enterprise Edition Only)

Overview

Note: This feature is only available in NetResults Tracker Enterprise Edition.

Alerts are a form of email notification messages that can be triggered based on date field in a record (e.g. to remind a user about a record at a certain date and time such as "2 days after the 'Date Reported'") or triggered by a lack of change in a record's state within a certain time period (e.g. a record should not stay within a particular state for longer than 2 days. If it does stay in the state longer than 2 days, alerts are triggered).

Alerts can be configured per record. Each record can have different alert settings including when, how, how often and to whom the alerts should be sent.

Alerts can be configured based on the form that was used to submit the record, based on a selection made in a certain field or based on the workflow transition used to process the record. With the necessary privileges, users can override these alert settings during the Add or Task operations.

When configuring alerts, a fixed date and time can be entered or a date and time relative to a date field within the record can be used. In addition, alerts can be sent once or configured to repeat periodically. Any combination of users and / or user groups can receive alerts for a particular record.

Enabling the Alerts Feature

Performing the following steps will allow you to enable the Alerts feature in your workgroup:

Enter the Alerts license key in the License Manager

You must enter a license key into the License Manager in order to use the Alerts feature.

Enable Alerts in the General Preferences section

1. Login to the workgroup as Admin.
2. Click on the Admin icon in the top button bar.
3. Click on the General Preferences link.
4. In the "General Options" section, set Enable Alerts Function to "Yes".
5. Click OK to save this change.

Create a Scheduled Task for the Alerts Feature

Please use the steps in this Knowledge Base article to create the scheduled task that will run periodically to trigger alerts notification messages:

http://kb.nrtracker.com/Item.asp?id=64#2003

Alerts User Group Privileges

The following are the user group privileges related to the Alerts feature. These privileges can be set in the User Group Privileges page of the User Accounts section. These privileges will only be displayed in the Privileges page if Alerts has been enabled using the steps in the section above.

- Edit Alert Settings
  Members of user groups with this privilege can edit the alert settings for a record
- Edit Own Alert Settings
  Members of user groups with this privilege can edit the alert settings for a record in which they are the Assignee.
- View Alert Settings

Members of user groups with this privilege can view the alert settings for a record

Configuring Alerts Settings during Add Operation

Alert settings for the Add operation can be configured per form. You can also configure alert settings based on the option menu item selected in a particular field on the form (e.g. Based on Product, Priority, Severity or any other pulldown you have defined). The alert settings you configure for each form can be applied automatically as records are added to the system or you can allow the end users to see and change the alert settings when they are adding a record to the system.

Alert settings for forms can be configured in the Workflows section.

Configuring Default Alert Settings for Transitions

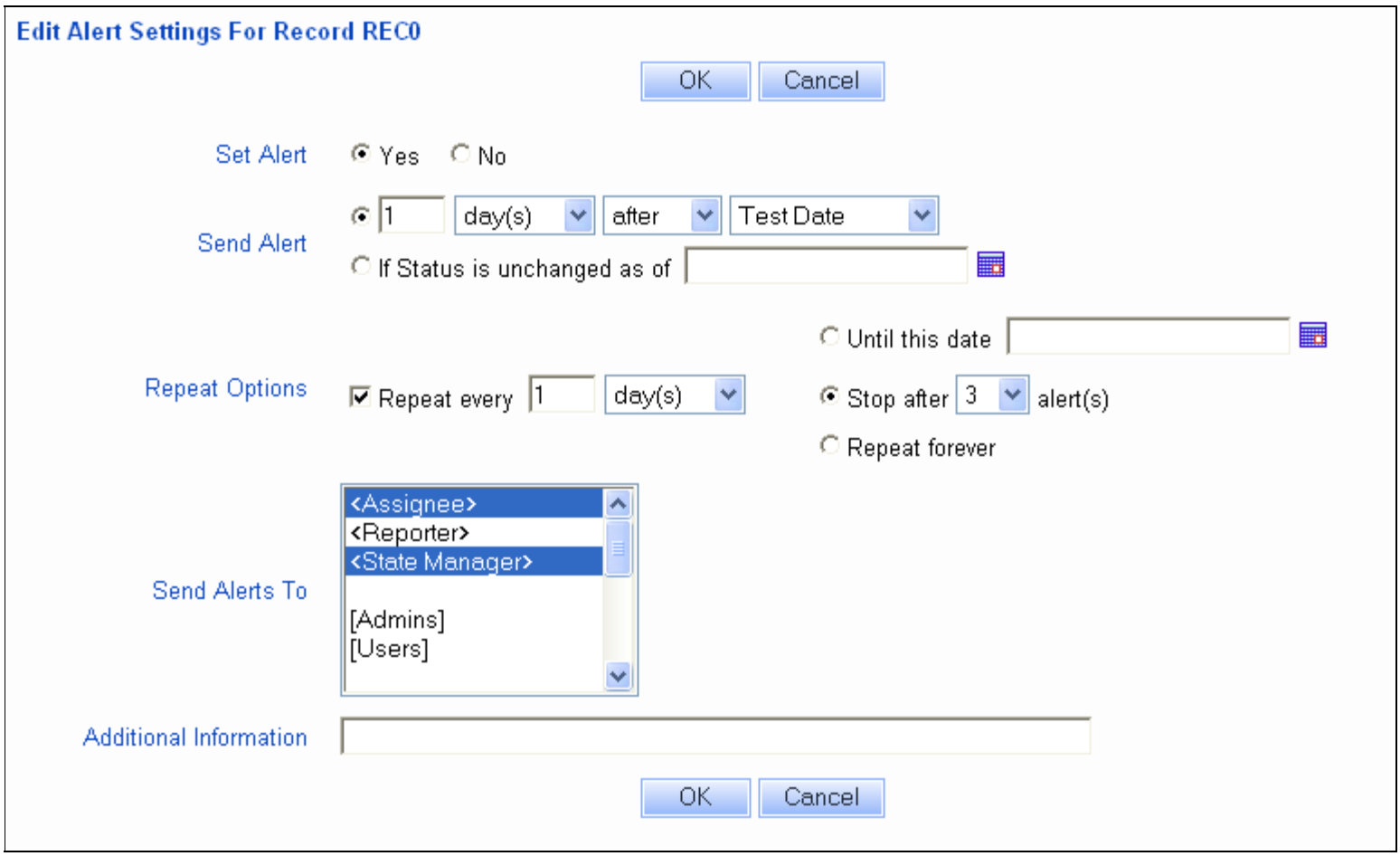
Alert settings can be configured for each workflow transition. Alert settings can be configured for each transition such that these settings will be applied to any record processed with the transition. It is also possible to allow users to be prompted to configure the Alert settings during the Task operation.

Alert settings for transitions can be configured in the Workflow Transitions section.

Editing Alert Settings

A user can edit the alert settings for a record if they have the required privileges. If a user is a member of a group with the Edit Own Alerts user group privilege, the user can modify the alert settings for a record in which they are the Assignee. If a user is a member of a group with the Edit Alert Settings privilege, the user can modify the alert settings for any record.

A user meeting the criteria mentioned above can edit the alert settings for a record by clicking on the Edit icon in the top button bar and entering a record number or by clicking on the Edit icon next to a record number in a report on the Query or Home page. Clicking on the Edit Alerts button will display the following alert settings for the record:



Overview

Note: This feature is only available in NetResults Tracker Enterprise Edition.

The Discussions feature is a means of allowing users to discuss various topics pertaining to a record. This allows users to collaborate without having to coordinate a meeting for everyone to contribute to the discussion. For example, a record may be assigned to a particular developer, but several developers are needed to provide input for an enhancement's design or the resolution of a bug. These discussions can continue in parallel to the record's progression through the workflow.

Discussions are also useful for integrating a new user into a project. The user can review the information present in the discussion to become familiar with the project's progress to date.

A discussion can be started for any record. The user initiating the discussion can invite other users or user groups to participate in the discussion. Within the discussion for each record, multiple threads can be started to discuss multiple topics. Users can post and reply to messages within a particular thread. Users can also choose to receive email messages to notify them about a new discussion or new posts to a discussion.

Enabling Discussions

Performing the following steps will allow you to enable the Discussions feature in your workgroup:

1. Enter the Discussions key in the License Manager
   You must enter a license key into the License Manager in order to use the Discussions feature.

2. Enable Discussions in the General Preferences section

   1. Login to the workgroup as Admin
   2. Click on the Admin icon in the top button bar
   3. Click on the General Preferences link
   4. In the "General Options" section, set Enable Discussion to "Yes"
   5. Click OK to save this change

3. Configure SMTP Mail Server for use with Discussions
   An SMTP mail server is only required if you wish to generate notification messages related to the discussions (for inviting users to a new discussion or notifying users when a new post has been made to the discussion). This can be configured in the Email Configuration section.

4. Ensure an email address is entered for the users that will receive discussion notification messages
   A valid email address is only needed if you want a user to receive notification messages for discussions. Email addresses are entered in a user's profile in the User Accounts section (if the Tracker Administrator has the appropriate privileges to edit user profile information) or in the User Management System.

After enabling the Discussions feature using the steps above, configure the user group privileges and default settings for Discussions as described below.

Discussions User Group Privileges

User group privileges related to the Discussions feature can be set in the User Group Privileges page of the User Accounts section. Discussion privileges will only be displayed in the Privileges page if Discussions have been enabled using the steps in the section above.

Default User Preferences for Discussions

Default user preferences can be set for the Discussions feature. These settings will be used when a new user is added to Tracker and can be configured in the User Preferences page of the Admin section.

The default user preferences will determine the initial settings for these preferences. Each user can change their own settings in the Preferences page.

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Submit via Web for Unregistered Users

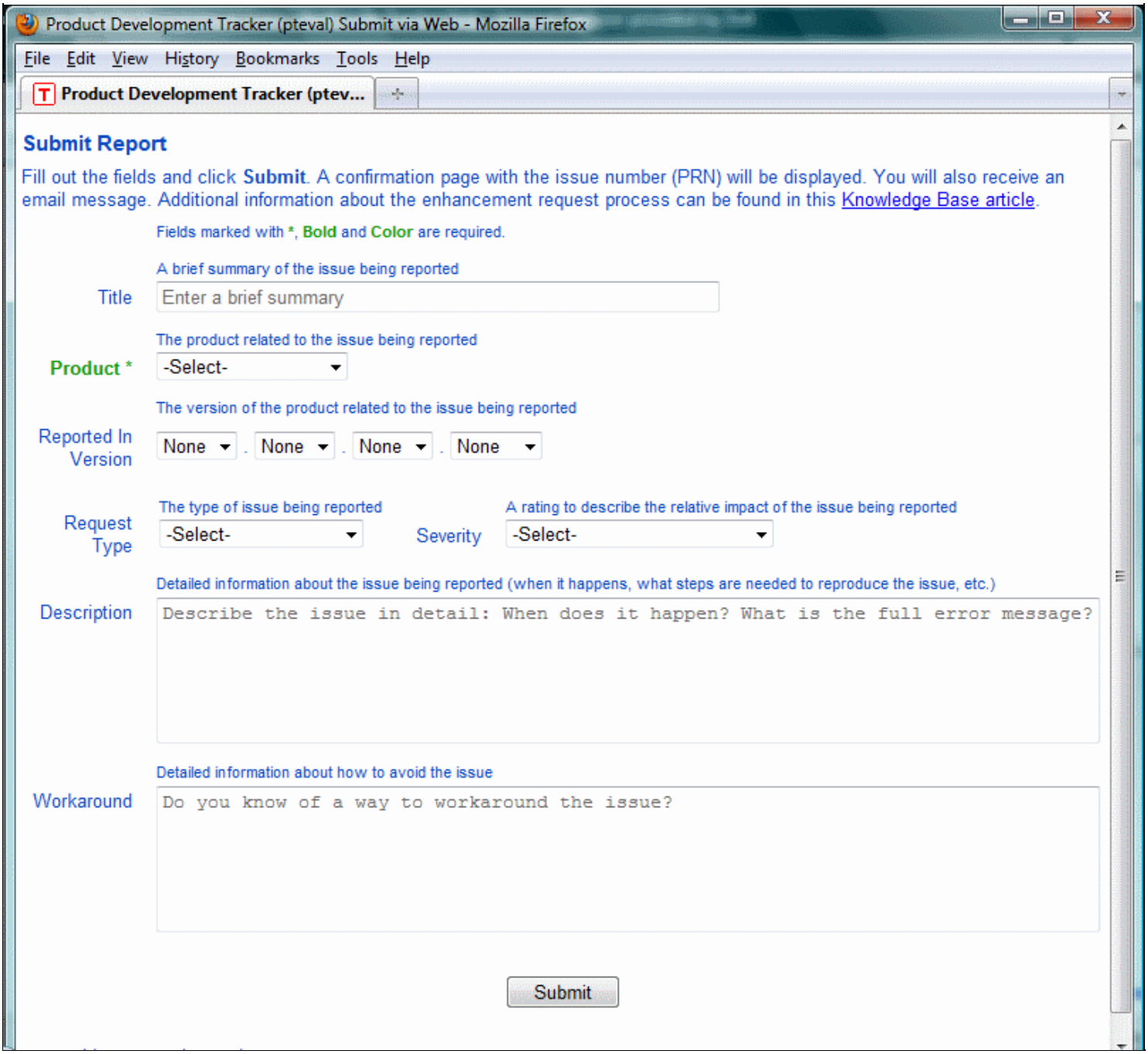
Note: This feature is included in Tracker Enterprise Edition and as a separately purchased option for Tracker Standard Edition. If you have not entered the Submit Page license key, this feature will not appear in your system.

Submit via Web for Unregistered Users, also known as the Submit Page, is a form used to submit records to Tracker without having to login (a Tracker user account is not needed). After submitting a record, the user is provided with the record number of the newly added record by Tracker. The Submit Page is useful in Support and Help Desk environments, as it allows unregistered or otherwise infrequent users to submit a ticket or request. The Submit Page can be configured to gather the user's email address in case you wish to send them email notifications as their request is processed. For example, you may want to send the user a confirmation that their request was submitted and also notify them when their request has been scheduled or released in a new version of your product.

However, since an unregistered user does not have a user account, the Reported By field will be set to "Unregistered User", the user cannot log in to Tracker to view the status of the issue they reported and cannot have issues assigned back to them for verification (e.g. to sign off on the resolution of the issue). To have access to those features, the user must have a Tracker user account.

The Submit Page can be customized with custom HTML and configured with your desired color preferences so that you can do some branding on the page.

A sample Submit Page is displayed below.



Enabling the Submit Page

To set up the Submit Page for use by unregistered users, perform the following steps:

Enter the Submit Page license key into the License Manager

You must enter a license key into the License Manager in order to use the Submit Page feature.

Enable the Submit Page in the General Preferences section

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the General Preferences link
4. In the General Options section, set Enable Submit via Web for Unregistered Users to "Yes"
5. Click on the OK button to save this change

Submit Page URL

The URL for the Submit Page for a given workgroup is:

http://***servername***/***workgroupname***/internet/user_add.asp

where ***servername*** is the TCP/IP host name of the machine where Tracker is installed and ***workgroupname*** is the name the workgroup you are trying to access. For example, to reach the workgroup called pteval installed on the server called myServer, you would browse to

http://myServer/pteval/internet/user_add.asp

Submit Page Fields

You can customize which fields are available on the Submit Page form and which option menu items are available in each pulldown field. Browse to the Submit Page to see which fields and pulldown option menu items are currently displayed.

To change whether a field is displayed on the Submit Page:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Forms link
4. Click on the Fields button to the left of the form you wish to modify
5. If the field you wish to modify has a * next to it, it is using global field properties. Use the sub-steps below to change whether it is displayed on the Submit Page:
    a. Click on the Admin icon
    b. Click on the Fields link
    c. Click on the Edit button to the left of the field you wish to add or remove from the Submit Page
    d. Refer to the Submit Page Field Properties section for details on how to configure the related settings
    e. Click OK to save your changes

    OR

    If the field you wish to modify does not have a * next to it, it is using form specific properties. Click on the field, then click on the Edit button.

6. Refer to the Submit Page Field Properties section for details on how to configure the related settings
7. Click OK to save your changes

Submit Page Field Properties

To add a field to be displayed on the Submit Page, set the option Include in Submit Page to "Yes". To remove a field from being displayed, set this option to "No".

Check the value of the Record Order option for this field. This field determines the order in which the fields are displayed on the Add and Submit Pages.

Check the setting of the option Required for Add & Submit. If this option is set to "Yes", this field will also require a user to enter a value for this field or select a value other than the default when submitting a record via the Submit Page. Required fields can be displayed in a particular color, in bold or with a special character via the Required Field Highlights option in the General Preferences section.

For date fields, check the setting of the option Initialize On Add. If this option is set to "No", the date field will not be set with the current date and time by default. If this option is set to "Yes", the date field will be set with the current date and time when the record is submitted via the Submit Page. This will be done irrespective of whether the field is displayed on the Submit Page. In certain cases, it may be desirable for a date field to be initialized with the current date and time without the field being displayed on the Submit Page. For example, you may want the Date Reported to be initialized with the current date and time without allowing the user submitting the form to be able to change the value of the Date Reported field.

To create a new field to be displayed on the Submit Page, use the information in the Fields section.

Customize the pulldown options displayed on the Submit Page

For the pulldown fields displayed on the Submit Page, you can limit the option menu values available for selection. For example, if a pulldown field called Priority is displayed on the Submit Page and you do not want unregistered users to select the value "1", you can set the value such that it is not displayed in the Priority field on the Submit Page.

Submit Page Option Menu Items

To set whether a pulldown option menu item is displayed on the Submit Page:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Fields link
4. Click on the Items button to the left of the pulldown or release number field you wish to modify
5. Click on the Edit button to the left of the option menu item you wish to modify. To remove an option menu item from being displayed on the Submit Page, uncheck the option Value is Public.
6. Click OK to save this change

Customize the Submit Page Options

Various aspects of the Submit Page can be customized. You can add custom HTML to the top and bottom of the page (e.g. to add your own logo or instructions to the form). You can also customize the Page Title and Header.

To customize the Submit Page options:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Submit Page Options link
4. Make selections for the options described below, then click OK to save the settings

---

Submit Page Settings

The options in the Submit Page Settings section allow you to customize the labels on the Submit Page and enable users to upload files when submitting the form.

Page Title

Enter up to 80 characters to be displayed as the page title in the browser. The text you enter will be displayed before the browser name (as shown by the text "Product Development Tracker (pteval) Submit via Web" before "Mozilla Firefox" in the sample image above). You can use the variable <workgroup> to include the name of the workgroup as part of the Page Title.

Page Header

Enter up to 127 characters to be displayed as the page header on the form. The text you enter will be displayed as the first line of the form (as shown by the text "Submit Report" in the upper left corner of the sample image above).

Page Header Alignment

Select where the Page Header (the text entered into the Page Header field above) should be displayed on the first line of the form. Selecting "Left" will display the Page Header in the upper left corner of the form. Selecting "Center" will display the Page Header in the center of the form. Selecting "Right" will display the Page Header in the upper right corner of the form. In the sample image above, the Page Header Alignment is set to Left.

Instruction Message

Enter text to be displayed below the Page Header and above the various fields in the page (as shown by the text "Fill out the fields and click Submit..." in the sample image above). The Instruction Message field can be used to display a customized message to those using the Submit Page. You can utilize format tags such as bold, *italics* and others as part of the instruction message. A complete list of available tags can be found here.

Submit Button Label

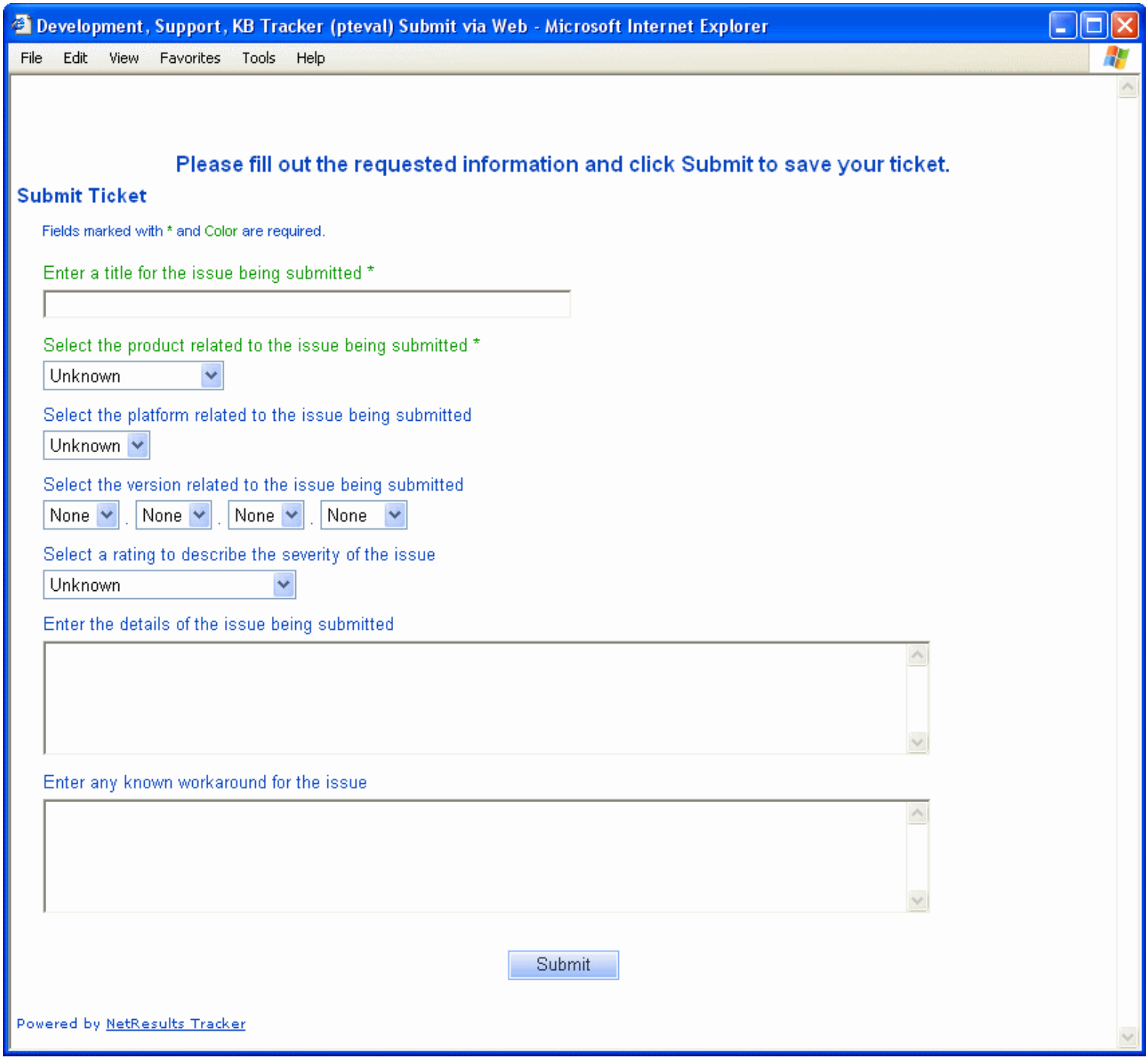
Enter up to 50 characters to be displayed on the button used to submit the Submit Page. By default, this is set to "Submit" (as shown in the sample image above). For example, you may want to change the label to "Save" or "OK" or "Complete".

Display Field Help

Select an option with respect to displaying the field help text for the Submit Page. Field Help is text that is customized per field to provide additional information about the purpose of the field on the form. To customize the Field Help text, configure the text in the "Help Description" property of the field in the Fields section.

- Selecting "Yes" will display the field help icon to the left of each field that has Field Help text configured in the "Help Description" property in the Fields section.
- Selecting "No" will prevent any field help icons from being displayed on the Submit Page.
- Selecting "Instead of Field Labels" will display the field help text configured in the "Help Description" property for each field in the Fields section as the field's label on the Submit Page (as shown in the sample below)
- Selecting "Above Each Field" will display the field help text configured in the "Help Description" property for each field above the field on the Submit Page (as shown in the sample image above).
- Selecting "Below Each Field" will display the field help text configured in the "Help Description" property for each field below the field on

the Submit Page.

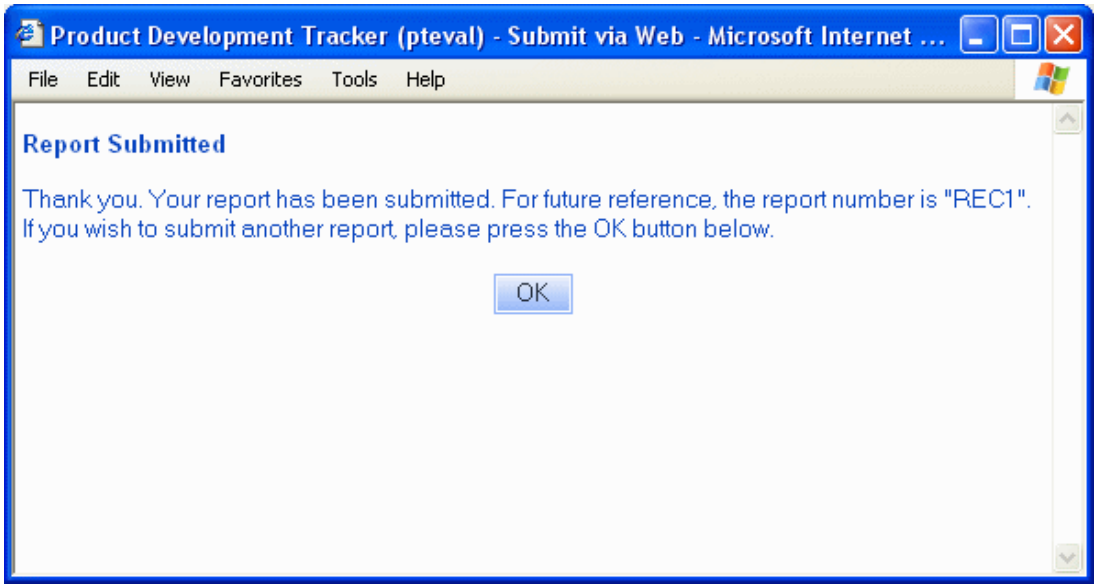


Enable File Attachmentt

Check the box for this option and select an attachment type if you wish to allow users to upload file and/or add URL attachments when submitting a record via the Submit Page.

Confirmation Page Settings

The options in the Confirmation Page Settings section allow you to customize the labels on the confirmation page displayed after a record is submitted using the Submit Page. A sample confirmation page is displayed below.



Page Title
Enter up to 80 characters to be displayed as the page title in the browser. The text you enter will be displayed before the browser name (as shown by the text "Product Development Tracker (pteval) - Submit via Web" before "Microsoft Internet Explorer" in the sample image above). You can use the variable <workgroup> to include the name of the workgroup as part of the Page Title.

Page Header
Enter up to 127 characters to be displayed as the page header on the form. The text you enter will be displayed as the first line of the form (as shown by the text "Report Submitted" in the upper left corner of the sample image above).

Page Header Alignment
Select where the Page Header (the text entered into the Page Header field above) should be displayed on the first line of the form. Selecting "Left" will display the Page Header in the upper left corner of the form. Selecting "Center" will display the Page Header in the center of the form. Selecting "Right" will display the Page Header in the upper right corner of the form. In the sample image above, the Page Header Alignment is set to Left.

Confirmation Message
Enter text to be displayed on the confirmation page after a user submits a record using the Submit Page. In the sample image above, the Confirmation Message is set to "Thank you. Your report has been submitted..." You can use the variable <number> if you wish to include the number (PRN) of the record submitted when the button was clicked on the Submit Page. You can utilize format tags such as **bold**, *italics* and others as part of the instruction message. A complete list of available tags can be found here.

Display Button
Check the box for this option if you wish to have a button displayed on the confirmation page. The button's label and action are determined by the settings selected in the Button Label and Button Action options below.

Button Label
Enter up to 50 characters to be displayed as the label for the button on the confirmation page. In the sample image above, the button label is "OK".

Button Action
Select an option to determine what the button on the confirmation page will do. When "Back to Submit Page" is selected, the browser will be directed back to the Submit Page when the button is clicked. Selecting the "Close Window" option will exit the browser window when the button is clicked. The Close Window option is only supported for use with Internet Explorer. When "Go To URL" is selected, the browser will be directed to the URL entered into the Button Action URL field below when the button is clicked.

Button Action URL
This option will only be available when "Go To URL" is selected for the Button Action option above. Enter up to 255 characters for the URL where the browser should be directed upon clicking the button on the confirmation page. Be sure to enter the full URL including the protocol (e.g. "http://", "ftp://", etc.). The variable <number> can be used to represent the newly added record (PRN) as part of the Button Action URL.

General Color Settings

The following color preferences can be set for the Submit Page. To change the color of an item, select a color from the pulldown or select <Custom> to enter the Hex code or select <Default> to choose the browser's default value. Hex code must be in the format "#XXXXXX".

Page Background
The background color of the Submit Page (e.g. the white color behind the text "Submit Report" in the Color Settings Sample above).

Page Text (Field Labels)
The color of the text on the Submit Page (e.g. the color of the text "Submit Report" and "Title" in the Color Settings Sample above).

Required Field Label Text
The color of the text used to display the label for fields that are required on the Submit page (e.g. the green color of the text "Description*" in the Color Settings Sample above).

Input Background
The color displayed in the area of a field where text or information would be entered (e.g. the white color behind the text "Enhancement Request" and "A new enhancement requested" in the Color Settings Sample above).

Input Text (Field Values)
The color of the text entered into a field (e.g. the black color of the text "Enhancement Request" and "A new enhancement requested" in the Color Settings Sample above).

Instruction Text
The color of the text that appears when Text, TextArea and Url fields are configured to use instructional text for the Submit page. (e.g. the color of the text "Instruction Text" in the Color Settings Sample)

Browser Button Settings

These settings determine the colors of the buttons for users using the following browsers: Internet Explorer (IE), Firefox versions 3.6 or newer and Safari versions 4.0 or newer.

Use Default Buttons (& Inputs)
Checking the box for this option will apply the operating system's default color settings to the buttons. When this option is enabled, the rest of the Browser Button Settings are disabled.

Gradient
Select a method for applying a gradient effect to the button color (e.g. "Bottom to Top" is the method selected in the Browser Buttons Sample). Selecting "None" will not apply the gradient effect to the button color. This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Background
The color used in the background of the buttons in the Tracker pages (e.g. the light blue color behind the text "Submit" on the button in the Browser Buttons Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Text
The color of the text in the buttons in the Tracker pages (e.g. the color of the text "Submit" in the Browser Buttons Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Border
The color of the border of the button in the Tracker pages (e.g. the color of the light blue border around the "Submit" button in the Browser Buttons Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Other Browser Button Settings

These settings determine the colors of the buttons for users using the following browsers: Firefox (versions older than 3.6) and Safari (versions older than 4.0).

Use Default Buttons (& Inputs)
Checking the box for this option will apply operating system's default color settings to the buttons. When this option is enabled, the rest of the Other Browser Button Settings are disabled.

Background
The color used in the background of the buttons in the Tracker pages (e.g. the blue color behind the text "Submit" on the button in the Other Browser Button Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Text
The color of the text in the buttons in the Tracker pages (e.g. the color of the text "Submit" in the Other Browser Button Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Border
The color of the border of the button in the Tracker pages (e.g. the color of the black border around the "Submit" button in the Other Browser Button Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

General Settings

The options in the General Settings section allow you to control which forms and projects are displayed and which user groups will be able to access records submitted via the Submit Page as well as add custom HTML to be used at the top and bottom of the Submit Page. You may wish to add your company logo or other branding or instructional text in the custom HTML sections.

The project(s) and form(s) that should be available on the Submit Page are determined by the User Groups option in the Unregistered User Options section of the General Preferences page. Any projects and forms that are visible to the user group(s) selected for that option will be available on the Submit Page (the available Projects and Forms will also be displayed in the Default Project and Form option below). To see which user groups have visibility to a particular Project (and its respective form(s)), check the Project's Form Visibility section.

Default Project and Form
Select the default project and form that should be displayed by default when a user browses to the Submit Page. The projects and forms available for selection are determined by the selections made in the User Groups option in the Unregistered User Options section of the General Preferences page.

Custom HTML for the Submit Page (Top of Page)
Custom HTML for the Submit Page (Bottom of Page)
If desired, customize the top or bottom of the Submit Page by entering your own HTML code. Note that all file references must be fully qualified; relative paths will not work. Please do not enter any header tags into this area. Some examples of header tags are <HTML>, </HTML>, <BODY>, </BODY>. If you wish to display an image on the Submit Page, you can upload the file as a global file attachment.

Custom HTML for the Confirmation Page (Top of Page)
Custom HTML for the Confirmation Page (Bottom of Page)
If desired, customize the top or bottom of the Confirmation Page by entering your own HTML code. Note that all file references must be fully qualified; relative paths will not work. Please do not enter any header tags into this area. Some examples of header tags are <HTML>, </HTML>, <BODY>, </BODY>. If you wish to display an image on the Confirmation Page, you can upload the file as a global file attachment.

IP Address Restrictions

Access to the Submit Page can be limited by IP address of the user attempting to access the page. When this feature is enabled, a user will only be able to access the Submit Page if the user's IP address matches one of the IP addresses or IP Address ranges configured in the Allowed IP Addresses field. If the user's IP Address does not match a configured address or range, they will see an "Access Denied" message that can be customized with any desired wording and HTML code. This option only applies to the Submit Page. IP Address Restrictions can be configured for the Login Page and other Tracker pages as well as the Knowledge Base pages in their own separate sections. IP Address restrictions configured in this section take effect immediately after clicking OK to save the changes.

To enable IP Address restrictions:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Submit Page Options link
4. Set the Enable IP Address Restriction option to "Yes"
5. Click on the Add button to add an IP address or range of addresses.

   For Type select "Single computer" to add a single IP Address or "Range of computers" to add a range of IP Addresses. For IP Address, enter the IP address, then click OK. For IP Address Range, enter the first IP Address in the range, then enter the last IP Address in the range and click OK. At least one IP Address or range must be entered when the this feature is enabled. The IP Address of the login user (the user making these changes) should also be added to the list as a single computer or within a range.

6. Enter any desired text or HTML into the Access Denied Message to customize what a user will see if they are denied access to the workgroup because their IP Address is not configured in the Allowed IP Addresses list. The variable "<ip_address>" can be used within this field such that it will be replaced with the actual IP address that was rejected when the Access Denied Message is displayed. Do not use the tags <HTML>, </HTML>, <BODY>, </BODY> or any other header tags in this field. When this feature is enabled, the Access Denied Message cannot be empty.
7. Click OK to save the changes

To edit an item in the Allowed IP Addresses list:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Submit Page Options link
4. Click on the item and click on the Edit button. Make any desired changes, then click OK.
5. Click OK to save the changes

To remove an item in the Allowed IP Addresses list:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Submit Page Options link
4. Click on the item and click on the Remove button
5. Click OK to save the changes

Date and Time Settings for the Submit Page

Date and Time settings can be configured to applied to the Submit Page in the Unregistered User Options in the General Preferences section.

Email Notification for Submit Page Users

Email notification messages can be sent to users reporting issues using the Submit Page. Designate a Text type field to collect the reporter's email address when records are submitted using the Unregistered User Email attribute and display this Text field on the Submit Page using the Include in Submit Page option in the Fields section.

You can set preferences for the Date and Time settings, email content and actions that send an email notification to Submit Page users by configuring the Unregistered User Options in the General Preferences section.

Configure the email rules to notify the Unregistered User.

Please review the following Knowledge Base article for complete details on how to send email notifications to Unregistered Users:

http://kb.nrtracker.com/Item.asp?id=280

Using the Submit Page

Once you have enabled the Submit Page using the steps above, your users can browse to this page by going to

http://***servername***/***workgroupname***/internet/user_add.asp

where ***servername*** is the TCP/IP host name of the machine where Tracker is installed and ***workgroupname*** is the name the workgroup you are trying to access. For example, to reach the workgroup called pteval installed on the server called myServer, you would browse to

http://myServer/pteval/internet/user_add.asp

To submit a record using the Submit Page:

1. Browse to the URL of the Submit Page
2. When the Field Help icon ( ) is present, you can move the cursor over the icon to see a description of the field.
3. Enter information into the fields displayed
4. Click on the Submit button to save the new record
5. A confirmation page will be displayed
6. A button for further action (e.g. close window, return to the Submit Page, or browse to another URL) may be displayed on the confirmation page

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Characteristics of Records submitted via the Submit Page

Records submitted via the Submit Page have a few differences when compared to records submitted via the Add Page:

Reported By field
All records reported using the Submit Page are filed as having been reported by a special built-in user named Unregistered User (Inet) so that you can quickly identify (or search for) records reported using the Submit Page.

Transitions where New Assignee is the Reporter
If a transition has New Assignee set to be the Reporter of a record, when this transition is selected for a record reported via the Submit page the record will be routed to the State Manager of the New State rather than the Reporter (since records cannot be assigned to the user called Unregistered User (Inet) who is listed as the Reporter). For more information about transitions, please review the Workflow Transitions section.

Passing Information to the Submit Page Fields using a String or Form Fields

The fields on the Submit Page can be filled out automatically using information passed using "GET" (query string) or using "POST" (form fields from another page).

Passing Data Using GET (Query String)

To pass data to the Submit Page using GET, append the API Field Name to the URL of the Submit Page. For example, if the Submit Page URL is:

http://myServer/pteval/internet/user_add.asp

and you want to pass the value "testing" into field Text1, the URL would look like:

http://myServer/pteval/internet/user_add.asp?Text1=testing

To pass multiple values, include an ampersand (&) between each value. For example, if you want to "testing" to be the value for Text1 and "280" to be the value for Int2, use this URL:

http://myServer/pteval/internet/user_add.asp?Text1=testing&Int2=280

Data that contains spaces can be passed as in the example below:

http://myServer/pteval/internet/user_add.asp?Text1=this is a simple test&Date4=11/11/2008 12:34:56 PM

Browsers convert this URL into:

http://myServer/pteval/internet/user_add.asp?Text1= this%20is%20a%20simple test&Date4=11/11/2008%2012:34:56%20PM

If your browser does not encode the URL, to pass the data you must manually encode the URL.

If more than one value is passed for the same field, the values will be merged together with a comma (,) For example, if you use this URL

http://myServer/pteval/internet/user_add.asp?Text1=part1&Int2=280&Text1=part2

the field Text1 will have the data "part1, part2" entered.

Please review the information in the Guidelines for Passing Data section for detailed information about passing data and special handling for the various field types.

Passing Data Using POST (Form Fields)

You can create a web page (using HTML or other languages) that will pass (post) the form fields to the Submit Page. You can use hidden fields on the web page to pass data. Please review the information in the Guidelines for Passing Data section for detailed information about passing data and special handling for the various field types.

Guidelines for Passing Data to the Submit Page

Data can be passed to the Submit Page for the following field types: Assignee, Date, Float, Form, Integer, Product, Project, Pulldown, Release Number, Status, Text, TextArea, URL and YesNo. Data cannot be passed into the field types: Link and Reporter. Data for adding attachments cannot be passed.

Data can only be passed to the Submit Page for fields that are visible on the Submit Page, meaning the property Include on Submit Page must be set to Yes for the field on the appropriate form. If the field is using global properties, the Include on Submit Page property must be set to "Yes" in the Fields section. If the field is not using global properties, the Include on Submit Page property must be set to "Yes" for the field in the Forms section. See the Submit Page Fields section for the appropriate steps for setting this property. If data is passed for a field that is not visible, the data will be ignored.

To pass the value of a field, use the field's API Field Name. API Field Names are not case-sensitive (e.g. Text1 is the same as text1).

Data Handling by Field Type

The following describes the data that can be accepted into each field type.

Assigned To
The data passed must be the User ID that corresponds to a user present in the Assigned To field's values. If the data passed does not match the User ID of a user present in the Assigned To field, the default user will be selected. The default user is the state manager of the default add state.

Date and Time
The data passed must be a string in the format that matches the Date and Time formats selected in the General Preferences section for the Unregistered User Options. For example, if Date Format is "mm/dd/yyyy" and time format is "12 Hour", the data passed must be a string of the format MM/DD/YYYY HH:MM:SS AM/PM. The time can be omitted, if desired.

Float
The data passed must be valid real number with a decimal point included. This field can accept positive or negative values.

Form
The data passed must match a form that is available on the Submit Page. The forms available on the Submit Page are determined by the User Groups setting in the Unregistered User Options in the General Preferences section.

To pass data into this field, use "Form" as the API Field Name as in the example below:

http://myServer/pteval/internet/user_add.asp?Form=Issue

where "Issue" is the name of the form to which the data should be passed.

Integer
The data passed must be an integer. This field can accept positive or negative values.

Product
See the information for "Pulldown" field type.

Project
The data passed must match a project that is available on the Submit Page. The projects available on the Submit Page are determined by the User Groups setting in the Unregistered User Options in the General Preferences section.

To pass data into this field, use "Project" as the API Field Name as in the example below:

http://myServer/pteval/internet/user_add.asp?Project=Product Development

where "Product Development" is the name of the project to which the data should be passed.

Pulldown
The data passed must match the label of an option menu item present in the pulldown field's values (items that are not visible in the pulldown on the Submit Page such as obsolete items or items that have the Value is Public property unchecked cannot be selected). If the data passed does not match an item present in the field's values, the default option menu item will be selected.

This feature cannot be used with Pulldown fields that have the Display Style property set to "Search Pulldown".

Data can be passed to pulldowns that are part of a dependent relationship. For example, let's say Pulldown3 is dependent on Pulldown2 and Pulldown2 is dependent on Pulldown1. To set the values for each field, you can use something like the following:

http://myServer/pteval/internet/user_add.asp?Pulldown1=Printer&Pulldown2=Toner &Pulldown3=Ink

It is recommended that you specify the fields in parent to child order. If a value specified does not match an item available in the pulldown, the default value for the field will be selected. Using the example above, if "Ink" does not match an item in Pulldown3, then the default option menu item for Pulldown3 will be selected.

Release Number
The data passed must match the label of an option menu item present in the Release Number field's values. Specifying the API Field Name for the Release Number will set the first digit of the field. To pass data for the second ("B"), third ("C") or fourth ("D") digits, you must also include the API Field Name as in the example below:

http://myServer/pteval/internet/user_add.asp?RelNum48=5&RelNum48C=4

Status
The data passed must match a state available in the Status field on the Submit Page. If the data passed does not match a state, the default add state will be selected.

Text
The data passed can be a text string of up to 80 characters for Access database and up to 160 characters for SQL Server or Oracle database. Please ensure that the string contains no more than the maximum allowed number of characters as passing a string with more than the maximum will result in a system error when submitting the record.

TextArea
The data passed can be a very large text string. The maximum value is determined by your web browser and the particular database in use.

Url
The data passed can be a string of up to 255 characters that is a valid formatted URL.

YesNo
The data passed must be either "Yes" or "No" (case does not matter). If the Display Style is set to Checkbox, passing the value "Yes" will check the box, passing the value "No" will leave the box unchecked.

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NetResults Tracker Help

Submit via Email

Overview

The ability to add records to Tracker via an email message is available as an additional option. This feature allows your end users or customers to send an email to a POP3 or IMAP email account. One email account is required for each combination of Project and Form where this feature is to be used. Optionally, if you wish to have the incoming email settings based on each option menu item within a pulldown, an email account will be required for each option menu item. Tracker's Email Processor reads and parses the information in the email message and uses the information to create a new record.

The subject and body of the email can be saved as fields within the record created. You can also configure Tracker to attach the original email message to the record created. Some of the options include setting the status of the new record, choosing whether to map the sender's email to set the "Reported By", and sending a reply to the unmapped emails. A complete list of options can be found when configuring the Incoming Email Settings options.

The requirements and steps for enabling this feature are described in the sections below.

Requirements for using Submit via Email

The following items are required for use of the Submit via Email feature:

Mail Server

A POP3 or IMAP Mail Server configured with at least one user account (see below) for use by Tracker is required. Most "Internet" email accounts are POP3 or IMAP server accounts.

User Accounts (Mailboxes)

A user account (mailbox) on a supported mail server is required for each combination of Project and Form that will use this feature. Optionally, if you wish to have incoming email settings set differently for each option menu item in a pulldown, one user account will be needed for each option menu item. If you are using multiple workgroups on the same Tracker installation, all projects where this feature will be used must have a unique user account even if the products are located in different workgroups. Warning: Tracker will delete emails that it reads from its mailbox. As such, if it is important that you keep a copy of all emails sent to a particular email address (e.g. support@mycompany.com), you should not configure Tracker to read directly from the mailbox for that address. Instead, you should create an email account for Tracker that receives copies (for example, via a mailing list or forward option) of all emails sent to the mission critical email account. In general, it is a good idea to set up the Tracker mailboxes as "secondary" email accounts at least until you are certain you have the Submit via Email feature configured properly.

Mail Client

A mail client program which can send email to the Mail Server you are using and which uses (or can be configured to use) one of the supported character sets (us-ascii, iso-8859-1, windows-1252, or utf-8) is required for each user who sends email to Tracker. Typically the mail client program will use SMTP to communicate with the mail server, though your Mail Server may support additional protocols. Most mail programs which can send email over the Internet (e.g. Microsoft Outlook Express, Netscape Mail, Microsoft Outlook, etc.) or which can send email to a server which can send email over the Internet (e.g. newer versions of Microsoft Exchange, newer versions of IBM Lotus Notes, etc.) will meet the Mail Client requirement.

The following components are required to be installed on the Tracker server machine for use of the Submit via Email feature.

Operating System

Windows Server 2003 or 2008 is required for use of the Submit via Email feature.

SOAP Interface

Microsoft SOAP Toolkit 3.0 must be installed on the machine where Tracker is installed. To download this component, browse to the Microsoft SOAP Toolkit 3.0 Download Page.

Microsoft WinHTTP 5.1 and Microsoft XML Core Services (MSXML) 4.0 are included when SOAP Toolkit 3.0 is installed.

Windows Installer

Windows Installer 2.0 or later is required to install SOAP. When installing SOAP, you will be prompted if you do not have the appropriate Windows Installer version. To download this component if needed, browse to the Microsoft Windows Installer Page.

Browser

Internet Explorer 5.0 or newer is required for installation of Microsoft SOAP Toolkit 3.0. To download the latest version of Internet Explorer, browse to the Microsoft Internet Explorer Download Page.

Enabling the Submit via Email feature

Perform the following steps to enable this feature:

Enter the Email license key into the License Manager

You must enter a license key into the License Manager in order to use this feature feature.

Install Required Components

Install the required components on the Tracker server as mentioned in the Server Requirements section above.

Enable the Submit via Email option in General Preferences

For each workgroup where this feature will be used

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the General Preferences link
4. Set the "Enable Submit via Email" option to Yes
5. Click OK to save this change

Enter the Outgoing Mail Server Settings

Configure the "Set Mail Server Configuration" section of the Mail Server used by this Tracker workgroup. If you are using other features that generate email notifications, a mail server may already be set up for your workgroup. The same mail server can be used for all features that generate email notifications.

Configure the Global Incoming Mail Options

Make selections for the options related to handling the incoming messages in the Incoming Mail section of the Email Configuration page.

Configure the Incoming Email Settings for each Project

Make selections for the options related to handling the incoming messages for each project in the Incoming Email Settings section of the Projects page.

Create a Scheduled Task for the Submit via Email Feature

Please use the steps in this Knowledge Base article to create the Scheduled Task that will run periodically to check the mailbox for email messages that are to be added as Tracker issues:

http://kb.nrtracker.com/Item.asp?id=65

Submitting a Record via Email

After enabling this feature using the steps above, to add a record via email, send an email to the mail account specified in the Incoming Email Settings that corresponds to the project for which you want to add a new record.

Email Notification for Unregistered Users

Email notification messages can be sent to unregistered users reporting issues using the Submit via Email feature. Designate a Text type field to be the collect the reporter's email address when records are submitted via email using the Unregistered User Email attribute in the Fields section.

You can set preferences for the Date and Time information, email content and actions that send an email notification to unregistered users by configuring the Unregistered User Options in the General Preferences section.

Required Fields on Add Page

The Submit via Email feature bypasses the "Required For Add" attribute for all field types. This is especially useful with respect to the Product field as it allows you add records via email for the default option menu item in the Product field while still requiring that a non-default value be selected on the Add page within Tracker.

Record Visibility for Records Submitted via Email

When Record Visibility is enabled in a workgroup, the visibility of each record added via email will be set based on the whether the email message is mapped or unmapped. The only exception is that all records are made visible to the Admins user group regardless of whether the email was mapped or unmapped.

When the option Set Reporter by Mapping "From" Address in the Incoming Email Settings is set to "Yes", this indicates that Tracker should attempt to match the From email address of the incoming message to the email address listed in the profile information for any user account. If the From email address in the incoming message matches an email address for a user in the workgroup, this user will be set as the Reporter of the record created by the incoming message. This is a Mapped email.

The new record resulting from a mapped email will be set such that it is visible to the user groups in which the Reporter is a member as well as the Admins user group.

When the option Set Reporter by Mapping "From" Address in the Incoming Mail Configuration is set to "No", Tracker will not attempt to map the From email address to a user in the workgroup. This is an Unmapped email. Or, if the Set Reporter by Mapping 'From' Address is set to "Yes" and a match is not found, this is also an Unmapped email.

The new record resulting from an unmapped email will be set such that it is visible to the user groups selected for the option Visibility for Records Submitted by Unregistered Users via Email in the Record Visibility section as well as the Admins user group.

Error Handling

Incoming messages with invalid formats (e.g. characters from an unsupported character set, incorrect multipart content, etc.) will be processed such that the field where the body of the incoming message is stored will note "Invalid Email Format. See Attachments." A copy of the raw email will be saved as an attachment called "rawemail.txt" in the record created for this incoming message. The raw email will be saved as an attachment irrespective of how the Save Raw Email as Attachment option is set.

If there are any control characters that are not supported by XML present, these will be converted into "blank" characters.

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Overview

The Knowledge Base is a feature that facilitates the process of creating and publishing articles to allow end users (customers, vendors, partners, any users) to search these articles for answers to questions and issues. Providing an information source that end users can use self-sufficiently reduces the effort needed to support end users. The Knowledge Base also provides a means of documenting and proliferating information to minimize the time needed to resolve an issue.

Enabling the Knowledge Base

A Knowledge Base license key is required to use this feature. Enter your license key in the corresponding tab of the Tracker License Manager.

Once your license key has been entered, create a new workgroup with "Knowledge Base" selected as the template type in the Workgroup Management System (WMS). An explanation of how this template is set up can be found in the section Using the Knowledge Base template. To create a new workgroup in WMS, refer to the Adding a Workgroup section of the WMS Help Guide.

To enable the Knowledge Base in the new workgroup, go to the General Preferences section by performing the following steps:

1. Login to the Knowledge Base workgroup as Admin
2. Click on the Admin icon
3. Click on the General Preferences link
4. Scroll to the Knowledge Base section, set the preference called Enable Knowledge Base to "Yes"
5. Click OK to save this change

Knowledge Base Components

There are several components of the Knowledge Base that can be customized:

- Workflow
  You can configure a set of workflow steps for the process of creating, reviewing, and publishing Knowledge base articles. A new Knowledge Base workgroup has a default workflow configured which is explained in detail in the Knowledge Base template section of this Help Guide.

- Search Page
  Customize the page where users will perform searches. You will be able to select the content displayed and options provided such as search methods (all words, any word, exact phrase) and preferences.

- Results Page
  Define the fields that will be displayed as part of the search results.

- Item Page
  Design how each individual Knowledge Base article will be displayed e.g. which field will be used as the article's title, which other fields will be included in the article.

- Preferences
  Set preferences such as date and time formats that are applied to the Knowledge Base for all searches.

- Customize the KB Pages with your own HTML
  The Search, Results, and Item pages include the ability to add your own HTML to change the look and feel of the pages presented to your users. For example, you may wish to add your company logo or other branding information to the pages. Refer to the sections for each component above for details on customizing the HTML for each of the Knowledge Base pages.

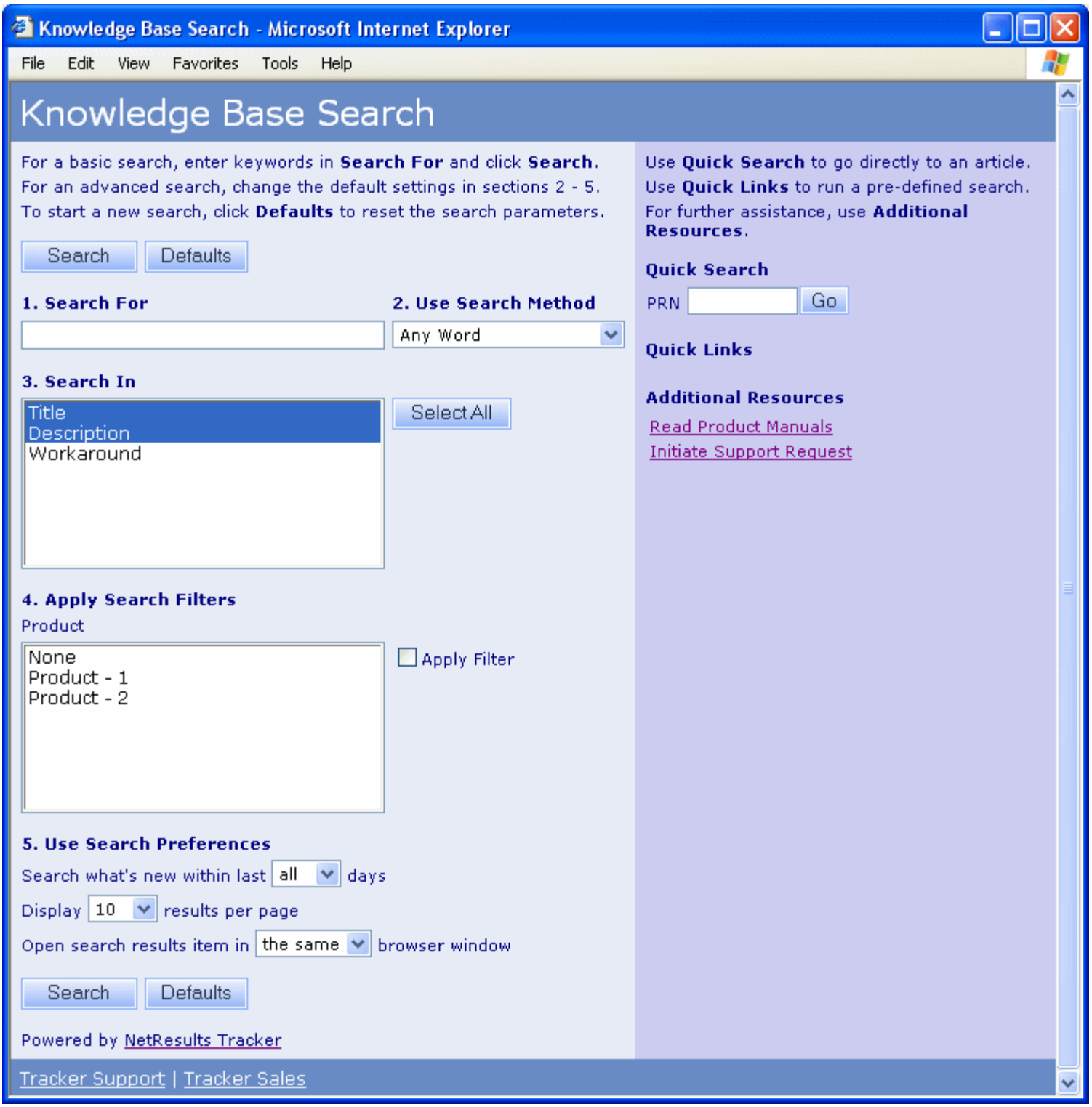
NetResults Tracker Help

Search Page

The Search Page is the first page users will see when they attempt to use the Knowledge Base. The URL for this page is:

http://servername/workgroup/kb/search.asp

where servername is the TCP / IP name of the machine where Tracker is installed and workgroup is the name of the Tracker workgroup you created as the Knowledge Base. An example of a Search Page is shown in the image below. The Search Page is configured with default settings. A detailed explanation of the default settings can be found in the section Using the Knowledge Base template.



Customizing the Search Page

To customize the Search Page:

1. Login to the Knowledge Base workgroup as Admin
2. Click on the Admin icon
3. Click on the Knowledge Base link
4. Click on one of the buttons to the left of the Search Page. Details about these options can be found below.

Header and Footer

Header or Footer

Click on the Header or Footer button to the left of Search Page on the Knowledge Base Configurations Page to customize the Header or Footer section of the Search Page. You can enter your own custom HTML into the text box provided. You may wish to add your company logo or other branding or instructional text into the custom HTML sections. Click OK to save your changes. Please do not enter any header tags into this area. Some examples of header tags are <HTML>, </HTML>, <BODY>, </BODY>. If you wish to display an image in the Header or Footer, you can upload the file as a global file attachment.

Page Title

Enter up to 80 characters to be displayed as the page title in the browser. The text you enter will be displayed before the browser name (as shown by the text "Knowledge Base Search" before "Microsoft Internet Explorer" in the sample above). You can use the variable <workgroup> to include the name of the workgroup as part of the Page Title.

Contents

Several items can be customized in the Contents of the Search Page. The Contents section contains the tools end users will employ to search through the Knowledge Base. The settings you choose in this page will determine how users will be able to conduct searches to return the desired information.

To customize the options on the Contents page:

1. Login to the Knowledge Base workgroup as Admin
2. Click on the Admin icon
3. Click on the Knowledge Base link
4. Click on the Contents button to the left of "Search Page"

For all components that can be customized as Contents of the Search Page, a Visible column displays whether this component is visible to users on the Search page. A checkmark in the Visible column indicates that the component is visible. By default, all components are visible. To remove the component from being displayed on the Search page, click on the Edit button and uncheck the box for the Is Visible option, then click OK to save your change. When a component is invisible (check mark not present in the Visible column for that component), the default selection for this component will be used during all searches. The default settings are described in the component details below. The components Search Words, Right Pane, and Left Pane cannot be made invisible.

Search Words

Search Words is the component where users enter the key word(s) to be used as search criteria. Click on the Edit button to the left of "Search Words" to customize the label. By default, this is set to "1.Search For". Click OK to save your changes.

Search Methods

This component displays the allowed methods of searching the Knowledge Base information. Examples of Search Methods are "All Words", "Any Word", "Exact Phrase", and "Boolean Expression".

Click on the Edit button to modify the label of this field. By default, it is set to "2. Use Search Method". Click OK to save the change.

When the Is Visible box is checked, this component is displayed on the Search Page. If you choose to make this component invisible by unchecking the box, the value selected in the Set Default section will be used for all searches.

Click on the Select Methods button to choose which Search Methods will be provided for use while searching the Knowledge Base. Click on a method to highlight it and click OK to save. At least one method must be selected. Multiple search methods can be selected by holding the "CTRL" button on your keyboard while clicking on multiple search methods.

- All Words: The search will return all Knowledge Base articles which contain all of the words typed into the "Search Words" field.
- Any Word: The search will return all articles which contain any of the words typed into the "Search Words" field.

Exact Phrase: The search will return all articles which contain the exact match for the string typed into the "Search Words" field.

- Boolean Expression: You can allow the use of Boolean operators such as "AND" and "OR". A + sign can be used as "AND". You can also use quotes to distinguish a string of words as one part of the Boolean expression.

Search Method Examples

Key Word(s) or Phrase entered in Search For field	Search Method	Results
access denied	Any Word	The search will return all records which contain the word "access" OR the word "denied".
access denied	All Words	The search will return all records which contain both "access" AND "denied".
access denied	Exact Phrase	The search will return all records which contain the string "access denied".
access OR denied	Boolean Expression	The search will return all records which contain the word "access" OR the word "denied".
access AND denied	Boolean Expression	The search will return all records which contain the word "access" AND the word "denied".

Click on the Set Default button to choose which Search Method will be used as the default. If the Search Methods component is visible on the Search Page, the default will be selected as the search method for all searches unless changed by the user performing a search. If it is not visible on the Search Page, the default will be used as the Search Method for all searches. Click OK to save your default selection.

Search Fields

Any of the text fields (fields of the format Text or TextArea) created in the Fields section can be selected as part of the Knowledge Base search. The settings for this component determine which text fields within the Knowledge Base articles will be searched to find a match for the key word(s) entered in the Search Words field.

Click on the Edit button to modify the label for this component. By default, it is set to "3. Search In".

When the Is Visible box is checked, this component is displayed on the Search Page. If you choose to make this component invisible by unchecking the box, the value selected in the Set Defaults section will be used for all searches.

Click on the Select Fields button to choose which fields are available as Search Fields on the Search Page. At least one value must be selected for this field. Multiple values can be selected for this field by holding down the "CTRL" button on your keyboard as you click on multiple fields. Click OK to save your selections.

Click on the Set Defaults button to select which fields are selected by default. If the Search Fields component is visible on the Search Page, the default(s) will be selected for all searches unless changed by the user performing the search. If it is not visible on the Search Page, the default(s) will be used for all searches. Multiple values can be selected for this field by holding down the "CTRL" button on your keyboard as you click on multiple fields. Click OK to save your default selections.

Search Filters

Any of the pulldown fields created in the Fields section can be selected to narrow down the search. The settings for this component determine which pulldown fields and their corresponding option menu items can be selected as filters. Selecting an item(s) as a filter on the Search Page will cause the search to return all articles that match the Search Words criteria AND match the filter(s) selected.

Example: Product is configured as a Search Filter. The Product field contains an option menu item called "Our Browser". When "Our Browser" is selected as a filter when performing a search of the Knowledge Base, the search results will be all articles that matched the key word(s) entered into the Search Words field AND have "Our Browser" selected for the Product field.

Click on the Edit button to modify the label for this field. By default, this is set to "4. Apply Search Filters".

When the Is Visible box is checked, this component is displayed on the Search Page. If you choose to make this component invisible by unchecking the box, the value selected in the Set Defaults section will be used for all searches.

Check the box for Allow Multiple Selection for Filters if you wish to allow users to select more than one option menu item in each filter to be used in the search. When multiple option menu items are selected as filters, the search will return all articles which match the criteria listed in the Search For field AND which match one of the option menu items selected as filters.

Example: Product is configured as a Search Filter. The Product field contains option menu items called "Our Browser" and "Our Database". When "Our Browser" and "Our Database" are selected as filters when performing a search of the Knowledge Base, the search results will return all articles that matched the key word(s) entered into the Search Words field AND have either "Our Browser" OR "Our Database" selected for the Product field.

Check the box for Include 'Apply Filter' option if you wish to allow users to choose which filters should be applied. Unchecking this box indicates that a user will have to select an option menu item for each filter displayed, which will be used as part of the search criteria.

In the Apply Filter Label field, enter the name to be used for the check box option on the Search Page which determines whether the filter will be used in the search. By default, this label is "Apply Filter".

Select an option for Initial Apply Filter Settings.

- When choosing the option Apply All Filters (all checked) with Include 'Apply Filter' option enabled, the Search Page will have the "Apply Filter" box checked for all filters displayed.
- When choosing the option Don't Apply Any Filter (all unchecked) with Include 'Apply Filter' option enabled, the Search Page will have the "Apply Filter" box unchecked for all filters displayed.
- When choosing the option Apply If Search Filter Has Default(s) with Include 'Apply Filter' option, the Search Page will have the "Apply Filter" box checked for any filter which has a default(s) selected in the Set Defaults section for Search Filters.

For the Include Obsolete Items option, check the box if you wish to allow option menu items that have been marked as obsolete to be available as search filters. Option menu items that have been marked as obsolete are values that have been deactivated in the pulldown field's Items section.

Click OK to save your selections for the Search Filters component.

Click on the Select Filters button to select the pulldown fields that will be displayed as possible filters on the Search page. Multiple values can be selected by holding down the "CTRL" button on your keyboard as you click on multiple fields. Selecting a pulldown field indicates that all option menu items with the "Value Is Public" option enabled for this pulldown will be displayed as possible filters on the search page. Click OK to save your selections.

Click on the Set Defaults button to select the option menu item(s) that will be selected by default as Search Filters. If the Search Filters are set to be visible on the Search Page, the default(s) will be selected as filters for all searches unless changed by the user performing the search. If the Search Filters are not visible on the Search Page, the default(s) (if any) will be used for all searches. Multiple values can be selected for each filter by holding down the "CTRL" button on your keyboard as you click on multiple fields. Click OK to save your selections.

Search Preferences

This option allows you to define the following preferences for the search results:

- Searching records added to the Knowledge Base within a given number of days with respect to a date field, such as, limiting the search to return articles where the Publication Date field is within the last X number of days.
- Limiting the number of results to be displayed on the Results page
- Whether the results page should be displayed in the same browser window or launch a new one

Click on the Edit to modify the label for this field. By default, it is set to "5. Use Search Preferences".

When the Is Visible box is checked, this component is displayed on the Search Page. If you choose to make this component invisible by unchecking the box, the values selected in the Set Preferences section will be used for all searches. Click OK to

save your changes.

Click on the Set Preferences button to configure the Search Preferences. You can choose to display each preference by checking the box in the Visible column

The preference Search what's new within the last given number of days from a Date Field narrows the search results to be articles that were modified within the last X number of days from the Date Field selected. You can select a default setting for the number of days by making a choice for this field in the Preference column. The available choices for number of days are all, 2, 7, 14, 30, 60, 90, 180. You can also set which date field is referenced to determine the article's age for all searches. All of the Date type fields in use in the Knowledge Base workgroup as well as the Last Updated Date field will be displayed as choices for this setting. If this preference is visible on the Search Page, the users can specify the number of days to limit the search results. If this preference is invisible, the default number of days set as the default will be used for all searches.

The preference Display a given number of results per page sets the number of articles that will be displayed per page in a list as the result of a search. A default can be set by making a choice in the Preference column for this field. The choices for this setting are 10, 20, 30, 50, 100. If the field is visible on the Search page, users will be able to make their own selection from the above choices. If the field is invisible, the default choice will be used for all searches.

The preference Open search results item in same or new window allows you to choose whether the list of results are displayed in the same browser window as the Search Page or are opened in a new browser window. If this field is visible on the Search Page, the users can make their own selection. If it is invisible, the value set in the Preference column will be used for all searches.

After making your selections, click OK to save the preferences.

Quick Search

Quick Search is a feature that allows end users to type in the number of the Knowledge base article he or she wishes to see to immediately view that article.

Click on the Edit to modify the label for this field. By default, it is set to "Quick Search".

When the Is Visible box is checked, the Quick Search section will be displayed on the Search Page. Click OK to save your changes.

Quick Links

Quick Links is a feature that allows you to save Knowledge Base searches with particular criteria as links on the Search Page. Your end users can click on these links to immediately run one of the saved search reports.

Click on the Edit to modify the label for this field. By default, it is set to "Quick Links".

When the Is Visible box is checked, the Quick Links section will be displayed on the Search Page. Click OK to save your changes.

Click on the Modify Links button to add and edit the Quick Links displayed on the Search page. A new browser window will be launched with the Knowledge Base Search Page displayed.

To add a Quick Link:

1. Enter a name for the Quick Link in the Quick Link Label field. This name will be displayed in the Quick Links section of the Search Page.
2. Enter the order for the Quick Link to be displayed relative to other Quick Links in the Quick Link Order field.
3. Make selections in the search criteria fields to be saved as the search criteria for the saved Knowledge Base search: Search For, Search Methods, Search In, Filters, and Preferences
4. Click on the Add button to save this search as a Quick Link.
5. The Quick Link will be displayed in the right column in the Quick Links section

To edit a Quick Link, click on the Edit icon to the right of the Quick Link in the right pane.

To delete a Quick Link, click on the Delete icon to the right of the Quick Link in the right pane.

Right and Left Panes

The right and left panes on the Search Page can be customized to add your own custom HTML to the Header and Footer. These sections can be used to provide instructions about how to use the Search Page, links to additional resources for your end users, etc.

Click on the Header or Footer button to the left of Right Pane or Left Pane to customize the Header or Footer section of either pane. You can enter your own custom HTML into the text box provided. Click OK to save your changes. Please do not enter any header tags into this area. Some examples of header tags are <HTML>, </HTML>, <BODY>, </BODY>.

By default, HTML has been entered to provide the following information in the panes:

- The Right Pane Header provides instructions for using the Quick Search and Quick Links sections that appear in the pane
- The Right Pane Footer is set to provide an Additional Resources section with other links that could assist end users, such as links to Read Product Manuals and Initiate Support Requests
- Left Pane Header provides instructions for performing a Knowledge Base search

Customizing the Color Preferences for the Search Page

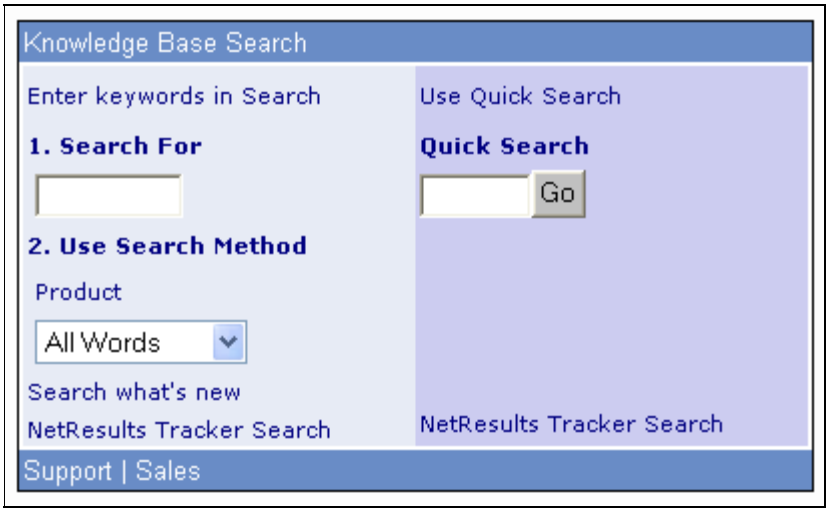
You can customize the color scheme displayed on the Search Page.

To customize the color preferences on the Search Page:

1. Login to the Knowledge Base workgroup as Admin
2. Click on the Admin icon in the Button Bar
3. Click on the Knowledge Base link
4. Click on the Color button to the left of Search Page
5. Make selections for the color preferences (see preferences for a detailed description of each item)
6. Click OK to save the changes

Color Preferences

The following color preferences can be set for the Search Page.



General Settings

Page Background

The background color for the body of the Search Page. The Page Background is not usually visible on the Search Page; it depends on how many fields and options are available on the Search Page.

Header Background
The background color of the section at the top of the Search Page (e.g. the color behind the text "Knowledge Base Search" in the Search Page Sample).

Header Text
The color of the text displayed in the top section of the Search Page (e.g. the color of the text "Knowledge Base Search" in the Search Page Sample).

Footer Background
The background color of the section at the bottom of the Search Page (e.g. the color behind the text "Support | Sales" in the Search Page Sample).

Footer Text
The color of the text in the bottom section of the Search Page (e.g. the color of the text "Support | Sales" in the Search Page Sample).

Left Pane Settings

Background
The background color in the left pane of the Search Page (e.g. the color behind the text "1. Search For" in the Search Page Sample).

Header Background
The background color of the top section of the left pane (e.g. the color behind the text "Enter keywords in Search" in the Search Page Sample).

Footer Background
The background color of the bottom section of the left pane (e.g. the color behind the text "NetResults Tracker search" at the bottom of the left pane in the Search Page Sample).

Title Text
The color of the text displayed above the Search options in the left pane (e.g. the color of the text "1. Search For" in the Search Page Sample).

SubTitle Text
The color of the text displayed for any sub titles in the Left Pane (e.g. the color of the text "Product" in the Search Page Sample).

Body Text
The color of the text displayed within the body of the left pane (e.g. the color of the text "Enter keywords in Search", "Search what's new" and "NetResults Tracker Search" in the Search Page Sample).

Warning Text
The color of the text that is displayed when there is a warning about an item on the Search Page (e.g. when a field is selected as a Search Filter, but does not have any option menu items that are public to be used as filters).

Right Pane Settings

Background
The background color in the right pane of the Search Page (e.g. the color behind the text "Quick Search" in the Search Page Sample).

Header Background
The background color of the top section of the right pane (e.g. the color behind the text "Use Quick Search" in the Search Page Sample).

Footer Background
The background color of the bottom section of the right pane (e.g. the color behind the text "NetResults Tracker search" at the bottom of the right pane in the Search Page Sample).

Title Text

The color of the text displayed above the Search options in the right pane (e.g. the color of the text "Quick Search" in the Search Page Sample).

Body Text
The color of the text displayed within the body of the right pane (e.g. the color of the text "Use Quick Search" and "NetResults Tracker Search" in the Search Page Sample).

Customizing the Style Sheet for the Search Page

A style sheet is used to determine the size, style and family of the fonts on the Search Page. You can use your own style sheet by placing a copy of your style sheet into the Styles directory of your workgroup's Knowledge Base files. Any color options set in the style sheet will be overridden by the settings in the Color Preferences section for the Search Page. The directory can be found at:

<installation directory>/***workgroup***/KB/Styles

where <installation directory> is the location where you installed your Tracker files. By default, the <installation directory> is at C:\Inetpub\wwwroot\NetResultsTracker and *workgroup* is the name of the workgroup used as Knowledge Base.

Click on the Style button to the left of the Search Page to specify the name of your customized style sheet. In the Style Sheet File Name field, enter the name of your style sheet file in the format FileName.Extension as in the example KBStyle6.css, which is the style sheet used by default.

Check the box for the option Apply to all pages to apply the style sheet entered in the Style Sheet File Name field to all pages related to the Knowledge Base. Enabling this option will overwrite any other style sheets specified in the Style section for the Results and Item pages.

Click OK to save your selections.

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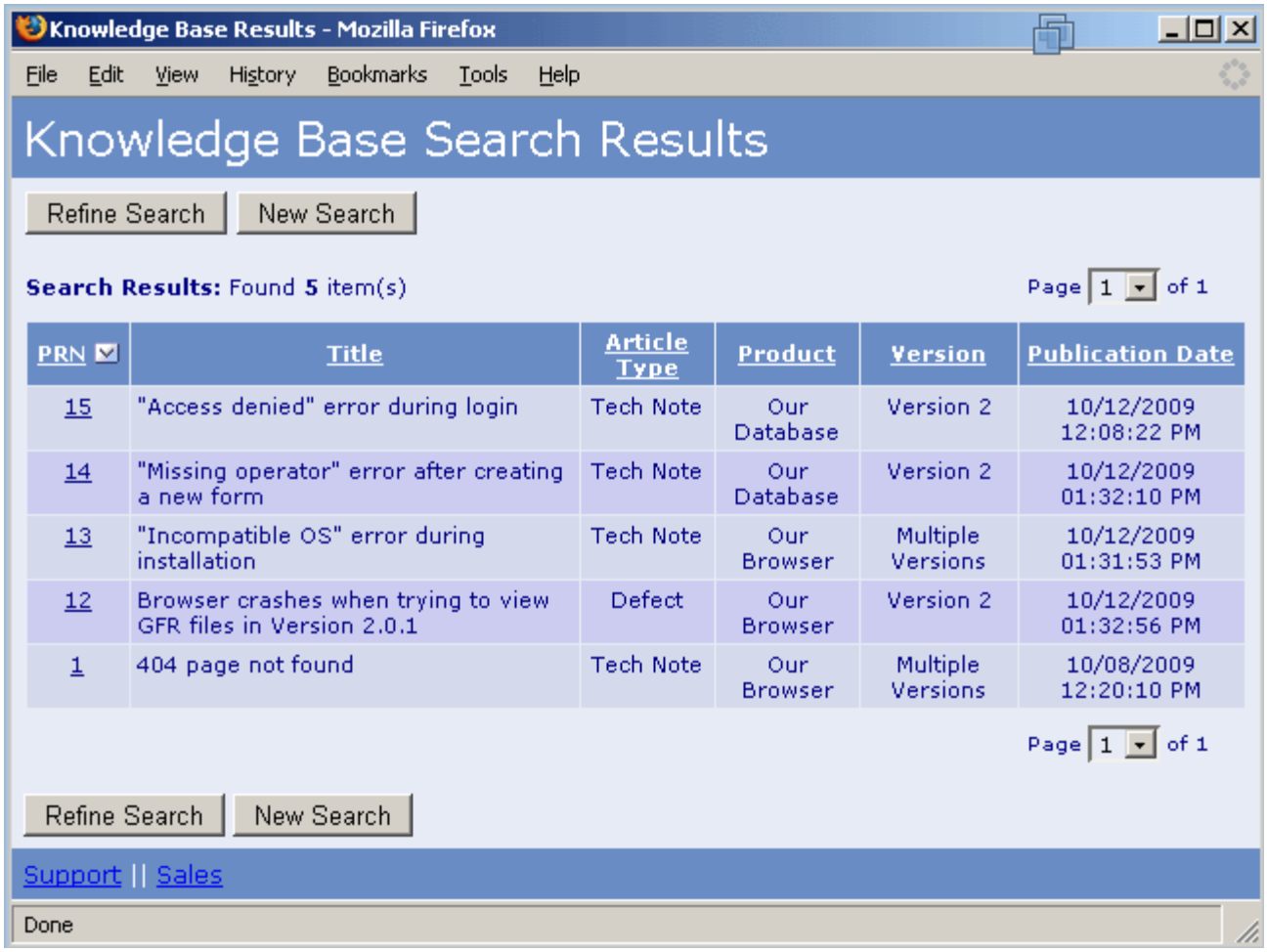
NetResults Tracker Help

Results Page

The Results Page is the page that will display the list of articles that matched the criteria specified on the Search page. Various aspects of the Results Page can be customized as described below. A set of results is displayed as an example below.



Header and Footer

Header or Footer

Click on the Header or Footer button to the left of Results Page on the Knowledge Base Configurations Page to customize the Header or Footer section of the Results Page. You can enter your own custom HTML into the text box provided. You may wish to add your company logo or other branding or instructional text in the custom HTML sections. Click OK to save your changes. Please do not enter any header tags into this area. Some examples of header tags are <HTML>, </HTML>, <BODY>, </BODY>. If you wish to display an image in the Header or Footer, you can upload the file as a global file attachment. The Header is the part where "Knowledge Base Search Results" is displayed in the in the sample above. The Footer is the part where "Support | | Sales" is displayed in the sample above.

Page Title

Enter up to 80 characters to be displayed as the page title in the browser. The text you enter will be displayed before the browser name (as shown by the text "Knowledge Base Results" before "Microsoft Internet Explorer" in the sample above). You can use the variable <workgroup> to include the name of the workgroup as part of the Page Title.

Contents

Click on the Contents button to the left of the Results Page on the Knowledge Base Configurations Page to customize the contents of the Results page. Specifically, you can select which fields will be used as the columns on the list where articles are displayed on the Results Page. All fields created in the Fields section of the workgroup are available to be selected as columns for the Results Page. Fields listed in the Selected Items column are the fields that will appear on the Results Page.

To add a field to the Selected Items column so that the field will appear on the Knowledge Base Results Page:

1. Click on the name of a field in the Not Selected Items column
2. Click on the Add button
3. If desired, change the order in which the field appears relative to the other fields in the Selected Items column by clicking on the Edit button, then entering the number to be used as the new order. Click OK to save the new value for the order.

By default, the fields in the Selected Items column will be displayed in the Results Page according to the order set for the fields in the form selected for the Knowledge Base Article Form property in the Preferences section and the results will be sorted by the PRN field in Descending order. These properties can be changed by using the Edit operation.

To edit the properties of a field displayed on the Results Page:

1. Click on the name of a field in the Selected Items column
2. Click on the Edit button
3. Enter a number for the Order, which is the order in which the field is displayed relative to the other fields in the Selected Items column. If you enter the same order as another field, the fields will be displayed in alphabetical order.

   The field can be set such that the results are sorted according to the value of that field by selecting "Yes" for Default for Sorting. The value "Yes" can only be selected for one field at any given time. When "Yes" is selected for a field, any other field in the Selected Items column that previously had "Yes" selected for this property will then be set to "No" when the changes are saved.

   If "Yes" was selected for Default for Sorting, select whether the results should be sorted in "Ascending" or "Descending" order in the Sort Order option.

4. Click OK to save the changes

To remove a field from the Selected Items column such that it will no longer be displayed on the Results Page:

1. Click on the name of a field in the Selected Items column
2. Click on the Remove button

The Record Number field (called PRN by default) is required to be displayed on the Results page so that each article has a unique identifier. Thus, the Record Number field cannot be removed from the Selected Items column.

When a TextArea field is selected to be displayed on the Results page, the contents of the field will be truncated to 255 characters in the results of a Knowledge Base search.

Customizing the Color Preferences for the Results Page

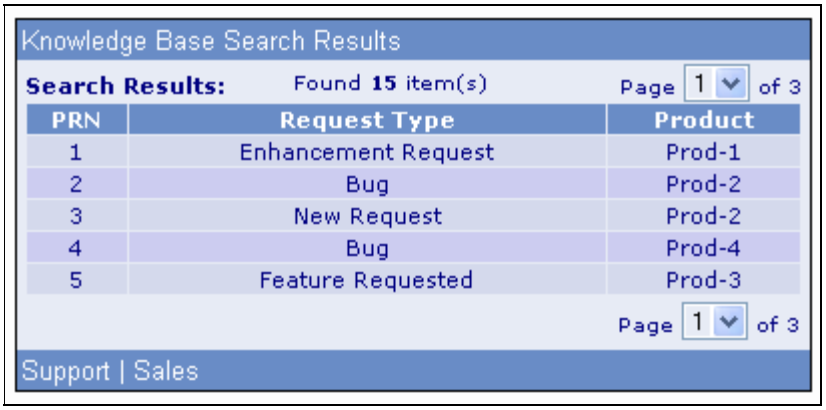
The color scheme of the Results Page can be customized.

To set the color preferences for the Results Page:

1. Login to the Knowledge Base workgroup as Admin
2. Click on the Admin icon in the Button Bar
3. Click on the Knowledge Base link
4. Click on the Color button to the left of Results Page
5. Make selections for the color preferences (a detailed description of each item is available in preferences)
6. Click OK to save the changes

Color Preferences

The following color preferences can be set for the Results Page.



General Settings

Page Background
The background color for the Results Page. The page background may not be visible on the Results Page at all times; it depends on the number of results that matched the search.

Header Background
The background color of the top section of the Results Page (e.g. the color behind the text "Knowledge Base Search Results" in the Results Page Sample.)

Header Text
The color of the text displayed in the top section of the Results Page (e.g. the color of the text "Knowledge Base Search Results" in the Results Page Sample.)

Footer Background
The background color of the bottom section of the Results Page (e.g. the color behind the text "Support | Sales" in the Results Page Sample.)

Footer Text
The color of the text displayed in the bottom section of the Results Page (e.g. the color of the text "Support | Sales" in the Results Page Sample.)

Body Background
The background color of the body of the Results Page (e.g. the color behind the text "Search Results" in the Results Page Sample.)

Body Title
The color of the title text in the body of the Results Page (e.g. the color of the text "Search Results" in the Results Page Sample.)

Body Text
The color of the non-title text in the body of the Results Page (e.g. the color of the text "Found 15 item(s)" in the Results Page Sample.)

Paging Text
The color of the text for paging through the results (e.g. the color of the text "Page" and "of 3" in the Results Page Sample.)

Paging Pulldown Background
The background color of the paging pulldown (e.g. the color behind the "1" in the paging pulldown in the Results Page Sample.)

Error Message Text
The color of the text that is displayed if no matches are found for the criteria entered on the Search Page (e.g. if no matches are found, the text "Sorry, no match found for your search. Please click here to modify your search." will be displayed in the color selected for this option).

Table Settings

Table Header Background
The color of the top row in the table displaying the results (e.g. the color behind the text "PRN", "Request Type" and "Product" in

the Results Page Sample.)

Title Text
The color of the text in the top row of the table displaying the results (e.g. the color of the text "PRN", "Request Type" and "Product" in the Results Page Sample.)

Odd Row Background
The background color of the odd-numbered rows of the table displaying the results (e.g. the color behind the text "1", "Enhancement Request" and "Prod-1" in the Results Page Sample.)

Odd Row Text
The color of the text in the odd-numbered rows of the table displaying the results (e.g. the color of the text "1", "Enhancement Request" and "Prod-1" in the Results Page Sample.)

Even Row Background
The background color of the even-numbered rows of the table displaying the results (e.g. the color behind the text "2", "Bug" and "Prod-2" in the Results Page Sample.)

Even Row Text
The color of the text in the even-numbered rows of the table displaying the results (e.g. the color of the text "2", "Bug" and "Prod-2" in the Results Page Sample.)

Customizing the Style Sheet for the Results Page

A style sheet is used to determine the size, style and family of the fonts on the Results Page. You can use your own style sheet by placing a copy of your style sheet into the Styles directory of your workgroup's Knowledge Base files. Any color options set in the style sheet will be overridden by the settings in the Color Preferences section for the Results Page. The directory can be found at:

<installation directory>/***workgroup***/KB/Styles

where <installation directory> is the location where you installed your Tracker files. By default, the <installation directory> is at C:\Inetpub\wwwroot\NetResultsTracker and *workgroup* is the name of the workgroup used as Knowledge Base.

Click on the Style button to the left of the Results Page to specify the name of your customized style sheet. In the Style Sheet File Name field, enter the name of your style sheet file in the format FileName.Extension as in the example KBStyle6.css, which is the style sheet used by default.

Check the box for the option Apply to all pages to apply the style sheet entered in the Style Sheet File Name field to all pages related to the Knowledge Base. Enabling this option will overwrite any other style sheets specified in the Style section for the Search and Item pages.

Click OK to save your selections.

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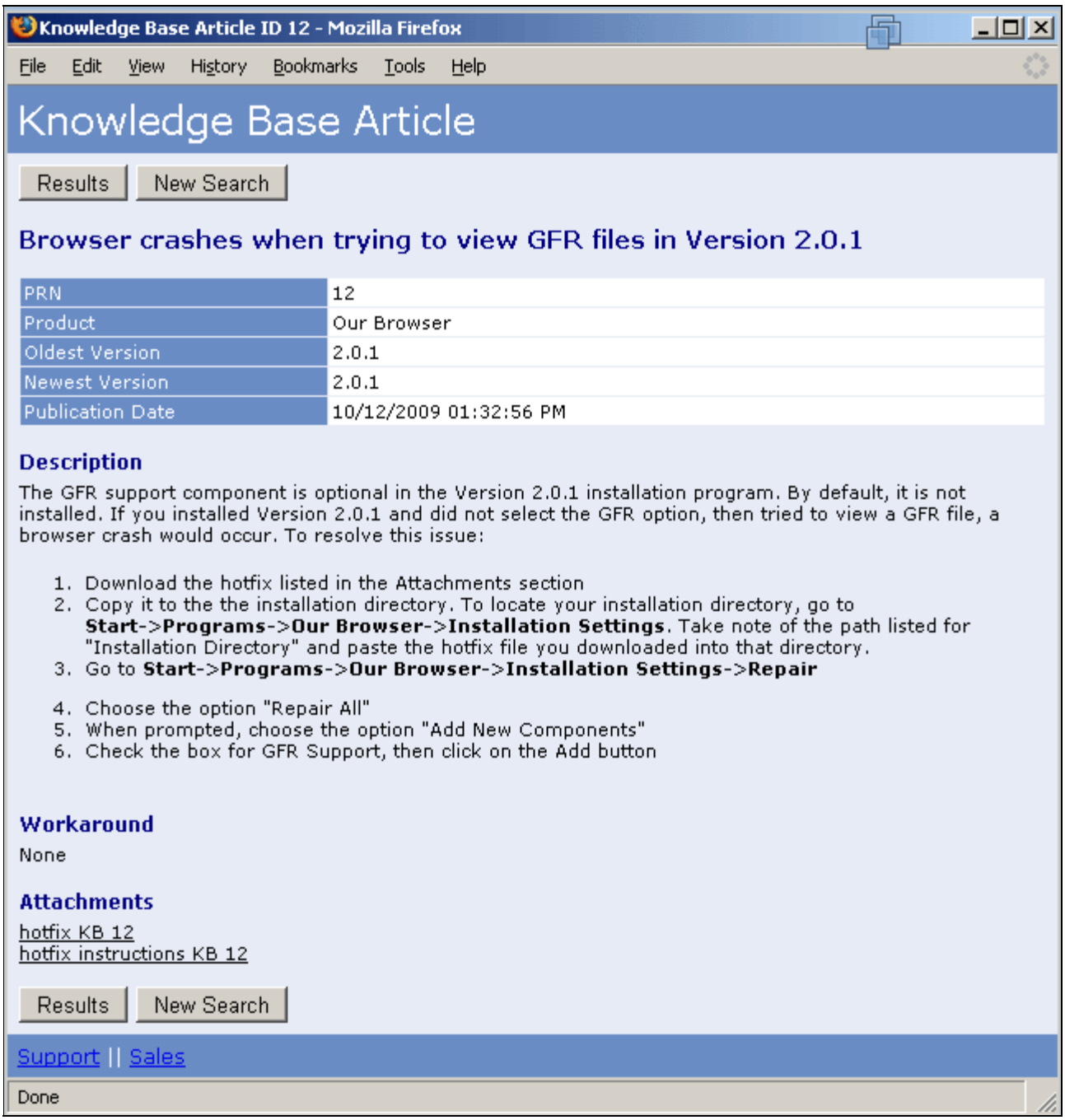
NetResults Tracker Help

Item Page

The Item Page is the page that will display the information within a Knowledge Base article. Various aspects of the item Page can be customized as described below.



Header and Footer

Header or Footer

Click on the Header or Footer button to the left of Item Page on the Knowledge Base Configurations Page to customize the Header or Footer section of the Item Page. You can enter your own custom HTML into the text box provided. You may wish to add your company logo or other branding or instructional text to the page in the custom HTML sections. Click OK to save your changes. Please do not enter any header tags into this area. Some examples of header tags are <HTML>, </HTML>, <BODY>, </BODY>. If

you wish to display an image in the Header or Footer, you can upload the file as a global file attachment. The Header is the text "Knowledge Base Article" displayed in the Item Page Sample above. The Footer is the text "Support || Sales" displayed in the Item Page Sample above.

Page Title
Enter up to 80 characters to be displayed as the page title in the browser. The text you enter will be displayed before the browser name. You can use the variables <workgroup> to include the name of the workgroup as part of the Page Title. and <itemlabel> <number> to include the item label (e.g. "Article" or "PRN" or other label for the PRN field) and record number. The Page Title is the text "Knowledge Base Article ID 12" displayed in the Item Page Sample above.

Contents

The contents of the Item Page can be customized to determine which fields will displayed in the sections of each article. To customize the contents of the Item Page, click on the Contents button to the left of the Item Page on the Knowledge Base Configurations Page.

To customize the options on the Contents page:

1. Login to the Knowledge Base workgroup as Admin
2. Click on the Admin icon in the Button Bar
3. Click on the Knowledge Base link
4. Click on the Contents button to the left of "Results Page"

Article Title

Click on the Edit button to the left of Title to select a field that will be used as the title for each article. All fields that are a Text type field will be available to be selected as the Article Title. Information on adding a Text type field to the database can be found in the Fields Help section. Click OK to save your selection.

Summary

Click on the Edit button to the left of Summary to select the fields that will be displayed in the Summary section of the article. All fields created in the Fields section of the workgroup except fields that are TextArea type fields will be available to be displayed in the Summary section. Fields listed in the Selected Items column are the fields that will appear in the Summary section.

To add a field such that it will be displayed in the Summary section of the Item Page:

1. Click on the field in the Not Selected Items column
2. Click on the Add button
3. If desired, change the order in which the field appears relative to the other fields in the Selected Items column by clicking on the Edit button, then entering the number to be used as the new order. Click OK to save the new value for the order.

To edit the order of a field with respect to the others in the Summary section:

1. Click on the field in the Selected Items column
2. Click on the Edit button
3. Enter a number for the order with respect to other fields in the Selected Items column. Fields that have the same order will be sorted alphabetically.
4. Click OK to save the change

To remove a field such that it will no longer be displayed in the Summary section of the Item Page:

1. Click on the field in the Selected Items column
2. Click on the Remove button

The Include Attachments option allows attachments added to the article to be displayed in the Summary section below any fields added to the Selected Items column. The label that will be displayed for this entry in the Summary section is determined by the Attachments Label option in the Preferences section.

Body

Click on the Edit button to the left of Body to select which fields will be displayed in the Body section of each Knowledge Base article. All fields created in the Fields section of the workgroup will be available to be selected for the Body section. Fields listed in the Selected Items column are the fields which will appear in the Body section.

To add a field such that it will be displayed in the Summary section of the Item Page:

1. Click on the name of a field in the Not Selected Items column
2. Click on the Add button
3. If desired, change the order in which the field appears relative to the other fields in the Selected Items column by clicking on the Edit button, then entering the number to be used as the new order. Click OK to save the new value for the order.

To edit the order of a field with respect to the others in the Summary section:

1. Click on the field in the Selected Items column
2. Click on the Edit button
3. Enter a number for the order with respect to other fields in the Selected Items column. Fields that have the same order will be sorted alphabetically.
4. Click OK to save the change

To remove a field such that it will be no longer be displayed in the Summary section of the Item Page:

1. Click on the name of a field in the Selected Items column
2. Click on the Remove button

You can choose to display fields that are TextArea type fields as Text or HTML. By default, the fields will be displayed as Text. To display the fields as HTML, check the box called Display TextArea Fields as HTML. Click OK to save this change.

The Include Attachments option allows attachments added to the article to be displayed in the Body section below any fields added to the Selected Items column. The label that will be displayed for this section is determined by the Attachments Label option in the Preferences section.

Customizing the Color Preferences for the Item Page

The color scheme of the Item Page can be customized.

To set the color preferences for the Item Page:

1. Login to the Knowledge Base workgroup as Admin
2. Click on the Admin icon
3. Click on the Knowledge Base link
4. Click on the Color button
5. Make selections for the color preferences (a detailed description of each item is available in preferences
6. Click OK to save the changes

Color Preferences

The following color preferences can be set on the Item Page.

General Settings

Page Background
The background color of the Item Page. The page background may not always be visible on the Item Page; it depends on how content is displayed in the article's Item Page.

Header Background
The background color of the top section of the Item Page (e.g. the color behind the text "Knowledge Base Article" in the Item Page Sample).

Header Text
The color of the text in the top section of the Item Page (e.g. the color of the text "Knowledge Base Article" in the Item Page Sample).

Footer Background
The background color of the bottom section of the Item Page (e.g. the color behind the text "Support | Sales" in the Item Page Sample).

Footer Text
The color of the text in the bottom section of the Item Page (e.g. the color of the text "Support | Sales" in the Item Page Sample).

Body Background
The background color of the body of the Item Page (e.g. the color behind the text "A new option to be added" and "Enhancement in KB Page" in the Item Page Sample).

Title Text
The color of the text displayed as the title in the body of the Item Page (e.g. the color of the text "Enhancement Request" in the Item Page Sample).

Error Message Text
The color of the text displayed when no match is found for a Quick Search (e.g. the text "Sorry no match found for your search. Please click here to perform a new search." will be displayed when an invalid article number is entered into the Quick Search field on the Search Page.)

Summary Section

Title Background
The background color of the left column in the Summary section, which displays the field names (e.g. the color behind the text "PRN" and "Product" in the Item Page Sample).

Title Text
The color of the text in the left column in the Summary section, which displays the field names (e.g. the color of the text "PRN" and "Product" in the Item Page Sample).

Text Background
The background color of the right column in the Summary section, which displays the field values (e.g. the color behind the text "20" and "Microsoft" in the Item Page Sample).

Body Text
The color of the text in the right column in the Summary section, which displays the field values (e.g. the color of the text "20" and "Microsoft" in the Item Page Sample).

Body Section

Title Text
The color of the text displayed as the name of each field included in the Body section (e.g. the color of the text "Description", "Title" and "Platform" in the Item Page Sample).

Body Text
The color of the text displayed as the value of each field included in the Body section (e.g. the color of the text "A new option to be added" in the Item Page Sample).

Customizing the Style Sheet for the Item Page

A style sheet is used to determine the size, style and family of the fonts on the Item Page. You can use your own style sheet by placing a copy of your style sheet into the Styles directory of your workgroup's Knowledge Base files. Any color options set in the style sheet will be overridden by the settings in the Color Preferences section for the Item Page. The directory can be found at:

<installation directory>/***workgroup***/KB/Styles

where <installation directory> is the location where you installed your Tracker files. By default, the <installation directory> is at C:\Inetpub\wwwroot\NetResultsTracker and *workgroup* is the name of the workgroup used as Knowledge Base.

Click on the Style button to the left of the Item Page to specify the name of your customized style sheet. In the Style Sheet File Name field, enter the name of your style sheet file in the format FileName.Extension as in the example KBStyle6.css, which is the style sheet used by default.

Check the box for the option Apply to all pages to apply the style sheet entered in the Style Sheet File Name field to all pages related to the Knowledge Base. Enabling this option will overwrite any other style sheets specified in the Style section for the Search and Results pages.

Click OK to save your selections.

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Preferences

There are several preferences that are applied to all areas of the Knowledge Base. These preferences include setting the workflow state where Knowledge base articles are published as well as selecting date and time formats.

To set the Knowledge Base Preferences:

1. Login to Tracker as Admin
2. Click on the Admin icon
3. Click on the Knowledge Base link
4. Click on the Preferences button to the left of "All Pages"
5. Make selections for the preferences, then click OK to save your selections

The preferences that can be set for all Knowledge Base pages are described below:

Knowledge Base Article Form
Select a form that should be used for creating and publishing articles to the Knowledge Base. The forms available for selection are based on the forms that have been created in the Forms section.

Articles from these Projects are visible
This option limits the articles that are published in the Knowledge Base to only those that have belong to one of the selected projects. The projects available are the projects associated with the form selected in Knowledge Base Form. More information can be found in the Projects section.

Articles in these State(s) are visible
Choose a state or a state group as the state(s) where articles are published to the Knowledge Base. When a Knowledge Base article has the Status field set to the state(s) selected for this preference, the article can be viewed using the Search Page -- it is available to all end users searching the Knowledge Base.

Multiple states can be selected for this preference by creating a state group in the Workflows page of the Administration section and selecting the new state group for this preference.

Date Format
Select the date format that should be used when displaying date fields in the Knowledge Base articles and related pages (Search, Results, and Item pages).

Time Format
Select the time format that should be used when displaying date fields in the Knowledge Base articles and related pages (Search, Results, and Item pages). Selecting 12 Hour will display the time using the numbers 1-12 to represent each hour. Choosing 24 hour will display the time using the numbers 0-24 to represent each hour.

Time Zone
Select the time zone that should be used when displaying date fields in the Knowledge Base articles and related pages (Search, Results, and Item pages). The list of available time zones is based on the operating system of the Tracker server machine. The following Help section contains the time zones for the server operating systems supported by Tracker: Windows Time Zones

Adjust to Daylight Saving Time (DST)
Checking the box here will enable the system to adjust the workgroup data to account for daylight saving time. If you selected a time zone for the workgroup where daylight saving time is observed, it is recommended that you enable this option.

Attachments Label
When the option Include Attachments is enabled in the Summary or Body of the Item Page, this is the label that will be displayed for that section of the Item Page. By default, it is set to "Attachments".

IP Address Restrictions

Access to Knowledge Base can be limited by IP address of the user attempting to access the workgroup. When this feature is enabled, a user will only be able to access the Knowledge Base pages if the user's IP address matches one of the IP addresses or

IP Address ranges configured in the Allowed IP Addresses field. If the user's IP Address does not match a configured address or range, they will see an "Access Denied" message that can be customized with any desired wording and HTML code. This option only applies to the Knowledge Base pages. IP Address Restrictions can be configured for the Login Page and the rest of the Tracker pages as well as the Submit Page for Unregistered Users in their own separate sections. IP Address restrictions configured in this section take effect immediately after clicking OK to save the changes.

To enable IP Address restrictions:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Knowledge Base link
4. Click on the Preferences button
5. Set the Enable IP Address Restriction option to "Yes"
6. Click on the Add button to add an IP address or range of addresses.

   For Type select "Single computer" to add a single IP Address or "Range of computers" to add a range of IP Addresses. For IP Address, enter the IP address, then click OK. For IP Address Range, enter the first IP Address in the range, then enter the last IP Address in the range and click OK. At least one IP Address or range must be entered when the this feature is enabled. The IP Address of the login user (the user making these changes) should also be added to the list as a single computer or within a range.

7. Enter any desired text or HTML into the Access Denied Message to customize what a user will see if they are denied access to the workgroup because their IP Address is not configured in the Allowed IP Addresses list. The variable "<ip_address>" can be used within this field such that it will be replaced with the actual IP address that was rejected when the Access Denied Message is displayed. Do not use the tags <HTML>, </HTML>, <BODY>, </BODY> or any other header tags in this field. When this feature is enabled, the Access Denied Message cannot be empty.
8. Click OK to save the changes

To edit an item in the Allowed IP Addresses list:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Knowledge Base link
4. Click on the Preferences button
5. Click on the item and click on the Edit button. Make any desired changes, then click OK.
6. Click OK to save the changes

To remove an item in the Allowed IP Addresses list:

1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Knowledge Base link
4. Click on the Preferences button
5. Click on the item and click on the Remove button
6. Click OK to save the changes

Color Preferences

You can customize the color scheme of the Knowledge Base pages.

To set the color preferences for the Knowledge Base pages:

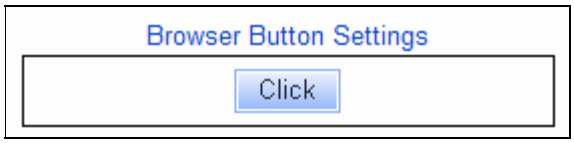
1. Login to the workgroup as Admin
2. Click on the Admin icon
3. Click on the Knowledge Base link
4. Click on the Color button to the left of "All Pages"
5. Make selections for each of the color preferences (Description of preferences)
6. Click OK to save the changes

Color Preference Options

The following color preferences can be set for the Knowledge Base pages:

Browser Button Settings

These settings determine the colors of the buttons for users using the following browsers: Internet Explorer (IE), Firefox 3.6 or newer and Safari 4.0 or newer.



Use Default Buttons (& Inputs)

Checking the box for this option will apply the operating system's default color settings to the buttons. When this option is enabled, the rest of the Browser Button Settings are disabled.

Gradient

Select a method for applying a gradient effect to the button color (e.g. "Bottom to Top" is the method selected in the Browser Buttons Sample). Selecting "None" will not apply the gradient effect to the button color. This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Background

The color used in the background of the buttons in the Tracker pages (e.g. the light blue color behind the text "Click" on the button in the Browser Buttons Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Text

The color of the text in the buttons in the Tracker pages (e.g. the color of the text "Click" in the Browser Buttons Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Border

The color of the border of the button in the Tracker pages (e.g. the color of the light blue border around the "Click" button in the Browser Buttons Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Other Browser Button Settings

These settings determine the colors of the buttons for users using the following browsers: Firefox (versions older than 3.6) and Safari (versions older than 4.0).

Use Default Buttons (& Inputs)

Checking the box for this option will apply operating system's default color settings to the buttons. When this option is enabled, the rest of the Other Browser Button Settings are disabled.

Background

The color used in the background of the buttons in the Tracker pages (e.g. the blue color behind the text "Click" on the button in the Other Browser Button Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Text

The color of the text in the buttons in the Tracker pages (e.g. the color of the text "Click" in the Other Browser Button Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Border

The color of the border of the button in the Tracker pages (e.g. the color of the black border around the "Click" button in the Other

Browser Button Sample). This option will not be available when the option Use Default Buttons (& Inputs) is enabled.

Error Page Settings

The following settings are applied to the error page should an error occur in the Knowledge Base.

Body Background
The background color of the error page.

Body Title Font
The color of the text displayed at the top (title) of the error page.

Border Background
The color of the border displayed around the error information.

Left Pane Body Text
The color of the text in the left pane of the error page.

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NetResults Tracker Help

Windows Time Zone Selection Chart

The following is a list of time zones that are supported by Tracker when installed on a Windows system.

Time Zone Offset (in Hours)	Time Zone	System Time Zone (as displayed in Date/Time Settings)
-12:00	Dateline Standard Time	Eniwetok, Kwajalein
-11:00	Samoa Standard Time	Midway Is, Samoa
-10:00	Hawaiian Standard Time	Hawaii
-10:00	Alaskan Standard Time	Alaska
-08:00	Pacific Standard Time	Pacific Time (US & Canada); Tijuana
-07:00	Mexican Standard Time [La Paz]	Chihuahua, La Paz, Mazatlan
-07:00	Mountain Standard Time	Mountain Time (US & Canada)
-07:00	Mountain Standard Time [Arizona]	Arizona
-06:00	Central Standard Time	Central Time (US & Canada)
-06:00	Mexico Standard Time	Mexico City, Tegucigalpa
-06:00	Canada Central Standard Time	Saskatchewan
-06:00	Central America Standard Time	Central America
-05:00	Eastern Standard Time	Eastern Time (US & Canada)
-05:00	Eastern Standard Time [Indiana (East)]	Indiana (East)
-05:00	SA Pacific Standard Time	Bogota, Lima, Quito
-04:00	Atlantic Standard Time	Atlantic Time (Canada)
-04:00	SA Western Standard Time	Caracas, La Paz
-04:00	Pacific SA Standard Time	Santiago
-03:30	Newfoundland Standard Time	Newfoundland
-03:00	SA Eastern Standard Time	Buenos Aires, Georgetown
-03:00	E. South America Standard Time	Brasilia
-03:00	Greenland Standard Time	Greenland
-02:00	Mid-Atlantic Standard Time	Mid-Atlantic
-01:00	Azores Standard Time	Azores
-01:00	Cape Verde Standard Time	Cape Verde Is
00:00	Universal Coordinated Time	Casablanca, Monrovia
00:00	Greenwich Mean Time	Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London
+01:00	Romance Standard Time	Amsterdam, CopenHagen, Madrid, Paris, Vilnius
+01:00	W. Central Africa Standard Time	West Central Africa
+01:00	Central European Standard Time	Belgrade, Sarajevo, Skopje, Sofija, Zagreb
+01:00	Central Europe Standard Time	Bratislava, Budapest, Ljubljana, Prague, Warsaw

+01:00	W. Europe Standard Time	Brussels, Berlin, Bern, Rome, Stockholm, Vienna
+02:00	Egypt Standard Time	Cairo
+02:00	South Africa Standard Time	Harare, Pretoria
+02:00	Israel Standard Time	Israel
+02:00	E. Europe Standard Time	Bucharest
+02:00	FLE Standard Time	Helsinki, Riga, Tallinn
+02:00	GTB Standard Time	Athens, Istanbul, Minsk
+03:00	Arab Standard Time	Kuwait, Riyadh
+03:00	E. Africa Standard Time	Nairobi
+03:00	Arabic Standard Time	Baghdad
+03:00	Russian Standard Time	Moscow, St. Petersburg, Volgograd
+03:30	Iran Standard Time	Tehran
+04:00	Arabian Standard Time	Abu Dhabi, Muscat
+04:00	Caucasus Standard Time	Baku, Tbilisi
+04:00	Afghanistan Standard Time	Kabul
+05:00	West Asia Standard Time	Islamabad, Karachi, Tashkent
+05:00	Ekaterinburg Standard Time	Ekaterinburg
+05:30	India Standard Time	Bombay, Calcutta, Madras, New Delhi
+05:45	Nepal Standard Time	Kathmandu
+06:00	Central Asia Standard Time	Almaty, Dhaka
+06:00	Sri Lanka Standard Time	Columbo
+06:00	N. Central Asia Standard Time	Almaty, Novosibirsk
+06:30	Myanmar Standard Time	Rangoon
+07:00	SE Asia Standard Time	Bangkok, Hanoi, Jakarta
+07:00	North Asia Standard Time	Krasnoyarsk
+08:00	China Standard Time	Beijing, Chongqing, Hong Kong, Urumqi
+08:00	W. Australia Standard Time	Perth
+08:00	Singapore Standard Time	Singapore
+08:00	Taipei Standard Time	Taipei
+08:00	North Asia East Standard Time	Irkutsk, Ulaan Bataar
+09:00	Tokyo Standard Time	Osako, Sapporo, Tokyo
+09:00	Korea Standard Time	Seoul
+09:00	Yakutsk Standard Time	Yakutsk
+09:30	AUS Central Standard Time	Darwin
+09:30	Cen. Australia Standard Time	Adelaide
+10:00	AUS Eastern Standard Time	Canberra, Melbourne, Sydney
+10:00	E. Australia Standard Time	Brisbane
+10:00	West Pacific Standard Time	Guam, Port Moresby
+10:00	Tasmania Standard Time	Hobart

+10:00	Vladivostok Standard Time	Vladivostok
+11:00	Central Pacific Standard Time	Magadan, Solomon Is, New Caledonia
+12:00	Fiji Standard Time	Fiji, Kamchatka, Marshall Is
+12:00	New Zealand Standard Time	Auckland, Wellington
+13:00	Tonga Standard Time	Nuku'alofa

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Our Knowledge Base (KB) section is updated quite often. For the latest information, available 24 hours a day, 7 days a week, please browse to the NetResults Tracker Knowledge Base on our web site. It is likely that you will find the answer to your question or resolution (or workaround) to a problem in the Knowledge Base. We also have a Frequently Asked Questions section which contains commonly asked questions and their answers.

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NetResults Tracker Help

Contacting NetResults

If you are unable to resolve a problem after searching the Knowledge Base section of our web site, and you are evaluating the product or have a current support agreement with NetResults, please contact us via email. Standard support is available via email on business days (Monday through Friday, excluding holidays). You should receive a response within one business day. Additional support options (e.g. phone support, extended hours) may be purchased from NetResults. Phone support is not included with the product, it must be purchased separately.

For the appropriate support email address, standard support hours, and a list of information to send us for fastest resolution to your problem, please click here. If for some reason you are unable to reach our site via the web, please send your support email to

support@nrtracker.com

In your email please be sure to include the following information (emails with this information are generally given priority over those without):

1. Version of Tracker you are using (e.g. 6.6.0, 6.5.1, 6.0.1, 5.5).
2. Web Server software being used (e.g. IIS 7.5, IIS 7.0, IIS 6).
3. Database being using (e.g. MS Access, MS SQL Server 2008/2005, Oracle 11g/10g).
4. Operating System of the server on which Tracker is installed (e.g. Windows Server 2008, Windows Server 2003).
5. Web Browser software being used (e.g. IE 7.0 / 8.0, Firefox 3.5 / 3.6, Safari 3.2 / 4.0).
6. The full text of any error message which is displayed. In many cases if you get a generic database error message, you can scroll further down on the page to find more detailed error information.
7. The steps required to reproduce the problem.
8. Whether you are an evaluator or licensed user with support.
9. Attach the following files from your installation to your message:
    - All files present in the installation log folder where you installed Tracker. By default, the files can be found in C:\NetResultsLog.
    - If your problem is related to the Workgroup Management System, attach the file called ptadminlog.txt that can be found in the "pttmp" folder of your web server directory. By default, this file can be found at C:\Inetpub\wwwroot\NetResultsTracker\pttmp\ptadminlog.txt.
    - If your problem is related to email notification messages, attach the file called emaillog.txt that can be found in the "pttmp" folder of your web server directory. By default, this file can be found at C:\Inetpub\wwwroot\NetResultsTracker\pttmp\emaillog.txt.
    - For all other problems, attach all the files that can be found in the "pttmp" folder of your web server directory. By default, this directory can be found at C:\Inetpub\wwwroot\NetResultsTracker\pttmp.

Please be as specific as possible in your description of what is wrong. Including steps to reproduce the problem and the full text of all error messages is very helpful and can significantly reduce the amount of time it takes to resolve a problem.

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