NetResults ProblemTracker

User Guide Help Topics

NetResults ProblemTracker

Product Overview

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Welcome to NetResults ProblemTracker.

ProblemTracker is a completely Web-based defect tracking application. It allows a user on any platform (Unix, PC, Mac) with a web browser full access to all the features of the product. This includes the ability to log new problem records, view or edit existing records, and generate reports.

ProblemTracker allows you to create and track problem incidents through a workflow that you define. In addition to defining the workflow states, you can define forward and reverse transitions between states, and user assignments for each state. ProblemTracker is highly customizable and can be tailored for virtually any workflow and problem realm. It comes with several pre-defined database templates, each designed for a specific product arena. Those currently included are:

- Software Development
- Web Site Development

ProblemTracker allows individuals and management to quickly obtain incident status in real-time, which can dramatically improve information access within an organization. ProblemTracker's integrated email notification also helps ensure that individuals are notified of important changes in problem status and assignment. In addition, because it is completely web based ProblemTracker can be configured to allow remote access from any web browser.

ProblemTracker greatly simplifies the task of setting up and using a bug tracking system. Since you access ProblemTracker using a standard web browser, there is no special client software to install or administer. In addition, users on all platforms have full access to the system without any special platform specific client software.

ProblemTracker also uses industry standard web server, web browser, and database technologies so you aren't tied to a proprietary web server server, client (browser), or database.

ProblemTracker is available in two versions: ProblemTracker and ProblemTracker Enterprise Edition. ProblemTracker Enterprise Edition includes all of the features of ProblemTracker plus some additional features such as Alerts and Discussions to provide improved support for enterprise wide use. In the Help library, we generally label sections that describe features that are unique to ProblemTracker Enterprise Edition as Enterprise Edition Only.

Features

- Completely web based solution - no proprietary client software is required.
- Customizable without any consulting required - the workflow and bug record can be changed completely by a ProblemTracker admin user.
- Flexible user group security model allows defining access to both operations (Add, Edit, Delete, etc.) **and** data records.
- Individual user log in and session state ensures security.
- A "Home" page presented after log-in for each user allows instant access to records each user has submitted, records assigned to them, and all functions required to process records.
- Can add, remove, and rename all fields in the bug record.
- Ad hoc query mechanism allows unlimited combinations of any record field to form queries on the bug database.
- Advanced query mechanism to build intricate queries using comparison and logic operators as well as nested clauses.
- Customizable report layouts can be saved by each user of the system, or shared with other members of a user group.
- Queries can be saved by each user of the system, or shared with other members of a user group.
- Unlimited number of attachments of any file type can be made for each incident record.
- Integrated email can be configured to notify on a change of state or assignment, or based on other actions such as delete, edit, or task.
- Powerful "Task" feature allows users to presented with only those fields required by the defined workflow when marking their task complete. ProblemTracker automatically advances the incident state and reassigns the incident as defined by the workflow. "Task" allows all members of the team to follow your development process, without any specific knowledge of the process as a whole.
- Capability to create and maintain an unlimited number of workgroups (projects) from a central interface.
- Source code control integration to associate source files with problem records.
- Multinationalization available to support Unicode character set.
- Incident history keeps a audit trail of activities for all incidents.
- Can add/remove/edit users of the system.
- Can add/remove/edit values for all fields that have a set of allowed values. Examples include product, platform, release number, etc.
- Uses industry standard database technology.
- Separate Administrator functions are also accessed via a web interface. No proprietary administrator software is required.
- No extra database software is required.

For Further Information

For further information on NetResults ProblemTracker, please browse to our web site at www.problemtracker.com. There you can find the latest product, ordering, and support information.

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Glossary

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Glossary of Terms

Click on the term to read more about it within the Help section listed to the right.

- Action
- Problem History
- Action By
- Problem History
- Action Date
- Problem History
- Add (Query Phrase)
- Advanced Queries
- Add Adv
- Advanced Queries
- Add Alert
- Alerts
- Add New Source Code File
- Source Code Control
- Add & Copy
- Adding Records
- Alerts
- Alerts
- Annotate
- Adding Records
- Assigned To
- Adding Records
- Assigned To Me
- Logging In
- Auto Login
- Logging In
- Breakdown calculations by
- Metrics
- Calculate the ... (y-axis for line chart)
- Metrics
- Date Format
- Logging In

- Delete (Navigation Bar Button)

- Deleting Records

- Delete (Query Phrase)

- Advanced Queries

- Delete (Source Code List Entry)

- Source Code Control

- Diff

- Source Code Control

- Discussion

- Discussion

- Discussion Subscription

- Discussion

- Don't chart data for a breakdown value if it is all zeros

- Metrics

- Edit Alerts

- Alerts

- Edit (Navigation Bar Button)

- Editing Records

- Edit (Query Phrase)

- Advanced Queries

- Edit (Source Code List Entry)

- Source Code Control

- Edit Report Layouts

- Using Saved Queries & Reports

- Edit Saved Queries

- Using Saved Queries & Reports

- Edit Source Code List

- Source Code Control

- Export

- Querying Records

- Fixed Version

- Source Code Control

- History (Navigation Bar Button)

- Problem History

- History Comment

- Editing Records

- Home (Navigation Bar Button)

- Logging In

- Insert (Query Phrase)

- Advanced Queries

- Logoff (Navigation Bar Button)

- Getting Started Tutorial

- Make Visible to these Groups

- Editing Records

- Maximum Records

- Logging In

- Message List

- Discussion

- Metrics

- Metrics

- Perform calculations ...(x-axis for line chart)

- Metrics

- Personal Preferences

- Logging In

- Problem was fixed in version

- Source Code Control

- Problem was found in version

- Source Code Control

- Problem Version

- Source Code Control

- Product Summary

- Summary Reports

- Query (Navigation Bar Button)

- Querying Records

- Remember Password

- Logging In

- Report Layout

- Querying Records

- Report Layouts

- Using Saved Queries & Reports

- Reported By Me

- Logging In

- Reset (Query Phrase)

- Advanced Queries

- Saved Chart

- Metrics

- Saved Chart Layout

- Metrics

- Saved Queries

- Using Saved Queries & Reports

- Show Chart

- Metrics

The goal of this chapter is to walk you through the basic operations using ProblemTracker. This tutorial assumes that the product has been installed, and you are using the default database that was installed. If your ProblemTracker Administrator has customized your installation of ProblemTracker, you may find that there are differences between the procedures described here and what you are working with. In this case, use this tutorial as more of a guideline to using the system.

In this tutorial you will:

- Start ProblemTracker using your browser
- Add a problem record to the database
- Query for the problem record
- Assign and schedule the problem record to be fixed
- Mark the problem record "Fixed"
- Logoff from the system

There is a separate tutorial for the Administrative functions provided in the Administration Guide.

Starting ProblemTracker

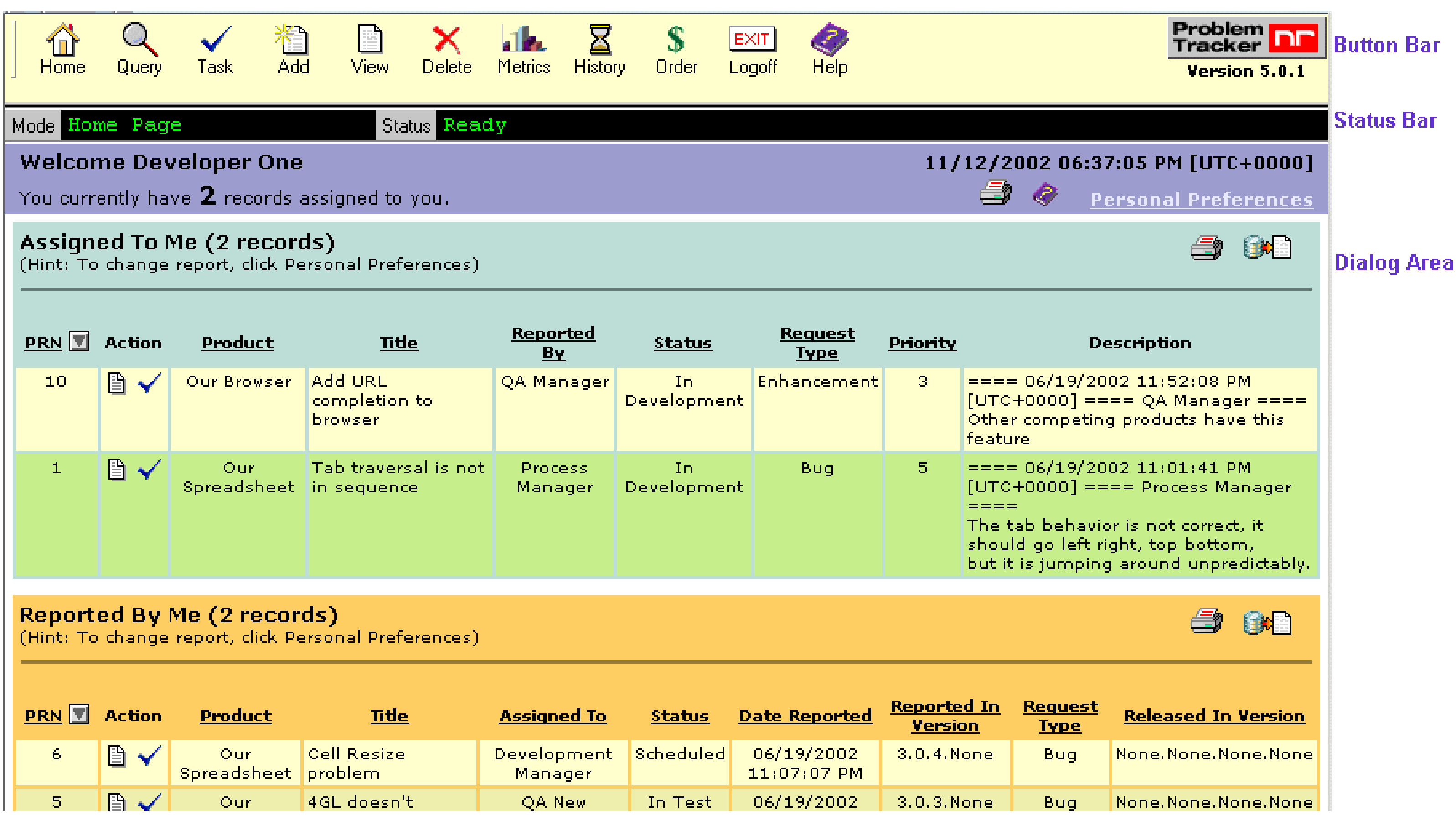
To use ProblemTracker, start your web browser and go to the following URL:

```
http://serverName/versionDir/ptlogin.asp
```

where *serverName* is the TCP/IP name of the host where the ProblemTracker server software is installed, and *versionDir* is the content subdirectory ("ptweb" or "ptdev") of the ProblemTracker workgroup you wish to access. If you are not sure where ProblemTracker was installed on your network, please ask your ProblemTracker Administrator.

You are presented with the login screen. Enter your username and password to log in. If you are using the sample database, enter the username "dev_mgr" and a password of "dev_mgr".

After logging in, the first screen you will see is your ProblemTracker homepage, which is typical of all the ProblemTracker pages. Please spend a moment to become familiar with it:



		Spreadsheet	problem	Manager		11:07:07 PM			
5		Our Spreadsheet	4GL doesn't remember screen position	QA New	In Test	06/19/2002 11:06:35 PM	3.0.3.None	Bug	None.None.None.None

Note the buttons in the Button Bar. Depending upon how your ProblemTracker administrator has set up your account, you may see fewer or perhaps more buttons. Each button allows you access to a basic ProblemTracker operation. If you are using the sample database, you should have access to all but the Administrative functions.

Add A Problem Record

The first thing you will do is report a bug. To do this press the "Add" button located in the button bar. You are presented with a page where you can enter information about the problem you'd like to report. In the Product field, select the a product (if you are using the sample database, just select "None"), enter the string "My first record" in the Description field, and press "OK". The new record is added to the ProblemTracker database. Note that ProblemTracker is now ready to add another record, the Status Area shows you the record number of the last added record. Make a note of this record number as you will need it later.

Query for Problem Records

Now that we have a record in the database, let's try doing a query to find that record. To do this, press the "Query" button located in the button bar. You are presented with a page where you can define a query. In this case, we'd like to find all problem records for the product "None". Just select "None" from the Product pulldown, and press the "Run Query" button. Note that since all the other fields are using the value "*", any value in these fields will match our query.

The page that appears displays the results of the query. Note that in each row displayed, there are three icon buttons (View, Task, Edit). These buttons allow you to perform an operation on the record. Press the "View" button. The contents of the record you defined are displayed. Press the "OK" button to return to the query result page. The Edit, Task, and View buttons in the button bar also allow you to perform an operation on a record, however, you must enter the record number to do so.

Now try pressing the button labeled "Format For Printing". This causes the same query result page to be reformatted to take up less space (the buttons are removed and a smaller font is used). This format is often more convenient for printing reports. Press the button labeled "Format For Editing" to return to the previous query result page.

Now let's refine the query. Press the OK button on the query result page - you should return to the query page. Now enter the string "My first record" in the Description field and press the "Run Query" button. This time only those records that contain the specified string are matched in the result.

Assign And Schedule A Problem Record

Once a problem record is entered into ProblemTracker, it can be tracked through an organization's development process. For the purposed of this tutorial we will assume that development process supported by the sample database. When first entered, the state of the record is set to "Reported", meaning that it hasn't been decided what to do with it. At some point, a decision is made to go ahead and fix the problem, and the state of the record is set to "Scheduled". Once scheduled, the record is advanced to the state called "In Development" and the problem is assigned to an individual to handle.

To give you a feel for how this all works, let's change the state of the record to "In Development" and assign it to you. Press the Edit button in the Button Bar and enter the record number you wish to modify, in this case the record that you added earlier.

The Edit page should be displayed. Set the Status field to "In Development", and the Assignee field to yourself. Then press the OK button.

To verify that you are the assignee, press the Home button in the Button Bar. You should now have at least one record assigned to you listed on your home page. You can also verify your changes by press the View button in the Button Bar and entering the record number.

Mark A Problem Fixed

Once an individual has fixed a problem, they should indicate that this is the case in ProblemTracker. To do this, press the Home button on the Button Bar and located the task (record) you wish to complete. If you don't see it on your home page (it only displays 20 records), use the Query button to locate the desired record. Once you have identified record, press the Task button (a blue check mark) that is either located on your Home page, on the Query result page, or on the Button Bar (you must enter the record number if you use the Task button on the Button Bar).

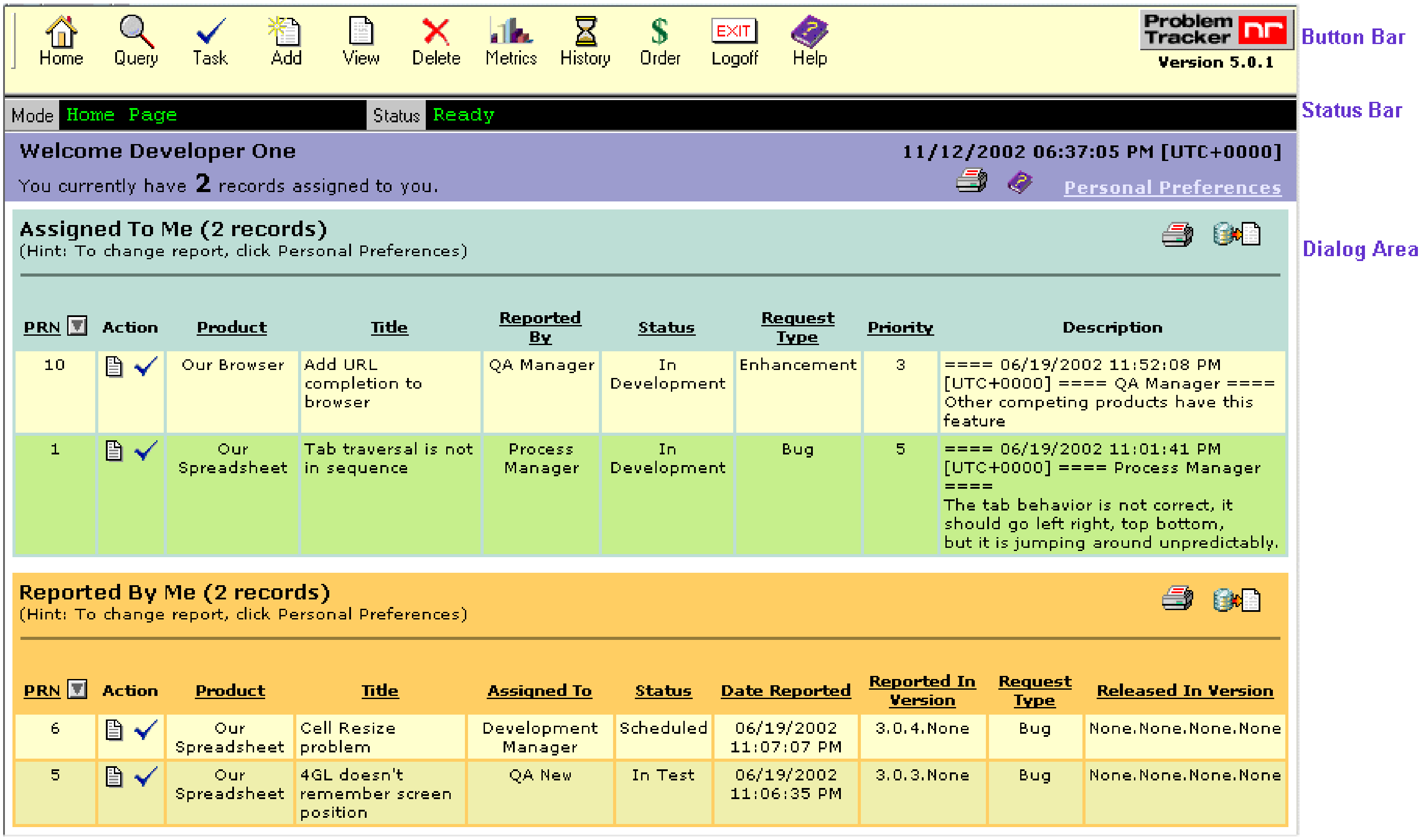
The "Task" button presents a form that allows you to enter any information appropriate to the task you have completed, and automatically advances the record state to the next state in the process. It also automatically resets the assignment as defined by your ProblemTracker administrator, indicating that it is ready to handled by another individual for the next step of the process.

Select the transition called "Mark Fixed" and click OK. Enter a description of the fix, and then press the "OK" button. Note that depending upon your original query, the record may or may not appear in the query summary because the state and assignee fields have changed.

Logoff the System 

When you are done using ProblemTracker, you should log off the system. Logging off is a good practice as it prevents other users from mistakenly accessing ProblemTracker from your computer and performing actions under your user account.

To logoff, press the Logoff button in the Button Bar.



The ProblemTracker user interface has the following main components as shown in the illustration above:

1. Button Bar
   This bar contains buttons that allow direct access to ProblemTracker's primary functions. For those operations that require a record, a dialog appears prompting you to enter a record number. By default this dialog will contain the record number of the last record on which an operation was performed. This bar also contains the Version of ProblemTracker being used.

2. Status Bar
   This area indicates the current ProblemTracker mode or operation. It also reports on the status of the last operation. The Status Area is contained in the same scrolling region as the Dialog Area, and may become hidden if the area scrolls down sufficiently.

3. Dialog Area
   This is the primary data entry and reporting area of ProblemTracker. In most cases action buttons that appear in this area are placed at both the top and the bottom of the form to allow easier access.

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Workflow Model

Overview

ProblemTracker helps you to track the progress of a problem incident through a series of steps within your organization. The order in which a problem incident can move between these steps is called the *workflow*.

At each step in the workflow, some work is done by an individual to complete the step, and then the problem incident is advanced to the next step. This process is repeated until all of the steps are completed. For instance, in a typical organization, the follow series of steps might take place once a problem is reported...

1. Customer reports a problem
2. Customer support engineer verifies the problem and creates a record in the defect tracking system.
3. Development Manager assigns the problem to a developer to fix.
4. Developer fixes the problem
5. Quality Assurance Manager assigns the problem to a QA engineer to verify the fix.
6. QA engineer verifies the fix
7. Fix is incorporated in the product

Issues to consider when designing a workflow include identifying the steps in the process, the key individuals in the process and events that they should be notified of, the data that is required at each step in the process, and who should handle each step.

ProblemTracker Workflow Customization

ProblemTracker supports full customization of workflow for any number of individual process states. This customization includes state names, forward and reverse transitions, assignments and email notification.

ProblemTracker Automatic State Advance

To aid in the process of advancing the state of a problem record in the process flow, ProblemTracker includes the Task feature. This feature allows the currently assigned individual to indicate that he/she has completed the task assigned to him/her and enter the information appropriate to completing the work. ProblemTracker then automatically advances the problem record to the next appropriate state, and changes the assignment to the next appropriate individual (as defined by the ProblemTracker administrator).

With the Task feature, it is only necessary for each individual to log into the system, identify the task (record) that they have completed, and use the Task operation. They are prompted for all the information required and the record is sent on to the next individual automatically. All users follow the defined process without needing to know the process as a whole.

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Problem History

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ProblemTracker keeps a history of activities for all records. This history allows you to keep an audit trail of which individuals worked on a particular problem record, and when they worked on it.

To view the history for a particular record, use the View command to bring up the record. If you are allowed to view the history, it will appear on this page.

You can also run specific queries over the history records to obtain statistics, such as the number of records that underwent a particular state transition within a particular time period. To run a history query, use the History button located in the Button Bar.

The results of a History query can be exported to a *.CSV file (comma separated values format) by clicking on the "Export" button on the page where the History Query results are displayed.

The following table lists the actions documented by the record history with a description:

Action	Description
ADD	The record was added to the database
ATTACH_ADD	An attachment file was added to the record
ATTACH_DELETE	An attachment file on this record was deleted
ATTACH_EDIT	An attachment file on this record was edited
DELETE	The record was marked as deleted
EDIT	The record was modified while using the Edit operation
EDIT_STATUS	The status of the record was changed while using the Edit operation
SCC_ADD	A source code file was added to this record
SCC_DELETE	A source code file on this record was deleted
SCC_EDIT	A source code file on this record was edited
TASK	The record was modified while using the Task operation
THREAD_START	A discussion thread was started
THREAD_DELETE	A discussion thread was deleted

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Logging In

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Log In Process

To use ProblemTracker you must log into the system. Start your web browser and go to the following URL:

`http://serverName/workgroupName/ptlogin.asp`

where *serverName* is the TCP/IP name of the host where the ProblemTracker server software is installed, and *workgroupName* is the name of the ProblemTracker workgroup (e.g. pteval) you wish to access. If you are not sure where ProblemTracker was installed on your network, please ask your ProblemTracker Administrator.

You are presented with the login screen. Enter your username and password to log in.

On occasion when logging in, you may encounter the error message, "Login Failed - Your previous login session is still active." This message can come up if you were previously logged in to ProblemTracker, but did not click the Logoff icon to finish your session. Select YES so that the previous session will be closed and a new session will begin and allow you to login. If you select NO, you will not be able to login to ProblemTracker.

If you are using floating licenses, it is important that you click the Logoff icon to end your ProblemTracker session when you are done. Simply exiting your browser will not end your session and may prevent other users from being able to access ProblemTracker. If you do forget to click the Logoff icon, simply login in again, answer YES when asked to delete your old session, and then click the Logoff icon on the Home page when it is displayed.

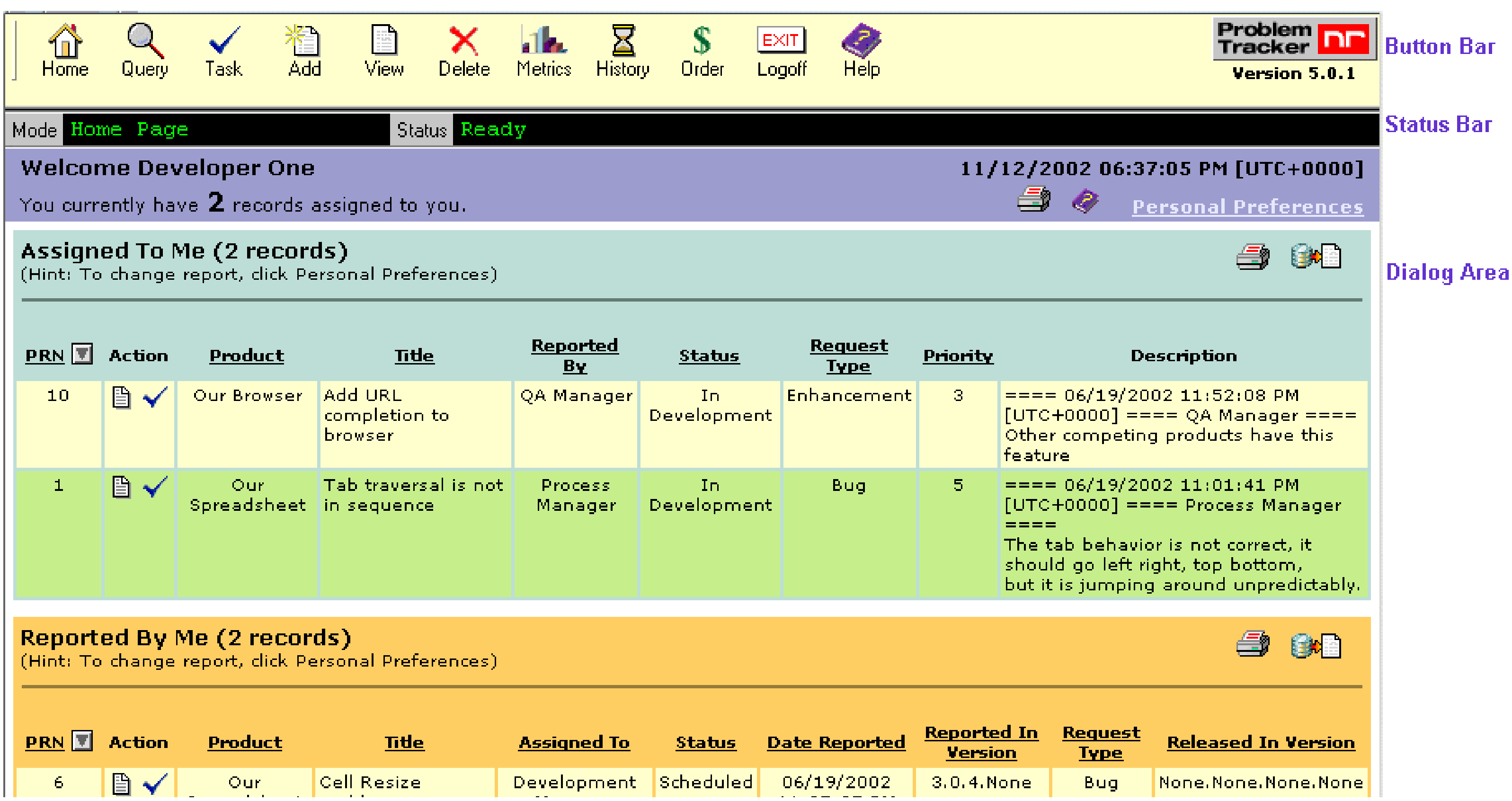
If you browse off to another site without clicking the Logoff icon to end your ProblemTracker session, you can click the Back button on your browser several times to return to the last ProblemTracker page you were on and then click the Logoff icon. Or, you can simply browse back to the login page, login again, then click the Logoff icon on the Home page when it is displayed. ProblemTracker does not allow more than one active session per user account (irrespective of license type), so if you login and then logoff you can always be certain that you have not left any active sessions around.

If your user ID is of the floating license type, you may encounter the error message, "Login Failed - The maximum number of concurrent logins has been reached. Please try again later or contact your administrator." This message is generated because the maximum number of floating license users are already logged into the system. As soon as another floating license user logs off (or is forced off by your administrator), you will be able to login to ProblemTracker.

If it is important that you are always able to login, please ask your administrator to configure you as a static license user. Static license users have a single license permanently assigned to them.

The Home Page

After logging in, the first screen you will see is your ProblemTracker homepage.



6		Our Spreadsheet	Cell Resize problem	Development Manager	Scheduled	06/19/2002 11:07:07 PM	3.0.4.None	Bug	None.None.None.None
5		Our Spreadsheet	4GL doesn't remember screen position	QA New	In Test	06/19/2002 11:06:35 PM	3.0.3.None	Bug	None.None.None.None

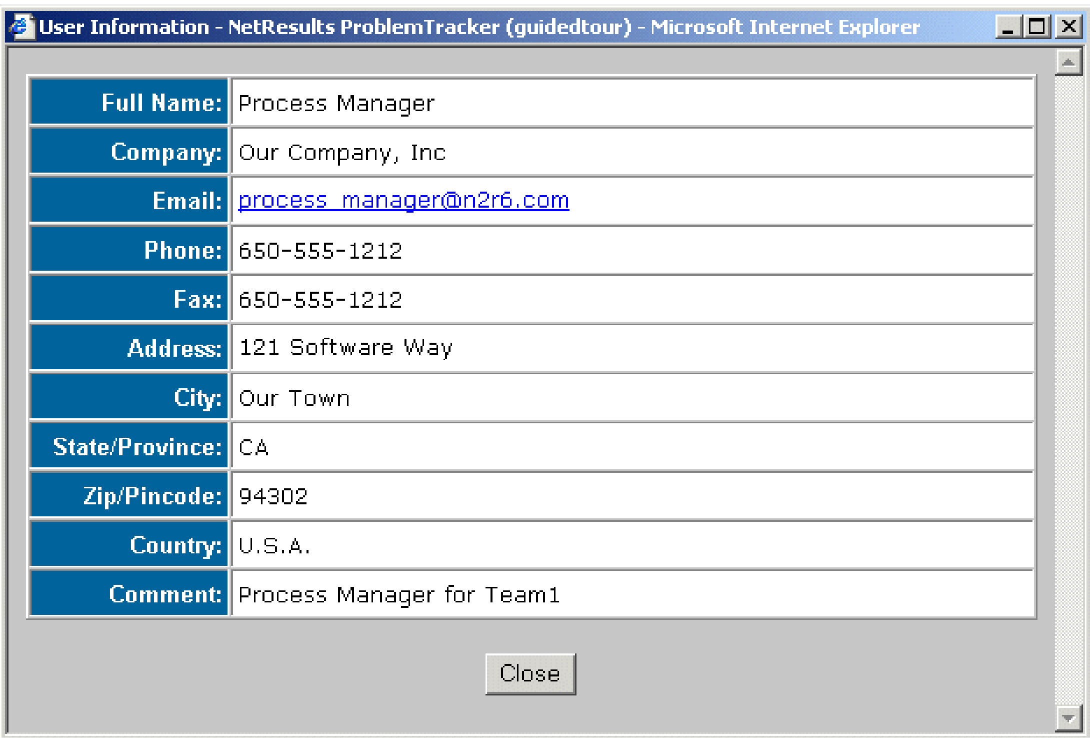
By default, this page has two reports, which display the records assigned to you and the records reported by you. Also present on the Home Page is a link to the personal preferences section, where you can customize various user settings, such as your changing your password and selecting date and report settings.

You can customize the following features:

- **Report Layout**
  You can customize the columns of the reports displayed on your home page either by creating your own saved report layout or selecting an existing saved report layout. Please refer to the section Using Saved Queries & Reports for details.
- **Report Query**
  You can customize the query "Assigned To Me" with a query of your choice by defining your own personal saved or advanced query and selecting it for the First Home Page Report field in the Personal Preferences page. Alternatively, you can select an existing saved or advanced query for this first home page report as well. You can customize the query "Reported By Me" using the Second Home Page Report field in the Personal Preferences page. Information on selecting the queries for the Home Page reports via the Personal Preferences page is described in the section below. Please refer to the section Using Saved Queries & Reports for details on how to create your own saved query or refer to the section Advanced Queries for information on creating advanced queries.

You can change the way the reports on the Home page are sorted at any time by clicking on the field name. The field that is being used as the primary sort field will have an arrow to the right of the field name. If the arrow is pointing down, the results are sorted by that field in a descending order. If the arrow is pointing up, the results are sorted by that field in an ascending order. Clicking once on the field with the arrow will reverse the sort order. Clicking once on any field that does not have the arrow will sort the results in ascending order by that field. Any field except large text fields can be clicked to sort the results by that field.

When the Assigned To or Reported By fields are displayed as columns on a Home Page report, the user's name will appear as a clickable link if you have the appropriate privilege. Click on the user's name to display the user's profile information as shown below.



The records displayed on each of the Home Page reports can be exported to a *.CSV file (comma separated values format) by clicking on the export icon to the right of the report name.

There are three different print icons present on the Home Page. The print icon to the left of the Personal Preferences link will print the Home Page as it is displayed (excluding the top button bar). Printing with this icon will include the "Welcome <User>" message, the date and time, and the records displayed in each report. Using this print icon will only display the records that appear on the Home Page (not all records that match the query results for each Home Page report).

Click on the print icon in the upper right corner of each Home Page Report to print all of the records that match the saved query used in the Home Page reports (including those records not shown on the Home Page when the number of records in the query results exceeds the maximum number of records displayed).

Personal Preferences

From the ProblemTracker home page, click on the link labeled "Personal Preferences".

You can customize the following features: **User Password Settings**

- **User Password**
  To change your password, type the new password into the new password and new password confirm fields.

Report Settings

- **Maximum Records**
  You can select the maximum number of records that are displayed per page for reports on the Home and Query Pages. The upper limit for this maximum value is 100 records.
- **First Home Page Report**
  You can select the saved or advanced query that will be displayed as the first report on your home page. By default, the saved query "Assigned To Me [Users]" is selected.
- **Second Home Page Report**
  You can select the saved or advanced query that will be displayed as the second report on your home page. By default, the saved query "Reported By Me [Users]" is selected. If you do not want a second report displayed on your home page, select the option "No Report" for this field.

Date Settings

- **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 ProblemTracker.
- **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 ProblemTracker. 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 within ProblemTracker. For a list of available time zones in your operating system, please refer to one of the following sections:
  Windows 2000 and Windows XP Time Zones
  Windows NT 4.0 Time Zones
- **Adjust To Daylight Saving Time (DST)**
  Check this box if you wish to have ProblemTracker adjust time information to account for daylight saving time. If you selected a time zone in which daylight saving time is observed, we would recommend enabling this option.

Dependent Pulldowns

- **Enforce Dependency in Query Page**
  Select Yes or No to determine whether the dependent relationships between pulldown fields should be enforced when using Query operations.

Multi-Line Field Settings

- **Display Window**
  Select the number of lines that should be displayed when editing (Edit or Task operation) or viewing (View operation) the text in a large text field. By default, this will be set to 5 lines. If the contents of a large field extend beyond the number of lines set in this preference, you will have the ability to scroll to see the complete contents of the field. On the View page if you are using Internet Explorer as your browser, you will have the option to dynamically expand the window to see the complete contents without scrolling by clicking on the "+" icon to the left of the text. On the View page, empty (blank) fields are always displayed as a single line.

Visual SourceSafe Login Settings

- **SourceSafe Login Settings**
  Enter your Microsoft Visual Source Safe user name and password to be able to use the Source Code Control Interface within ProblemTracker.

Discussion Settings
Note: These options will not be displayed unless you are using ProblemTracker Enterprise Edition.

- **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 notification for each new post in any discussion thread to which he/she is subscribed. Selecting "Receive Email for the first New Post to each Thread" indicates that the user will only receive email for the first post made to each discussion thread since the user last viewed the message list for the thread. With this setting the user can tell which threads have had postings since the last time they were read, but will not have a separate email for each posting (just one per thread with new posts). After viewing the message list for a thread, a notification email will be sent the next time a message is posted.
- **Invitation Notification by Email**
  This option determines whether a user should receive an email notification message when he / she has been invited to participate in a discussion thread initiated for a particular record. Selecting "Yes" indicates that the user should receive an email invitation for each new discussion thread.
- **Message Display Window**
  Enter the number of lines of text you wish to see when displaying a message within a discussion. The default setting is 5 lines of text.

Login Options

- **Remember Password**
  You can set whether or not your browser should remember your password by checking the box labeled Remember Password and entering the password in the box

provided. When enabled, the password field is automatically filled in when you log in.

- **Auto Login**
  If your password is currently remembered by your browser, you can enable Auto Login. This feature automatically logs you in, bypassing the log in screen and taking you directly to your home page. To enable this feature, check the box labeled Auto Login.

User Privileges

When you log in, you are given access to data and operations as assigned by your ProblemTracker administrator. These rights are assigned to you via User Groups. Each group defines a set of privileges, and you are assigned to groups. The total set of privileges you have is the sum of all the rights of all the User Groups that you are a member of.

Please contact your ProblemTracker administrator if you wish to receive additional privileges.

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Adding Records

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Adding A Record

To add a record, press the Add icon located in the Button Bar. The Add form will appear in the Dialog Area, allowing you to enter information about the problem.

ProblemTracker allows your administrator to customize the fields that appear in the bug record. Other requirements such as required fields may also apply.

As an example of a typical record, the code development sample database included with ProblemTracker has the following fields:

- **Title**
  A brief description of the problem
- **Product**
  The product for which the problem is being reported. The values of this pulldown menu can be customized.
- **Platform**
  The platform for which the problem is being reported. This is often used to indicate a hardware of software platform, such as Apple Macintosh or Microsoft Windows NT. The values of this pulldown menu can be customized.
- **Request Type**
  This is the nature of the request, generally either a bug, an enhancement, or a contractual obligation. The values of this pulldown menu can be customized.
- **Severity**
  Severity is a general indicator of how serious the problem is. The values of this pulldown menu can be customized.
- **Problem Reported In**
  Used to indicate the version number of the software where the problem was found.
- **Description**
  A description of the problem.
- **Reported By**
  Name of the person who reported the problem.
- **Date Reported**
  Date the problem was reported.
- **Workaround**
  A description of how a customer can work around this reported problem.
- **Assigned To**
  Name of the individual to whom this record is currently assigned for resolution. This value is chosen from a list of ProblemTracker users.
- **Status**
  The current status of the record. Initially this status is set to TBD.
- **Fix Released In**
  The version number of the software that will include a fix for this problem.
- **Priority**
  Used to indicate a relative order in which problems should be handled. The values of this pulldown menu can be customized.

The Difference between the Add Operation and the Add & Copy Operation

After entering the information for a new record on the Add page, you have the option to click "Add" or "Add & Copy" to save the new record. Clicking on the **Add** button will save the new record, then will return to a "blank" Add form so another new record can be added.

Clicking on the **Add & Copy** button will save the new record, but when returning to the Add form, the contents of some fields will be saved so that another similar record can be added without having to re-enter information into the fields. The fields which are copied to the Add form for the next record are selected by your ProblemTracker Administrator.

Dependent Pulldowns

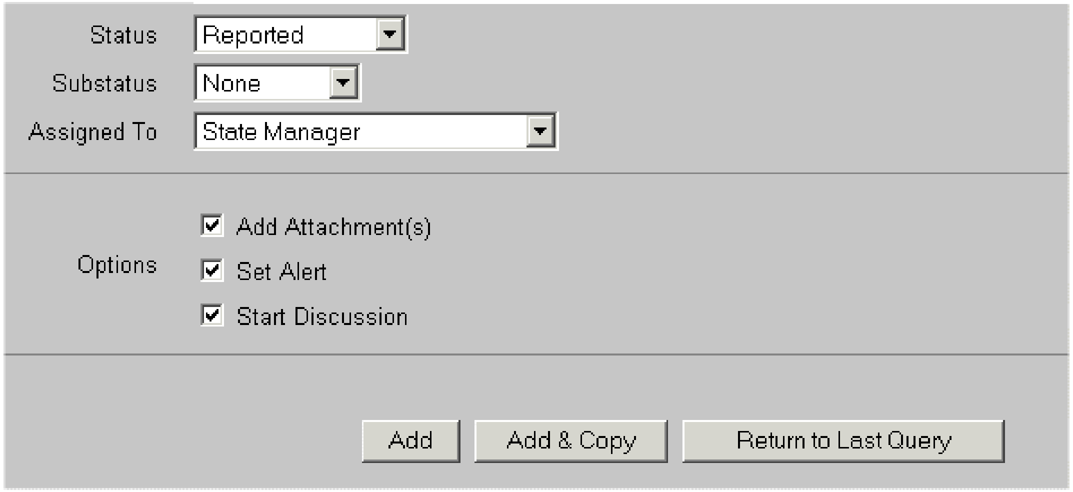
In some cases, your ProblemTracker Administrator may have set up dependent pulldowns. Dependent pulldowns allow the value selected for one pulldown (the parent pulldown) to determine the values displayed in another pulldown (the child pulldown). When dependent pulldowns appear on the Add page, the menu option selected in the parent pulldown will limit the menu options available in the child pulldown.

Specifying Record Visibility

If record-level security has been enabled, and your are a member of a user group that is allowed to modify the visibility of a record to user groups, a selection list will appear at the bottom of the page. This list allows you to select which user groups this record will be visible to. To select more than one user group, hold down the shift or control key while clicking.

Additional Options on the Add Page

Depending on the privileges you have been assigned, you may see additional options at the bottom of the Add page such as "Add Attachment", "Set Alert", and "Start Discussion". These options are discussed in detail below.



Adding an Attachment

If you are a member of a User Group that has the Add Attachment privilege, then you may add an attachment along with the problem record. To add an attachment along with the problem record, please follow the steps below.

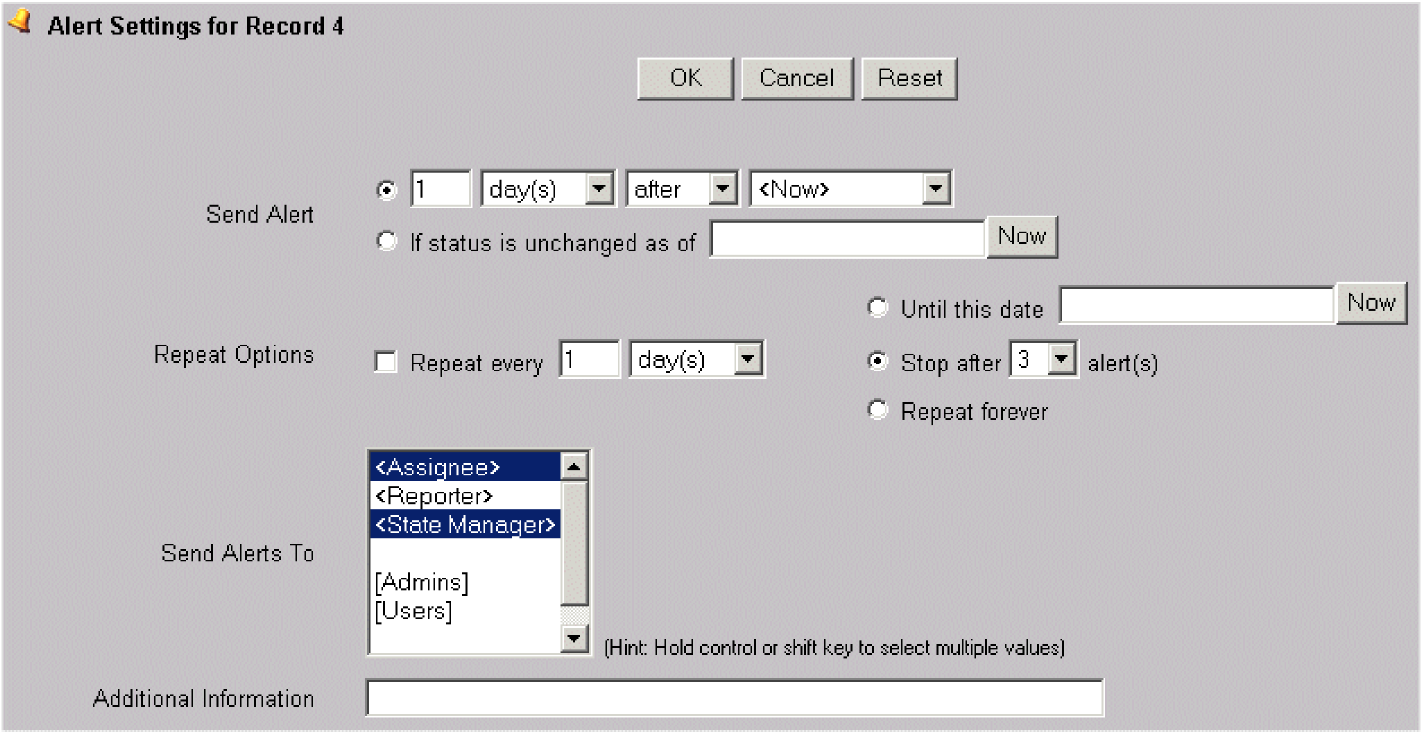
1. Check the "Add Attachment" box at the bottom of the Add page
2. Click on the "Add" or "Add & Copy" button to add the new record
3. Enter a meaningful description for the Attachment (this will be displayed when someone subsequently views the problem record) in the "Attachment Description" field.
4. Click the Browse button (to the right) to select the file from your local machine.
5. If you wish to add another attachment, check the "Add Another Attachment" box at the bottom. You will be prompted to enter the attachment description and browse to the file for the second attachment file. If you do not wish to add another attachment, simply click on the OK button to complete the operation.

After you have added a problem report (and if you have been given the appropriate privileges by your Administrator), you can add more file attachments and/or edit or delete existing attachments by following the directions in the Record Attachments section of the Help.

Setting an Alert (Enterprise Edition Only)

Alerts are email notification messages that can be configured for a record. You can set an alert to remind you about a particular record at a later date and time. You can also set an alert to be sent to other users and groups in your organization.

Depending on the product you selected, you may have the option to set an alert for the record you are creating. If you are allowed to set an alert for the record, the box "Set Alert" will appear at the bottom of the Add form. Check the box if you wish to set an alert for the record. After clicking the "Add" or "Add & Copy" button, the Alert settings will be displayed as shown below.

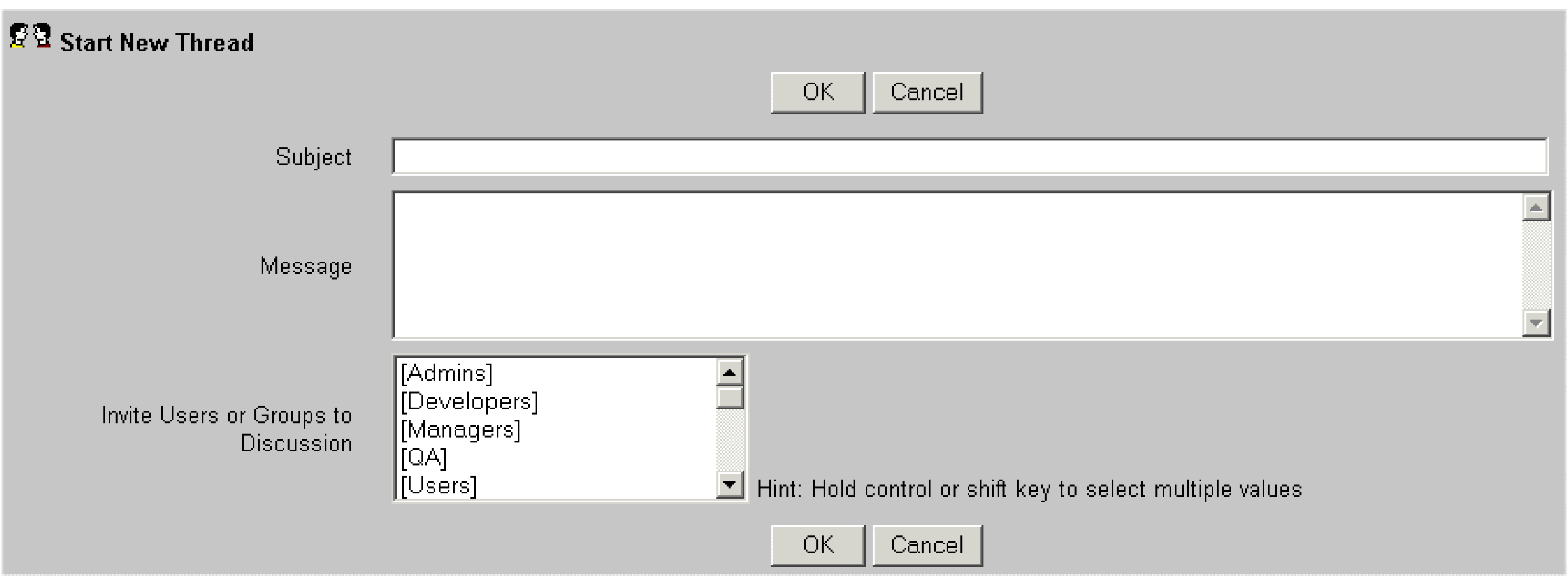


Details on configuring Alert settings during the Add operation can be found in the Alerts section.

Start a Discussion (Enterprise Edition Only)

A discussion can be initiated for a record using the "Start Discussion" check box at the bottom of the Add page. The Discussion feature allows users to discuss topics related to a record in parallel to a record's progress through the workflow. When starting a discussion for a record, you can invite other users and groups to participate in the discussion.

If you have the user group privileges required to initiate a discussion, check the box for "Start Discussion". After clicking on the "Add" or "Add & Copy" button to save the new record, you will be prompted with the Discussion settings as shown below:



Details on starting a Discussion during the Add operation can be found in the Discussion section.

NetResults ProblemTracker

Viewing Records

To view a record, you can either perform a query and press the View button located in the Action column of the report next to the desired problem record, or you can press the View button located in the Button bar and enter the record number you would like to see.

If you have been assigned permission to view user information and either the "Assigned To" or "Reported By" fields are displayed on the View page, you can click on the user's name to display the user's profile information such as phone, email, and address as shown below.

To see the full contents of the BigText fields, use the scroll bar to the right of the field. If you are using Internet Explorer, click on the "+" to the left of the field to expand the BigText field to see the full contents. To collapse the field back the default size, click on the "-" to the left of the field. To change the default number of lines displayed for a BigText field, change the "BigText Field Settings" value on your Personal Preferences page.

If you have been assigned permission to view the source code list, it will be displayed. Any source code file(s) associated with the problem record will be included on the source code list.

Each file on the source code list can be compared with other versions of the file. To compare the difference between two versions of a source code, click on the Differences icon to the left of the source code file name. Enter a version number for the Problem Version. If you wish to compare the oldest version of the file, leave the Problem Version field blank. Enter a version number for the Fixed Version. If you wish to compare with the latest version of the file, leave the Fixed Version field blank. Click OK to see the differences.

A history is kept for each file on the source code list. To view the history of a file between two versions, click on the History icon to the left of the source code file name. Enter a version number for the Problem Version. If you wish to see the history since the oldest version of the file, leave the Problem Version field blank. Enter a version number for the Fixed Version. If you wish to see the history through the latest version of the file, leave the Fixed Version field blank. Click OK to see the history.

To view a file attachment, click on the link below each attachment description.

If you have been assigned permission to view the record history, it will also be displayed.

If Alert settings (available only in ProblemTracker Enterprise Edition) have been configured for a record and you have been assigned permissions to view the alert settings, these will be displayed. Examples of the information shown in the alert settings section are whether alerts are set for the record, the date and time an alert will be sent, and whether the alert will be repeated.

If a Discussion(s) (available only in ProblemTracker Enterprise Edition) has been initiated for a record and you have been assigned permissions to view discussion messages, this will be displayed. The following discussion thread Information is displayed: the name of each thread, status (whether a thread has had new messages posted since you last viewed the thread), user who initiated the thread, number of messages, date and time of last update, and whether you are subscribed to the thread.

A problem record can be formatted for printing from the View page by clicking on the Format for Printing button.

On the Format For Printing page, either click on the print icon use your browser's print function to print the problem record. To return to the View page, click on the Format for Viewing button at the top of the page.

NetResults ProblemTracker

Marking A Task Complete

To indicate that the work necessary for a particular process state has been completed you should use the Task operation. You find the Task button on your ProblemTracker home page, on the query result page, or on the Button Bar.

Depending upon the current state, there may be one or more choices displayed in order to mark a task complete. The choices, called transitions, can be displayed as clickable buttons, radio buttons, or a pulldown menu. Once you select a choice, the next screen will show the appropriate fields required to be filled out for completing a task.

Fields and / or a history comment may be displayed after selecting a transition. The fields presented are called task fields. Some of these fields may be for your information only (read-only task fields) and cannot be modified. Other fields including the history comment may require a modification before you can click OK to proceed.

When large text fields are present, an "Annotate" button will be displayed to the left of the field. Clicking on the "Annotate" button will add a date and time stamp with your user name to the field. This makes it easy to distinguish which information within the field has been added by you or another user.

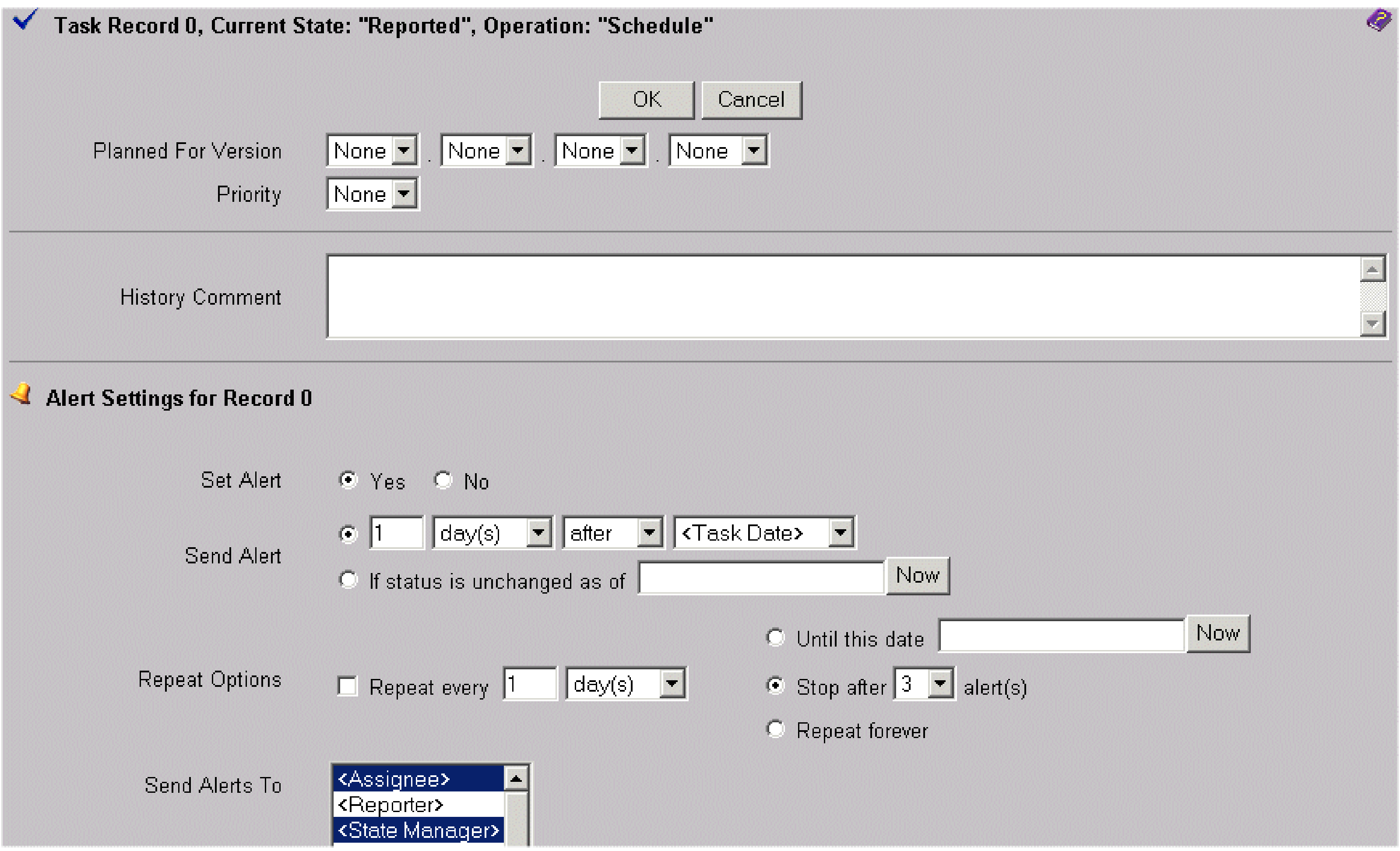
To view the full contents of the large text fields, use the scroll bar on the right of the field. Alternatively, the number of lines displayed for these large text fields can be customized by setting the value of "Multi-line Field Settings" on your Personal Preferences page.

Note that once submitted, ProblemTracker automatically advances the problem record to the next process state, and assigns the record to the next appropriate user.

Alerts (Enterprise Edition Only)

Alerts are email notification messages that can be configured for a record. You can set an alert to remind you about a particular record at a later date and time. You can also set an alert to be sent to other users and groups in your organization.

If you have been given the appropriate privileges, you may be given the option to set an alert during the Task operation as shown below.



Details on how to configure Alert settings during the Task operation can be found in the [Alerts](#) section.

NetResults ProblemTracker

Editing Records

Help Topics | << | >>

Editing A Record

To edit a record, you can either perform a query and press the Edit button located in the Action column of the report next to the desired problem record, or you can press the Edit button located in the Button bar and enter the record number you would like to edit.

The edit form allows you to directly modify any field of the record. This can be useful if you wish to update a description, or force a record to a particular process state (for instance, mark a record as "Released" before it has been tested).

When large text fields (BigText) are present, an "Annotate" button will be displayed to the left of the field. Clicking on the "Annotate" button will add a date and time stamp with your user name to the field. This makes it easy to distinguish which information within the field has been added by you or another user.

To view the full contents of the large text fields, use the scroll bar on the right of the field. Alternatively, the number of lines displayed for these large text fields can be customized by setting the value of "Multi-line Field Settings" on your Personal Preferences page.

Your ProblemTracker may have been configured to have dependent pulldown fields. Dependent pulldowns are pulldown fields where the option menu values displayed in one pulldown are determined by the value selected in the pulldown it is dependent on. If you change the value selected in a parent pulldown field, it may change the value selected in the child pulldown menu based on the relationship set up between the two fields.

The edit page also allows you to add, edit, or remove an attachment for the record. Click here for details.

If you have been assigned permission to edit the source code list, you will be able to add, edit or remove source code files for the record. Click here for details.

If you have been assigned permission to edit the alert settings for a record, you will be able to set up an alert for the problem record. Click here for details on setting an Alert for a record.

When you edit the record you can also enter a comment that will be entered into the history for the record. This can be useful in the future to help determine why the record was edited. Up to 2000 characters can be entered into the history comment field.

Modifying Record Visibility

If record-level security has been enabled, and your are a member of a user group that is allowed to modify the visibility of a record to user groups, a selection list will appear at the bottom of the page. This list allows you to select which user groups this record is visible to. To select more than one user group, hold down the shift or control key while clicking.

NetResults ProblemTracker

Record Attachments

Overview

ProblemTracker allows you to associate as many files as you wish with a problem record. These "attachments" can be anything from an image file, to a customer email or a website URL.

Attachments are presented as a list of standard HTML hyperlinks when the problem record is viewed by the user, and are presented to the user in a new browser window when clicked.

Adding an Attachment

An attachment file can be included with a problem record when the problem record is first created (see Adding Records) or it can be added to a problem record by following these steps:

1. Edit the desired problem record, either by navigating to it via a query result, or via the Edit button.
2. Press the "Edit Attachments" button. A form appears that displays the current attachments associated with the problem record.
3. Select the type of attachment you are adding. "File" is a file which will be uploaded to your server. "URL" is a URL specification (which is not uploaded to the server). The URL attachment type may be useful when tracking problems on websites.
4. Press the "Add New Attachment" button.
5. In the form displayed, enter a meaningful description of this attachment in the "Attachment Description:" field
6. If you have selected a "File" attachment, use the "Browse" button to select the file from your local machine. If you have selected a "URL" attachment, type in the URL you wish to add as an attachment.
7. Press the OK button.

If you should encounter any errors when uploading files to the server, a list of the files which encountered problems and the associated error messages will be displayed at the top of the next page.

Editing an Attachment

To edit an existing attachment, follow these steps:

1. Edit the desired problem record, either by navigating to it via a query result, or via the Edit button.
2. Press the "Edit Attachments" button. A form appears that displays the current attachments associated with the problem record.
3. Located the desired attachment in the table and press the Edit button that appears in the same row.
4. In the form displayed, edit the attachment URL or description. If the attachment is a "File" attachment, you will not be presented with the option to edit the URL.
5. Press the OK button.

Removing an Attachment

To delete an existing attachment, follow these steps:

1. Edit the desired problem record, either by navigating to it via a query result, or via the Edit button.
2. Press the "Edit Attachments" button. A form appears that displays the current attachments associated with the problem record.
3. Located the desired attachment in the table and press the Delete button that appears in the same row.
4. Press the OK button.

Viewing Attachments

Attachments to problem records appear as a list of descriptions and clickable links when the problem record is viewed. The action that occurs when the link is clicked depends upon the actions defined for each file type in the user's browser and on the file extension to file type mapping used by your web server. Please refer to your web browser's documentation for details on how to set up actions to handle various file types. Please contact your web site administrator if a file is not being mapped to the appropriate file type by your web server.

NetResults ProblemTracker

Source Code Control

Overview

ProblemTracker allows you to associate any source code file from your Source Code Control system to a problem record.

The source code files are presented as a list when the problem record is viewed. The entries displayed on the source code list within each problem record can be edited to add or remove source code files.

In addition, a history of older versions of each source code file can be viewed. The older versions can be compared to display the differences within the source code file.

Adding a Source Code File to a Problem Record

To add a source code file to a problem record:

1. Edit the desired problem record, either by navigating to it via a query result, or via the Edit button.
2. Click on the "Edit Source Code List" button. A form appears that displays the current source code files associated with the problem record.
3. Click on the button labeled "Add New Source Code File".
4. A new form will appear. The left column will show a directory listing the projects in your Source Code Control database. "$" denotes the root of the database. Double click on a project folder to expand it one level. Navigate to find the file you wish to associate to the problem record. The list of files will appear on the right column. Select a file in the right column by clicking on it.
5. If desired, enter a version number in the field "The problem was found in version".
6. If desired, enter a version number in the field "The problem was fixed in version".
7. Click OK to associate the file to the problem record. A confirmation message will be displayed, click OK to proceed.

Editing the List of Source Code Files

For each source code file that has been associated with a problem record, you can edit the version information in the fields "The problem was found in version" and "The problem was fixed in version". You can also replace the file with a new version from your Source Code Control database or select a new file to add in its place.

To edit an entry on the Source Code List:

1. Edit the desired problem record, either by navigating to it via a query result, or via the Edit button.
2. Click on the "Edit Source Code List" button. A form appears that displays the current source code files associated with the problem record.
3. Click on the Edit button to the right of the entry you wish to modify.

4. To replace a file, navigate to the appropriate project folder in the left column, then double click on the file name in the column on the right.
5. If desired, modify the fields "The problem was found in version" and "The problem was fixed in version".
6. When modifications are complete, click OK, then OK again to confirm.

Removing a Source Code File from a Problem Record

To remove a file from the Source Code List:

1. Edit the desired problem record, either by navigating to it via a query result, or via the Edit button.
2. Click on the "Edit Source Code List" button. A form appears that displays the current source code files associated with the problem record.
3. Click on the Delete button to the right of the entry you wish to delete, then click OK to confirm.

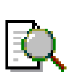
Viewing the History of a Source Code File


The history of each source code file can be accessed via the source code list within a problem record. The history has an entry for each version of the file that has been checked into the source code control database. The history information collected for each version includes file type, date of action (check-in, check-out, etc.), user who performed action, and any comments entered about the action. From this list of history entries, you can generate a comparison between two versions of the source code file.

To view the history for a source code file:

1. View the desired problem record, either by navigating to it via a query result, or via the View button.
2. Scroll down to the list of Source Code files associated with the problem record.
3. Click on the History button to the left of the source code file you wish to see.
4. If desired, enter a version number in the fields "Problem Version" and "Fixed Version". Leaving these fields blank will generate history information for all versions.
5. To see the details of a version listed in the history, click on the version you wish to see. The history details of the version will be displayed.
6. Additionally, a difference between versions can be generated from the history listing of a source code file. The two columns in the File History, called Base and Against, contain radio buttons where you can select 2 versions to compare for a list of differences. In the Base column, click on the radio button for the oldest version you wish to compare. In the Against column, click on the radio button for the latest version you wish to compare. Click on the Diff button at the top to generate the differences between the versions selected.

Comparing Versions of a Source Code File


The history contains an archive of each version of a source code file. Any two versions can be compared to display the differences. This is especially useful to be able to see the specific changes that were made in a source code file to fix a particular problem or introduce an enhancement.

There are 2 ways to generate a list of differences between 2 versions:

Method 1

1. View the desired problem record, either by navigating to it via a query result, or via the View button.
2. Scroll down to the list of Source Code files associated with the problem record.
3. Click on the Differences button to the left of the source code file you wish to see.
4. If desired, enter a version number in the fields "Problem Version" and "Fixed Version". Leaving these fields blank will compare the oldest and latest versions. Then, click OK to generate the list of differences.

Method 2

1. View the desired problem record, either by navigating to it via a query result, or via the View button.
2. Scroll down to the list of Source Code files associated with the problem record.
3. Click on the History button to the left of the source code file you wish to see.
4. If desired, enter a version number in the fields "Problem Version" and "Fixed Version". Leaving these fields blank will generate history information for all versions.
5. The two columns in the File History, called Base and Against, contain radio buttons where you can select the versions to compare. In the Base column, click on the radio button for the oldest version you wish to compare. In the Against column, click on the radio button for the latest version you wish to compare. Click on the Diff button at the top to generate the differences between the versions selected.

Querying Records for Source Code Information

Users that are members of user groups with the "View Source Code Files" privilege enabled are able to include Source Code related field in the criteria of a standard or advanced query. The fields "Source Code File", "Problem Version" , and "Fixed Version" are displayed in the standard and advanced query pages. You can enter text into these fields to be used as search criteria in the query. For details on running queries, please refer to the Querying Records or Advanced Queries Help sections.

Alerts (Enterprise Edition Only)

Overview

Note: This feature is only available in ProblemTracker Enterprise Edition.

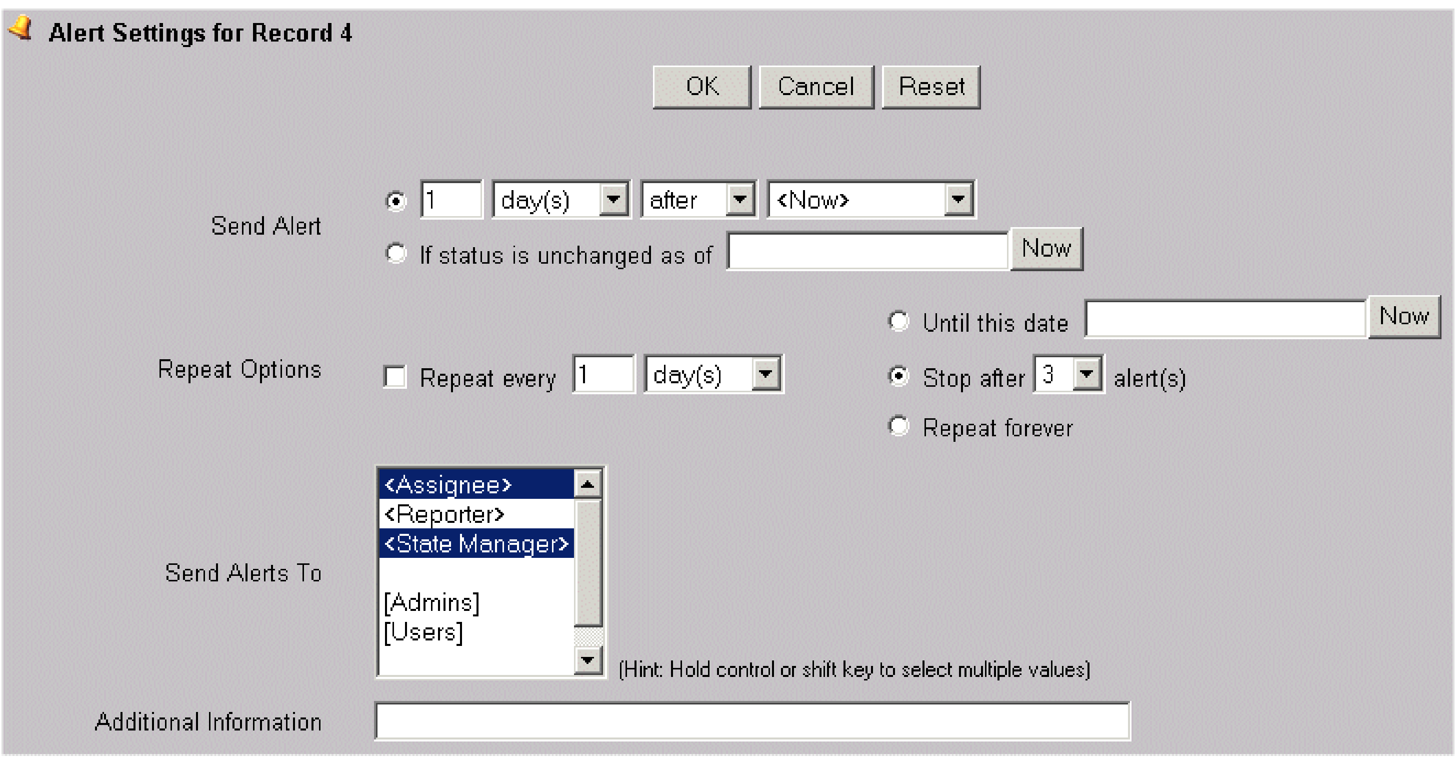
Alerts are a form of email notification messages that can be triggered by a lack of change in a record's state within a certain time period. For example, a problem record should not stay within a particular state for longer than 2 days. An alert can be sent if the record is still within the same state after a period of 2 days has passed. Alerts can also be used to remind a user about a record at a later date and time.

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.

When specifying when to send an alert either for a given record or a transition, a fixed date and time can be entered or a date and time based on 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.

Setting Alerts during the Add Operation

Depending on the product you selected, you may have the option to set an alert for the record you are creating. If you are allowed to set an alert for the record, the box "Set Alert" will appear at the bottom of the Add form. Check the box if you wish to set an alert for the record. After clicking the "Add" or "Add & Copy" button, the Alert settings will be displayed as shown below.



- **Send Alert**
  The user can select when the alert should be sent. A relative or absolute time can be specified. A relative time can be selected by choosing the radio button to the left of the option "X <Interval> <before or after> <Date>" where X can be any number from 1 to 99, <interval> can be hours, days, weeks, or months, and <Date> can be <Now> or another date field in the record. Example 1: If "5 days after <Now>" is selected, the alert will be sent 5 days after the record is added. Example 2: If "10 hours before <Due Date>" is selected, the alert will be sent 10 hours before the date and time entered in the field called "Due Date" in the record.

  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, then <Now> will be set as the date to generate an alert (to replace the date field that was removed).

  An absolute time can be selected by choosing the radio button to the left of the option "If state is unchanged after <Date and Time>" where <Date and

Time> is any date and time you choose. The <Date and Time> entered should comply with the date and time formats in the user's personal preferences. For example, if the user has "mm/dd/yyyy" selected as the date format and "12 hour" as the time format, the information entered for <Date and Time> in the alert settings must be of the form "mm/dd/yyyy hh:mm:ss PM".

- **Repeat Options**
  The user can select whether an alert should be repeated after the first alert is sent. Checking the box to the left of "Repeat every X <interval>" will enable an alert to be sent multiple times. The user can enter any number from 1 to 99 and select hour, day, week, or month as the <interval>. An alert can be repeated until a particular date (select the radio button for "Until this date <Date>" and enter a date), or after the alert has been sent a particular number of times (select the option "Stop after X alert(s)" where X is a number from 1 to 10), or forever (select the option "Repeat forever").

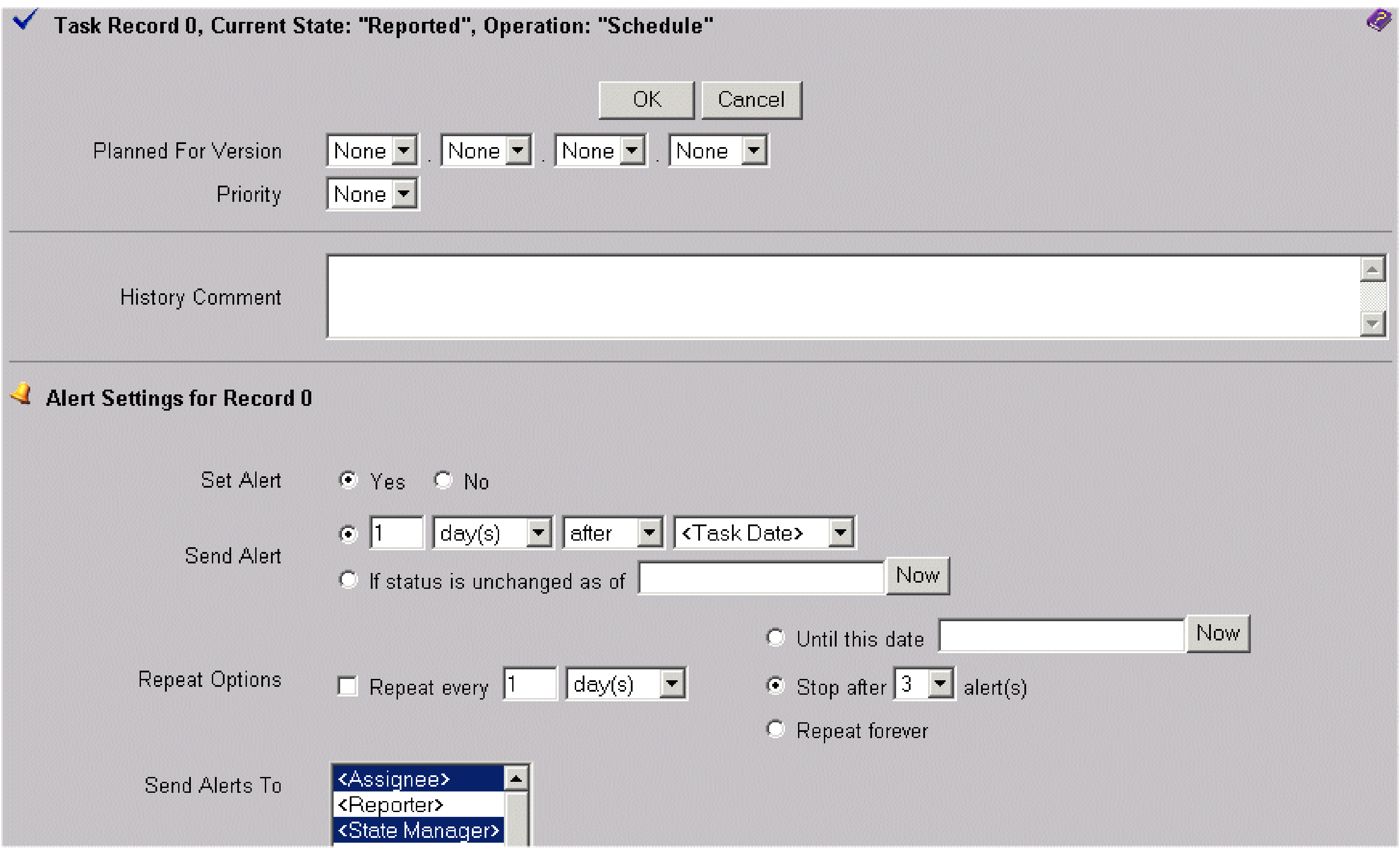
- **Send Alerts To**
  The user can choose which users or user groups will receive the alert. To select multiple users and / or groups, hold down the "CTRL" button on the keyboard while clicking on the users / groups. Depending on the configuration selected by your ProblemTracker Administrator, the user groups displayed may only be those groups of which you are a member.

- **Additional information**
  Up to 80 characters can be entered. This information will be included in the alert notification email.

These alert settings will be in effect for the newly added record until the state is changed either via the Task or Edit operations or if the alert settings are changed in the Edit Alerts section.

Configuring Alert Settings during Task Operation

When the task operation is performed on a record, the user may be prompted to configure alert settings as shown below.



- **Set Alert**
  Selecting "Yes" indicates an alert should be generated using the alerts settings below. Selecting "No" indicates that no alert should be sent.

- **Send Alert**
  The user can select when the alert should be sent. A relative or absolute time can be specified. A relative time can be selected by choosing the radio button to the left of the option "X <Interval> <before or after> <Date>" where X can be any number from 1 to 99, <interval> can be hours, days, weeks, or months, and <Date> can be <Task Date> or another date field in the record. Example 1: If "5 days after <Task Date>" is selected, the alert will be sent 5 days after this task operation is complete. Example 2: If "10 hours before <Due Date>" is selected, the alert will be sent 10 hours before the date and time entered in the field called "Due Date" in the record.

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, then <Task Date> will be set as the date to generate an alert (to replace the date field that was removed).

An absolute time can be selected by choosing the radio button to the left of the option "If state is unchanged after <Date and Time>" where <Date and Time> is any date and time you choose. The <Date and Time> entered should comply with the date and time formats in the user's personal preferences. For example, if the user has "mm/dd/yyyy" selected as the date format and "12 hour" as the time format, the information entered for <Date and Time> in the alert settings must be of the form "mm/dd/yyyy hh:mm:ss PM".

- **Repeat Options**
  The user can select whether an alert should be repeated after the first alert is sent. Checking the box to the left of "Repeat every X <interval>" will enable an alert to be sent multiple times. The user can enter any number from 1 to 99 and select hour, day, week, or month as the <interval>. An alert can be repeated until a particular date (select the radio button for "Until this date <Date>" and enter a date), or after the alert has been sent a particular number of times (select the option "Stop after X alert(s)" where X is a number from 1 to 10), or forever (select the option "Repeat forever").

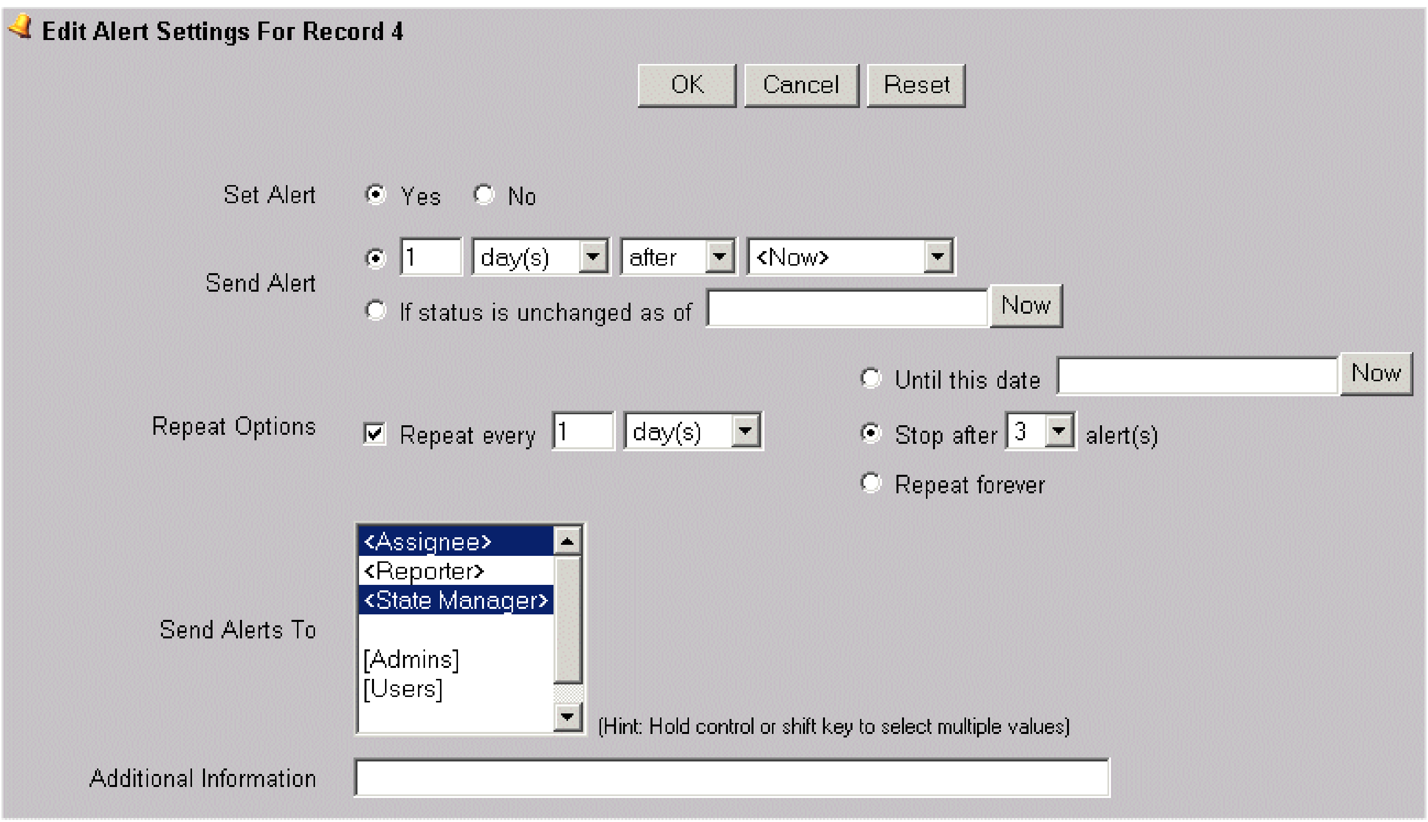
- **Send Alerts To**
  The user can choose which users or user groups will receive the alert. To select multiple users and / or groups, hold down the "CTRL" button on the keyboard while clicking on the users / groups. Depending on the configuration selected by your ProblemTracker Administrator, the user groups displayed may only be those groups of which you are a member.

- **Additional information**
  Up to 80 characters can be entered. This information will be included in the alert notification email.

These alert settings will be in effect for the record until the state is changed either via the Task or Edit operations or if the alert settings are changed in the Edit Alerts section.

Editing Alert Settings

A user can edit the alert settings for a record if they have the required privileges. A user 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:



- **Set Alert**
  Selecting "Yes" will send an alert based on the values below

- **Send Alert**

The user can select when the alert should be sent. A relative or absolute time can be specified. A relative time can be selected by choosing the radio button to the left of the option "X <Interval> <before or after> <Date>" where X can be any number from 1 to 99, can be hours, days, weeks, or months, and <Date> can be <Now> or another date field in the record. Example 1: If "5 days after <Now>" is selected, the alert will be sent 5 days after the alert settings are saved by clicking OK. Example 2: If "10 hours before <Due Date>" is selected, the alert will be sent 10 hours before the date and time entered in the field called "Due Date" in the record.

An absolute time can be selected by choosing the radio button to the left of the option "If state is unchanged after <Date and Time>" where <Date and Time> is any date and time you choose. The <Date and Time> entered should comply with the date and time formats in the user's personal preferences. For example, if the user has "mm/dd/yyyy" selected as the date format and "12 hour" as the time format, the information entered for <Date and Time> in the alert settings must be of the form "mm/dd/yyyy hh:mm:ss PM".

- **Repeat Options**
  The user can select whether an alert should be repeated after the first alert is sent. Checking the box to the left of "Repeat every X <interval>" will enable an alert to be sent multiple times. The user can enter any number from 1 to 99 and select hour, day, week, or month as the <interval>. An alert can be repeated until a particular date (select the radio button for "Until this date <Date>" and enter a date), or after the alert has been sent a particular number of times (select the option "Stop after X alert(s)" where X is a number from 1 to 10), or forever (select the option "Repeat forever").

- **Send Alerts To**
  The user can choose which users or user groups will receive the alert. To select multiple users and / or groups, hold down the "CTRL" button on the keyboard while clicking on the users / groups. Depending on the configuration selected by your ProblemTracker Administrator, the user groups displayed may only be those groups of which you are a member.

- **Additional information**
  Up to 80 characters can be entered. This information will be included in the alert notification email.

Overview

Note: This feature is only available in ProblemTracker Enterprise Edition.

Discuss 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 archiving information for later use. For example, information on how to reproduce, workaround, or fix a bug can be addressed in a discussion thread. In a customer support organization, the discussion information would be useful to help the support team provide information to the customers as quickly as possible. Another example lies in 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.

Preparation for using the Discussion feature

In order to use the Discussion feature, you must have the "Discuss" icon displayed in the top button bar. Please contact your ProblemTracker Administrator if you do not have this icon displayed. When using the Discussion feature, you have the ability to set preferences that determine whether you should receive discussion invitations and new post notification messages by email. You can also choose how many lines of text you would like to display in the message window in the Discussion section. Review the Personal Preferences section for details on how to customize these settings.

Access a Discussion

To access the Discussion for a record, click on the Discuss icon in the button bar and enter the appropriate record number. You can also reach the Discussion by clicking on one of the Discuss icons that may be present on the Home or Query page reports.

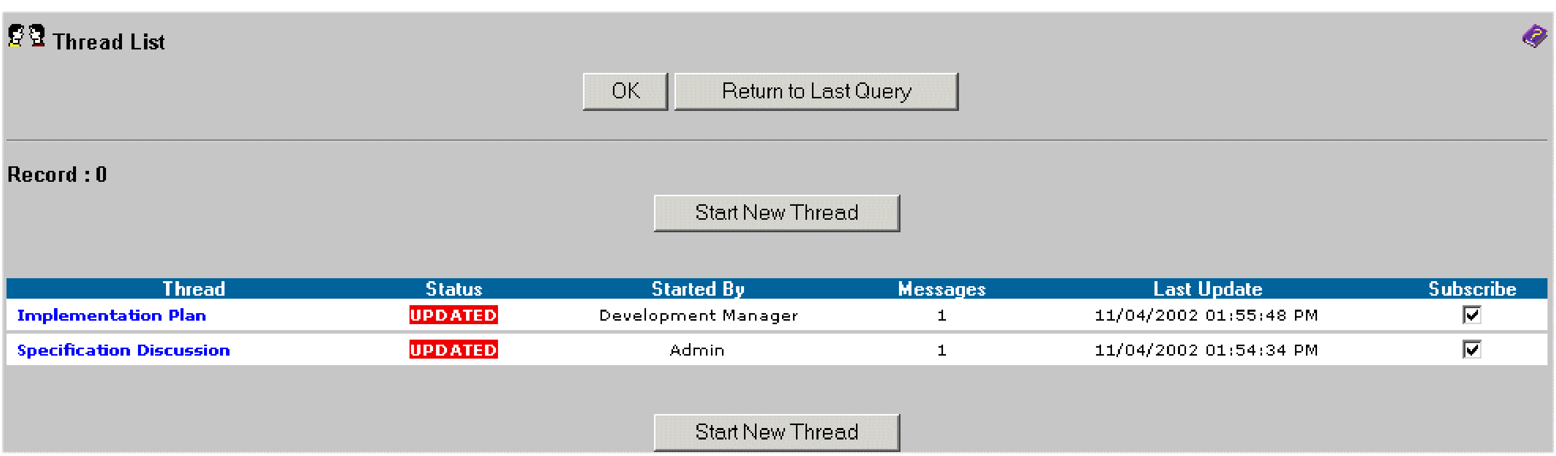
If your Personal Preferences are set such that you receive a discussion invitation or new post notification by email, you can also reach the discussion by clicking on the URL listed in the email message.

Invitations and Subscriptions

Another user can invite you (or a user group in which you are a member) to participate in a discussion when he or she starts a new discussion thread for a record. This invitation automatically subscribes you to a discussion thread. When you are subscribed to a discussion thread, this indicates you will receive notifications related to the discussion thread based on your Personal Preference settings.

If you are not invited to participate in a discussion thread, you can **subscribe** to the thread by performing the following steps:

1. Click on the Discuss icon in the top button bar and enter the appropriate record number
2. Check the box in the "Subscribe" column for the thread to which you want to subscribe
3. Click OK to save this change



To **unsubscribe** from a discussion thread:

1. Click on the Discuss icon in the top button bar and enter the appropriate record number
2. Uncheck the box in the "Subscribe" column for the thread from which you want to unsubscribe
3. Click OK to save this change

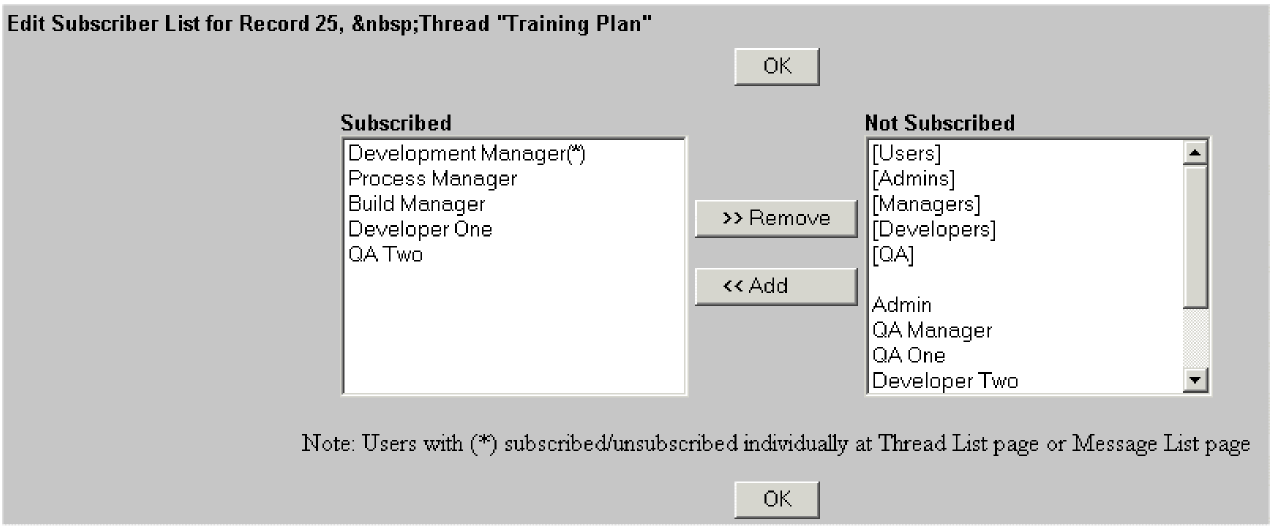
After unsubscribing from a discussion thread, you will no longer receive notification messages related to that thread. You can still access the discussion thread if you are not subscribed to it.

Editing a Subscriber List

You can modify the list of users and user groups subscribed to a discussion thread. To do this:

1. Go to the Discussion section of a record by clicking on Discuss icon in the top button bar and entering the record number or by clicking on the Discuss icon for a record on the Query or Home page.
2. Click on a thread to view its contents
3. Click on the "Edit Subscriber List" button at the top of the page
4. To add a user or group to the "Subscribed" list, click on the user or group in the right column "Not Subscribed", then click on the Add button.
5. To remove a user or group from the "Subscribed" list, click on the user or group in the left column "Subscribed", then click on the Remove button.
6. Click OK to return to the thread's message list.

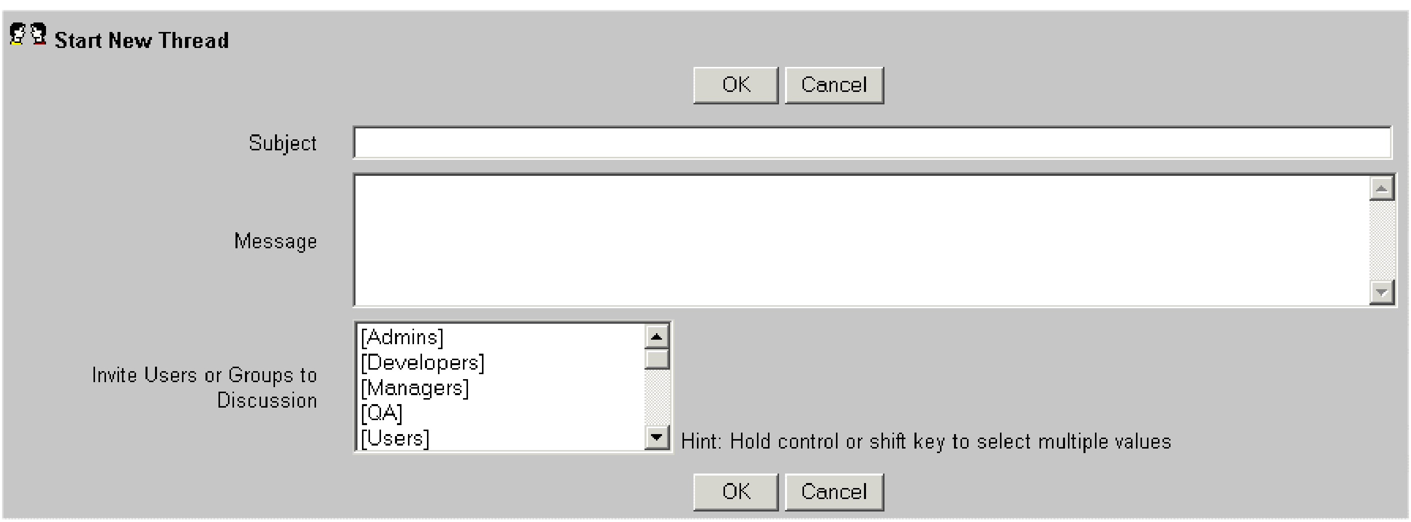
Any users in the "Subscribed" list that have "(*)" noted are users which manually subscribed to the thread by checking the "Subscribe" box on the Thread List or on the Message List pages.



Initiating a Discussion

With sufficient user group privileges, you can start a discussion within a record. One way to start a discussion is on the Add page when creating a new record. The other way is to go to the Discussion section for a record.

Starting a Discussion via the Add page
To start a discussion when adding a record, enter the information in the fields on the Add form, then check the "Start Discussion" box at the bottom, then click on the "Add" or "Add & Copy" button. On the next page, enter the following information about the discussion thread you are creating:



- **Subject**
  Enter some information to describe the topic of the new thread you are creating

- **Message**
  Enter information that will appear in the first message posted to this thread. For example, you could describe in more detail the topic of the thread. You could also describe what contributions are expected from the users who participate in the discussion.

- **Invite Users or Groups to Discussion**
  By default, when you initiate a discussion, you are subscribed to the discussion thread you are creating. You can unsubscribe yourself, by clicking on your username in the "Invite Users or Groups to Discussion" field so that your username is de-selected. Click on the users and / or user groups that should be invited to participate in the discussion thread you are creating. To select multiple users or groups, hold down the "CTRL" button on your keyboard while clicking on the users and groups. Users have the option to set their Personal Preferences such that they will receive an email when they are invited to participate in a new discussion thread.

After entering the information above, click OK to create the new thread.

Starting a Discussion for a record after it has been added
To create a thread, click on the Discuss icon in the top button bar, then enter the number of the record for which you want to start a discussion and click OK.

If the record does not have any existing discussion threads, you will be prompted to enter the following information. If the record already has existing threads, you can add a new thread by clicking on the "Start New Thread" button, then entering the information below:

- **Subject**
  Enter some information to describe the topic of the new thread you are creating

- **Message**
  Enter information that will appear in the first message posted to this thread. For example, you could describe in more detail the topic of the thread. You could also describe what contributions are expected from the users who participate in the discussion.

- **Invite Users or Groups to Discussion**
  Click on the users and / or user groups that should be invited to participate in the discussion thread you are creating. To select multiple users or groups, hold down the "CTRL" button on your keyboard while clicking on the users and groups. Users have the option to set their Personal Preferences such that they will receive an email when they are invited to participate in a new discussion thread.

After entering the information above, click OK to create the new thread.

Viewing a Thread

When one or more threads have been created in a record, they will appear on the Thread List. To get to the thread list for a record, click on the Discuss icon in the top button bar and enter the number of the record you wish to see. You can also click on the Discuss icon next to a record from the reports on the Home page.

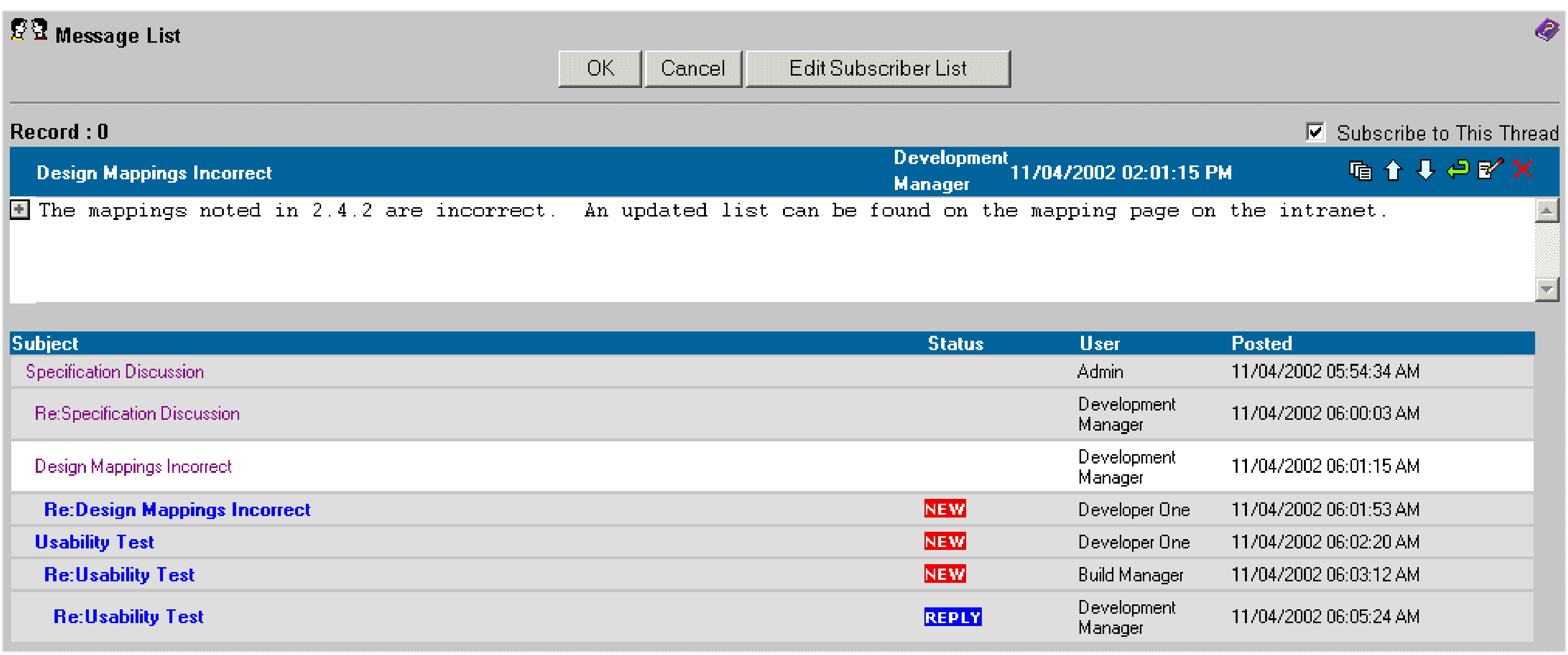
The Thread List for a record shows details about each thread such as the name of the thread, the user who started it, the number of messages, and the date and time of the last update. To view a thread, click on the name of a thread on the list.

If a thread has been updated since your last login, "UPDATED" will appear in the Status column of the thread list. This indicates that there are new message(s) to view in the thread.

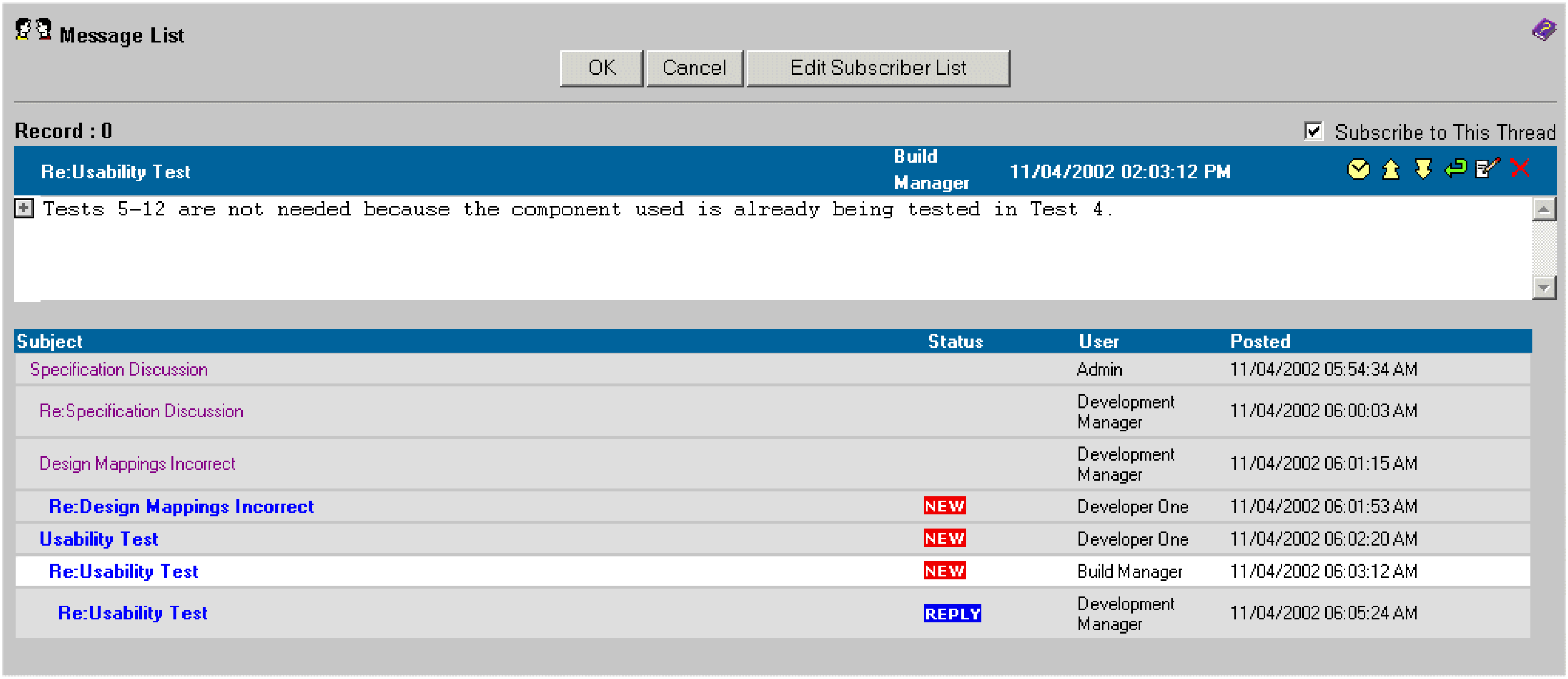
Thread Structure and Operations

When viewing a thread, the top of the page will display the thread information. Below the thread information, a tree structure is displayed which lists all messages in the thread. The first entry in the tree structure is the thread information. Click on the subject of a message in the tree structure so its contents will be displayed at the top of the page. To expand the message to see all of its contents, click on the + icon in the top left corner of the message contents.

There are 2 ways to sort the message list. By default, the messages are sorted in **thread order**, meaning the messages are organized in a tree structure with levels to indicate the hierarchy of each message. In this mode, the thread message is at the top level. Any reply to this thread message starts a new level (second level). Replies to messages at the second level start a new level (third level) and so on. The other way to sort the message list is in chronological, or **time order**. To change the sorting order, click on the order icon in the upper right corner of the message box. The first image below displays a message list sorted in thread order.



The following image shows an example of a message list sorted in time order.



When the thread order icon is displayed in the upper right corner of the message box, the message list is currently sorted in **thread order**. Click on this icon to change the message list sort order to time order.

When the time order icon is displayed in the upper right corner of the message box, the message list is currently sorted in **time order**. Click on this icon to change the message list sort order to thread order.

When viewing a message in the tree structure, you can use the up and down arrows in the upper right corner of the message to navigate through the tree structure.

If you have the appropriate privileges, you can view, edit, post, reply, or delete a thread and the messages it contains. The thread is the first message listed in the tree structure. If "NEW" is displayed in the Status column of a message on the list, this indicates that you have not viewed that message.

To **reply** to the **thread**, click on the reply icon in the upper right corner of the thread message box at the top. A reply to the thread is a message. The message you create with your reply will be listed one level under the thread in the tree structure. The message is indented to the right to show that it is at the next lower level to the thread. "REPLY" will be displayed in the Status column of your reply message in the message list.

To **edit** the **thread**, click on the edit icon in the upper right corner of the thread message box at the top.

When a message is viewed (by clicking on the message in the tree structure), the message content is displayed in the message box at the top.

To **reply** to a **message**, click on the reply icon in the upper right corner of the message box at the top. The message you create with your reply will be listed one level under the message to which you replied. The message is indented to the right to show that it is at the next lower level to the message (and two levels below the thread). "REPLY" will be displayed in the Status column of your reply message in the message list.

To **edit** the **message**, click on the edit icon in the upper right corner of the message box at the top.

To **delete** the **message**, click on the delete icon in the upper right corner of the message box at the top.

Discussion Information in Reports

The reports displayed on the Query and Home pages in ProblemTracker can display the following icons related to discussions within a record.

If you have the appropriate privilege, you can click on this icon to view the discussion threads in a record in the query results.

If you have the appropriate privilege, you can click on this icon to view the discussion threads with new messages posted in a record in the query results.

You can also include whether a record contains a discussion to which you are subscribed as criteria in a saved query. The field "Discussion Subscription" on the Query page has "*", "Yes", and "No" as options. Selecting "Yes" will include records which contain discussion threads to which you are subscribed in the query results. Selecting "No" will exclude such records.

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Querying Records

To generate a ProblemTracker report, press the Query button located in the button bar. The Dialog Area of the Query page that is displayed has three separate sections: a Saved Queries bar, a Saved Report Layouts bar, and the Query for Records section. All three sections operate independently of each other (except for the Preview button in the Saved Queries bar). The Saved Queries bar and the Saved Report Layouts bar are described in the next Help topic. This Help topic describes the Query for Records part of the Query page.

You can combine any or all of the various fields displayed to define a query. Each value is applied to the query as an AND clause, that is, the query will return all records that match all of the specified criteria.

The rules for each particular data type are:

Integer or Float
You can specify a value and one of the following conditions: >,<,=. To match any value, select the condition ? and leave the value blank.

Pulldown
You can pick any particular value, or select * to match any value.

Date
You can enter a start and an end date for the period you wish to match. To match any value, leave the field blank.

Status
You can select any currently defined workflow state, or a State Group. State Groups allow you to defined collections of states to query against. By default the system defines a single State Group named All that includes all the current workflow states, but your Administrator can define others. For example, your Administrator could define a State Group named "Active" that includes all the states except for "Closed". Click here for more information on State Groups.

Assigned To
You can select any active user or user group within the system. User groups are denoted as [user group] within the pulldown.

In addition to specifying the search criteria, you can also select which fields to **Sort By**, **Sort Order** for the selected sort fields and which **Report Format** to use for the query results. Report formats determine what columns are displayed and in what order. The Sort By, Sort Order and Report Format selection are at the bottom of the web page.

There are three buttons in the Query for Records section. For convenience, they are displayed at both the top and bottom of the web page.

Run Query
The Run Query button executes the query based on the values specified in the Query for Records section including

each query field, the Sort By selections, and the Report Layout selection. Both the Sort By and Report Layout selections for the Run Query operation are at the bottom of the page. The Saved Queries bar and Saved Report Layouts bar (just below the Status bar) have no affect on the Run Query operation.

Clear
The Clear button restores the default values and wildcards for each query field. This function is useful if you wish to restore the query field values to a query which will "return all records".

Reset
The Reset button restores the values supplied for each query field to the values which were used in the last query. This function is useful if you wish to use a previously executed query as a baseline for further queries.

Dependent Pulldowns

In some cases, your ProblemTracker Administrator may have configured dependent pulldowns in the system. A set of dependent pulldowns is a pair of pulldown menus where one pulldown is the child pulldown field and the other is the parent pulldown field. The menu option values that are displayed in the child pulldown field are determined by the menu option value that is selected for the parent pulldown field. A simple example to illustrate this functionality:

A system has a pulldown called Product with two menu option values "Our Computer" and "Our Printer". A pulldown called Component has the menu option values "Hard Drive", "Video Card", "Toner", and "Paper Tray". The components "Hard Drive" and "Video Card" correspond to the "Our Computer" menu option in the Product pulldown field. The components "Toner" and "Paper Tray" correspond to the "Our Printer" menu option in the Product field. When a user selects "Our Computer" for the Product field, only the options "Hard Drive" and "Video Card" will be displayed in the Component field. The Component pulldown (child) is dependent on the Product pulldown (parent).

By default, these relationships between pulldown fields are not enforced when running queries. If you would like these dependencies between pulldown fields to be enforced when you perform queries (including the queries that display your home page reports), change the setting "Enforce Pulldown Dependency in Query" to be set to Yes in the Personal Preferences section. To do this,

1. Login to ProblemTracker.
2. On the Home Page, click on the link to the Personal Preferences section.
3. Configure the setting "Enforce Pulldown Dependency in Query" to Yes
4. Click OK to save this change.

Examples

Goal	Procedure
Find all records assigned to "Robert Frank"	Press the Clear button. Then do a Field Lookup by setting the "Assigned To" field to "Robert Frank". Then press the Run Query button.
Find all problems for the product "Big Widget" that need to be assigned for testing	Press the Clear button. Then do a Field Lookup by setting the "Product" field to "Big Widget" and the "Status" field to "Fixed". Then press the Run Query button.
Locate a problem related to random program crashes.	Press the Clear button. Then do a String Lookup in the Description field. Enter "random crash" in the "Description" text field and press the Run Query button.

Query Results

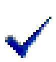
Once you have generated a query, you can view, task, or edit any of the records listed in the query results. You can change the sort order of the Query results at any time by clicking on the field name of the column you wish to sort by. The initial sort order is based on the selections made in the Sort By section on the Query page. The field that is being used as the primary sort field will have an arrow to the right of the field name. If the arrow is pointing down, the results are sorted by that field in a descending order. If the arrow is pointing up, the results are sorted by that field in an ascending order. Clicking once on the field with the arrow will reverse the sort order. Clicking once on any field that does not have the arrow will sort the results in ascending order by that field. Any field except BigText type fields can be clicked to sort the results by that field.

The number of query results displayed per page is based on the value of the field "Maximum Records" in the "Report Settings" section of your Personal Preferences page. By default, this is set to display 20 records per page.

When the "Assigned To" or "Reported By" fields are displayed in the query results and if you have the privilege that allows you to see user profile information, you can click on the user's name to display their profile details as shown below.

The query results can be formatted for printing as a table or text (text will display the full contents of all fields, table format may truncate long fields based on the settings in the Report Layout you used).

 If you have the appropriate privilege, you can click on this icon to view a record in the query results.

 If you have the appropriate privilege, you can click on this icon to task a record in the query results.

 If you have the appropriate privilege, you can click on this icon to edit the fields, attachments or source code list in a record in the query results.

 If you have the appropriate privilege, you can click on this icon to view the discussion threads in a record in the query results.

 If you have the appropriate privilege, you can click on this icon to view the discussion threads with new messages posted in a record in the query results.

 To print the query results, select "Text" or "Table" and click on the "Format For Printing" button, then click on the print icon at the top of the page.

The query results can be exported to a *.CSV file (comma separated values format) by clicking on the button in the upper right corner of the query results page.

If you have the appropriate privilege you may also have the option to "Edit Results." The Edit Results option allows you to make changes to all of the records that matched your query in a single edit operation. Please note that using the Edit Results options can make large changes to your database and cannot be undone. By default, this option is only available to the administrator. To use this operation after running a query, on the page where the query results are displayed, click on the "Edit Results" button in the upper right corner of the page. The Edit Results page will display the fields active in the database. Make changes to the fields you desire, then click OK. Click OK once again to confirm that this will change multiple records and cannot be undone.

The Edit Results operation can also be used to set the Alerts settings for multiple records that matched your query in a single edit operation. If you wish to delete the alerts settings for all records in the query results, select "Delete" in the "Alerts" field at the bottom of the page. If you wish to modify the alerts settings for all records in the query results, select "Modify..." in the "Alerts" field at the bottom of the page. When selecting "Modify...", another page will be displayed where the alerts settings can be changed. To change a particular setting, click on the check box next to the setting as shown in the example below. Modify the alerts settings you wish to change, then click OK to save the changes for all records in the query results.

If you have the appropriate privileges and your system has been configured to use "hard" deletes (deletes which permanently purge records from the database), then you may see a Delete Records button. Clicking this button will (after asking for a final confirmation), permanently delete all records that matched the query you just ran. However, entries will be made to Record History for all records deleted in this manner. By default, ProblemTracker is configured to perform only "soft" (recoverable) deletes and only the administrator is able to perform the Delete Records operation (it requires the same privilege as Edit Results).

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Using Saved Queries & Reports

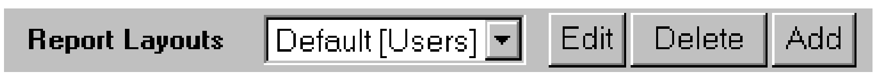
Overview

A ProblemTracker report is composed of a search criteria (query) and an output layout (report format). You can define and save both queries and report formats. This enables you to quickly select from a list of frequently used queries, rather than re-entering all the query parameters for each query. You can use either group or personal saved queries. You can always save a personal saved query, and if you have been given permission by your Administrator, you may also be able to save a query or report for use by all users in your assigned user group.

Saved queries are managed by the Saved Query bar which appears on the Query Page below the status bar, as shown below:

Using the Saved Query bar, you can define new queries, edit or remove existing saved queries, and run or preview a saved query. Group level saved queries are listed followed by the User Group name in square brackets.

Saved report formats are managed by the Saved Report bar which also appears on the Query Page below the status bar, as shown below:



Using the Saved Reports bar, you can define new report formats, and edit or remove existing saved report formats. Group level saved report formats are listed followed by the User Group name in square brackets.

Field Level Visibility in Saved Group Queries and Reports

Field Level Visibility is the feature that allows fields to be restricted by user group in various areas of ProblemTracker such as the Add, Edit, and View pages and in Queries and Reports. That is to say that the system can be configured such that each user group may see a different set of fields in each area of ProblemTracker. Therefore, when creating saved group queries and report layouts, all fields may not be displayed depending on field visibility settings for the group selected.

When a field is not visible to the user group selected in a saved group query, the field will be set to the default value when the saved group query is run. In most cases, this default value is "*", which will include all possible values for the field in the saved group query results. In the case of the Deleted field, the default is "No" such that all records that have not been marked as deleted will be included in the results of the saved group query.

In the case of report layouts, if the field is not visible to the group selected for the saved group report layout, the field will not appear in the list of possible values for each column of the report.

Please contact your ProblemTracker if you wish to include a field in a saved group query or report layout that is not visible to the selected user group.

Define a Saved Query

To define a saved query, follow these steps:

1. Press the Add button on the Saved Query bar. Note: to create a Saved Query that is similar to an existing Saved Query, select the existing Saved Query in the pulldown menu to the left before clicking the Add button.
2. Select the Query Type. If it's a group saved query, select the name of the group to which this saved query should be visible. Click OK to proceed.
3. In the form that appears, enter a query name (this is the name that you will use to retrieve the query) in the "Query Name" field.
4. Enter the parameter for the query as you would for a normal query.
5. Press the "Save Query" button.

Run a Saved Query

To run a saved query, follow these steps:

1. Click on arrow in the combo box control in the Saved Query bar and select the desired query from the drop-down list.
2. Press the Run button in the Saved Query bar.

Preview a Saved Query

Many times you may wish to verify the parameters of a saved query before running it or perhaps modify it slightly before running it. The ProblemTracker saved query Preview feature allows you to do this.

To preview, optionally modify, and run a saved query, follow these steps:

1. Press the Preview button in the Saved Query bar. The parameters for the saved query appear in the query dialog below.
2. Modify the query parameters if desired.
3. Press the "Run Query" button in the query dialog to submit the query.

Set Default Saved Query Drop-Down Menu Selection

To set the query which you would like to appear in the Saved Query drop-down list when you first browse to the Query page, follow these steps:

1. Click on arrow in the combo box control in the Saved Query bar and select the query you would like to be the default from the drop-down list.
2. Press the Default button in the Saved Query bar. The page will be refreshed and the Status will say "Default Query has been updated.".

Edit a Saved Query

To edit a saved query, follow these steps:

1. Click on arrow in the combo box control in the Saved Query bar and select the query you would like to edit from the drop-down list.
2. Press the Edit button in the Saved Query bar. A page containing the current query parameters is displayed.
3. Edit the query parameters as desired.
4. Press the "OK" button to save your updates.

Delete a Saved Query

To delete a saved query, follow these steps:

1. Click on arrow in the combo box control in the Saved Query bar and select the query you would like to remove from the

drop-down list.
2. Press the Delete button in the Saved Query bar.

Standard Saved Queries within ProblemTracker

Within ProblemTracker, there are three saved queries that are installed by default:

- **Default [Users]**
  A saved query for the Users group that will display all records within ProblemTracker.
- **Assigned to Me [Users]**
  A saved query for the Users group that will display all records assigned to the user who is currently logged into ProblemTracker. By default, this query is selected as the First Home Page Report in the Personal Preferences page for all users. Please review the Personal Preferences section for more information about selecting a saved query for the First Home Page Report.
- **Reported By Me [Users]**
  A saved query for the Users group that will display all records reported by the user who is currently logged into ProblemTracker. By default, this query is selected as the Second Home Page Report in the Personal Preferences page for all users. Please review the Personal Preferences section for more information about selecting a saved query for the Second Home Page Report.

Define a Saved Report Format

To define a report format, follow these steps:

1. Press the Add button on the Saved Report bar.
2. Select the Report Layout Type. If it's a group report layout, select a group to which this report layout should be visible. Click OK to proceed.
3. In the form that appear, enter a report name (this is the name that you will use to select the report format) in the "Report Layout Name" field.
4. Select how to align text fields (left, center, right).
5. Select the maximum size for text fields.
6. Select the fields you would like displayed.
7. Press the OK button.

Edit a Saved Report Format

To edit a saved report format, follow these steps:

1. Click on arrow in the combo box control in the Saved Report bar and select the report format you would like to edit from the drop-down list.
2. Press the Edit button in the Saved Report bar. A page containing the current format is displayed.
3. Edit the format as desired.
4. Press the "OK" button to save your updates.

Delete a Saved Report Format

To delete a saved report format, follow these steps:

1. Click on arrow in the combo box control in the Saved Reports bar and select the query you would like to remove from the drop-down list.
2. Press the Delete button in the Saved Reports bar.

Use a Saved Report Format in a Query

To use a saved report format in a query, follow these steps:

1. Click on the Query icon in the navigation bar.
2. Enter the query directly or start with an existing Saved Query by selecting the Saved Query and clicking Preview.
3. Scroll down to the bottom of the page and select the Saved Report Format in the Report Layout pulldown.
4. Press the Run Query button.

Use a Saved Report Format in a Saved Query

To use a saved report format in a saved query, follow these steps:

1. Click on the Query icon in the navigation bar.
2. Select the Saved Query in the Saved Query bar and click the Edit button.
3. Scroll down to the bottom of the page and select the Saved Report Format in the Report Layout pulldown.
4. Press the OK button to save the edited Saved Query.

When the "Assigned To" or "Reported By" fields appear in a report layout, users with the privilege "View User Information" will be able to click on the user's name in the query results to display the user's profile information (e.g. phone number, email address, company name).

Standard Saved Report Layouts within ProblemTracker

Within ProblemTracker, there are three saved report layouts that are installed by default:

- **Default [Users]**
  A saved report layout for the Users group that will display the fields PRN, Product, and Status in a report. The saved query Default [Users] uses this report layout by default.
- **Home Report1 [Users]**
  A saved report layout for the Users group that will display the fields PRN, Product, Title, Reported By, Status, Request Type, Priority, and Description within a report. By default, this report layout is used by the saved query "Assigned To Me [Users]".
- **Home Report2 [Users]**
  A saved report layout for the Users group that will display the fields PRN, Product, Title, Assigned To, Status, Date Reported, Reported in Version, Request Type, and Released in Version within a report. By default, this report layout is used by the saved query "Reported By Me [Users]".

Advanced Queries

Overview

The Advanced Queries function allows you to build more intricate queries using operators such as AND, OR, and NOT, multiple selection of values to match, and grouping (parentheses) of query criteria to generate more refined results. You can define and save advanced queries, enabling you to quickly select from a list of frequently used advanced queries, rather than re-entering the numerous query parameters that compose this type of query. You can use either group or personal advanced queries. You can always save a personal advanced query, and if you have been given permission by your Administrator, you may also be able to save an advanced query for use by all users in a user group.

Advanced queries are managed by the Saved Query bar which appears on the Query Page below the status bar.

Using the Saved Query bar, you can define new advanced queries, edit or remove existing advanced queries, and run or preview an advanced query. Group level advanced queries are listed followed by the User Group name in square brackets.

Field Level Visibility in Advanced Saved Group Queries

Field Level Visibility is the feature that allows fields to be restricted by user group in various areas of ProblemTracker such as the Add, Edit, and View pages and in Queries and Reports. That is to say that the system can be configured such that each user group may see a different set of fields in each area of ProblemTracker. Therefore, when creating advanced saved group queries, all fields may not be displayed depending on field visibility settings for the group selected.

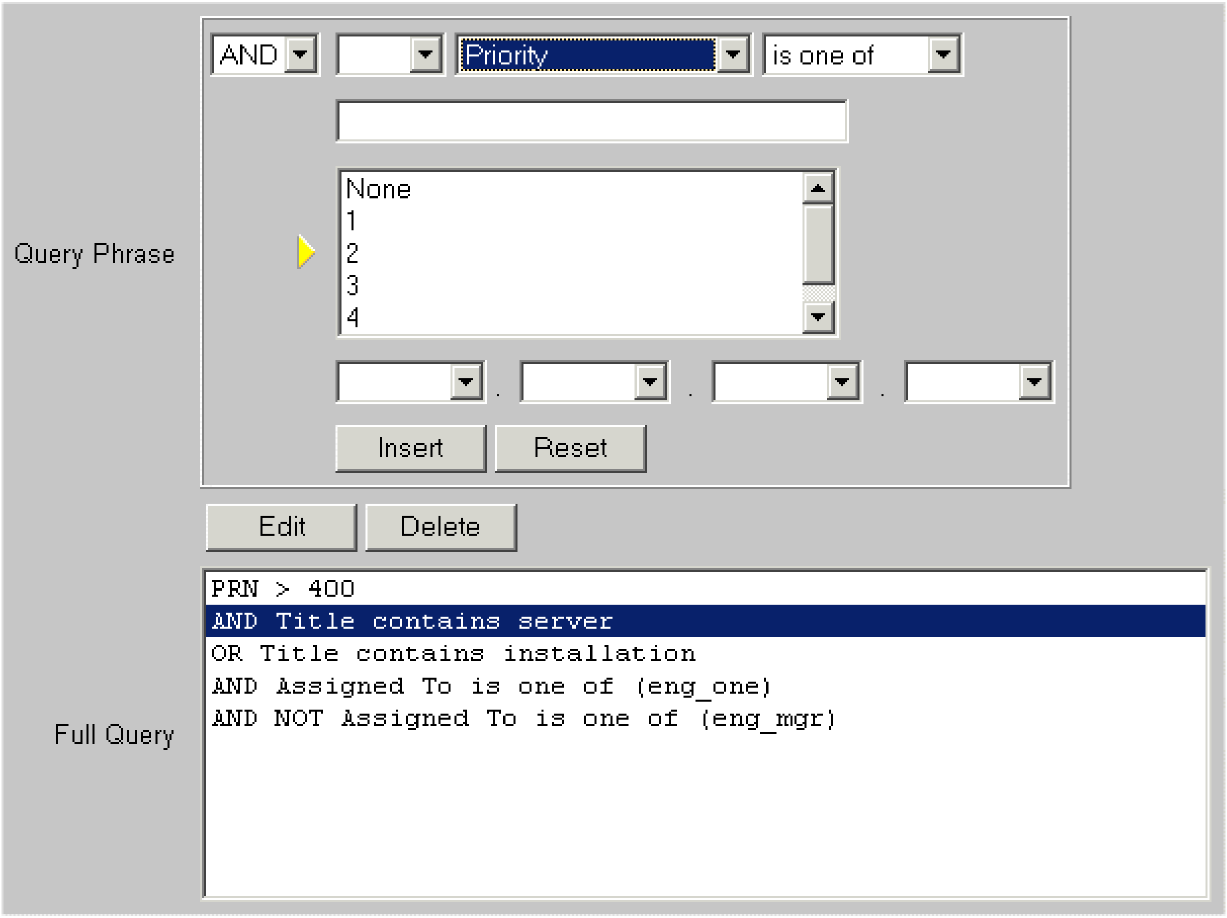
When a field is not visible to the user group selected in a advanced saved group query, the field will be set to the default value when the advanced saved group query is run. In most cases, this default value is "*", which will include all possible values for the field in the advanced saved group query results. In the case of the Deleted field, the default is "No" such that all records that have not been marked as deleted will be included in the advanced saved group query results.

If a personal or group advanced saved query was created before a field was made invisible to a user group, it is possible for this user group to see an invisible field in a clause in the "Query Phrase" section of the advanced saved query. Any clause containing a field that is now invisible to the user group will be "read only". This clause cannot be edited because it contains a field that has been restricted for the user group. However, the clause can be deleted from the advanced saved query.

Please contact your ProblemTracker administrator if you wish to include a field in an advanced saved group query that is not visible to the selected user group.

Building Query Phrases

The procedure for building an advanced query differs from a standard query in that multiple options for each field can be selected and / or excluded for advanced queries. This is done by composing various query phrases that will be combined to generate the query results. These phrases are constructed in the Query Phrase section of the Advanced Query page.



Logic operators and fields are selected for a query phrase in the first row of the Query Phrase section. A description of the fields in the first row of the Query Phrase section:

1. The first field is a pulldown that contains the operators "AND", "OR", and "(blank)". For the first phrase of an advanced query, "(blank)" is the only possible option for this first field.
2. The second field is a pulldown that contains the operators "NOT" and "(blank)".
3. The third field is a pulldown menu that lists all fields within the data record. In addition, "(" and ")" are options in this pulldown that can be used to nest (or group together) query phrases within the full query.
4. The fourth field will automatically change based on the selection that was made for the third field. Table 1 shows the possible values for the fourth field based on the input of the third field:

Table 1

3rd Field Type	4th Field displays...	Yellow Triangle on...	Type of information to enter near Yellow Triangle
PRN	Compare Operators <, >, =, >=, <=	Row 2	PRN Number
Text Field	contains	Row 2	text key words
Pulldown Menu	is one of	Row 3	Click on menu value(s) to select, hold CTRL button to select multiple values
RelNum	"="	Row 4	If desired, select values from pulldown menus
Date	"before" or "on or after"	Row 2	Date
Float	Compare Operators <, >, =, >=, <=	Row 2	numeric value
Integer	Compare Operators <, >, =, >=, <=	Row 2	integer
URL	contains	Row 2	text key words
(	"(blank)"	N/A	N/A
)	"(blank)"	N/A	N/A

A yellow triangle will appear to the left of the second, third or fourth rows in this section based on the selection made for the third field in the first row. The yellow triangle indicates that more information is needed in that particular row to complete the query phrase. Table 1 describes the type of information that should be entered in rows 2, 3, or 4 based on the selections made in the first row.

Once the components of the query phrase have been selected, you can click on the Insert button to add the query phrase to the Full Query section. To add another query phrase, click on the Reset button and begin selecting options in the first row.

To edit a query phrase that has been inserted into the Full Query section, click on the query phrase, then click on the Edit button. Modify the phrase in the Query Phrase section, then click on the Update button. The query phrase will be updated in the Full Query section.

To delete a query phrase that has been inserted into the Full Query section, click on the query phrase, then click on the Delete button.

Define an Advanced Query

To define an advanced query, follow these steps:

1. To start, select a query from the Saved Query pulldown menu that will be used as the starting point (template) for the new saved query. To start with a basic saved query, select the saved query "Default [Users]".
2. Click on the Add Adv. button on the Saved Query bar.
3. Select whether this is a Personal or Group saved query. If it is a Group advanced query, also select the User Group to which this advanced saved query should be visible. Click OK to proceed.
4. In the form that appears, enter a query name (this is the name that you will use to retrieve the query) in the "Query Name" field.
5. Build the first query phrase, by selecting "(blank)" for the first field of the first row of the Query Phrase section.
6. Select values for the rest of the fields in the first row.
7. If applicable, enter information in the rows 2, 3, or 4. To select multiple values in row 3, hold down the CTRL button on your keyboard while clicking on each value you wish to select.
8. Click on the Insert button to add the first query phrase to the Full Query section.
9. Click on the Reset button to clear the Query Phrase section, then construct the next query phrase.
10. Repeat steps 7 and 8 until you have inserted all of the query phrases you wish to include.
11. If desired, choose fields and order in the Sort By section to sort the query results.
12. If desired, select a Report Layout from the pulldown menu.
13. Click on the Add button to save your advanced query.

Run an Advanced Query

To run an advanced query, follow these steps:

1. Click on the pulldown menu in the Saved Query bar and select the desired advanced query from the list of options.
2. Press the Run button in the Saved Query bar.

Preview an Advanced Query

Many times you may wish to verify the parameters of an advanced query before running it or perhaps modify it slightly before running it.

To preview, optionally modify, and run an advanced query, follow these steps:

1. Press the Preview button in the Saved Query bar. The parameters for the advanced query appear in the query dialog below.
2. Modify the advanced query parameters if desired.
3. Press the "Run Query" button in the query dialog to submit the query.

Edit an Advanced Query

To edit an advanced query, follow these steps:

1. Click on the pulldown menu in the Saved Query bar and select the advanced query you would like to edit from the list of options.
2. Press the Edit button in the Saved Query bar. A page containing the current advanced query parameters is displayed.
3. In the Full Query section, click on a query phrase you wish to modify, make the changes in the Query Phrase section, then click on the Update button. After you are done making changes to the advanced query, click on the OK button to save your updates.

Delete an Advanced Query

To delete an advanced query, follow these steps:

1. Click on the pulldown menu in the Saved Query bar and select the advanced query you would like to remove from the list.
2. Press the Delete button in the Saved Query bar.

Metrics

The Metrics operation is a way to gather and display statistical information based on your ProblemTracker data. The information can be displayed as bar, pie, or line charts using system defined or user defined Chart Layouts to specify the format for the chart. You can limit the records used as input to the statistical calculations (Input Records) by specifying a Saved Query. Only those records which match the Saved Query will be used when performing the statistical calculations. Chart parameters can be stored away for future runs as Saved Charts (for global, group, or personal use).

Generating a Chart

A chart can be generated using the "Project Status (Default) [Users]" Saved Chart or any other saved chart that has been added by a ProblemTracker user with the appropriate privilege(s) by performing the following steps:

1. Select a chart from the "Saved Chart" pulldown field (by default, only the default saved chart "Project Status (Default) [Users]" will appear in this field
2. The options displayed in the Chart Layout, Input Records, and Chart Title fields will be automatically filled with the settings in the Saved Chart selected. If desired, make other selections for the Chart Layout, Input Records, and Chart Title fields.
3. Click on the "Show Chart" button to display the chart.
4. Make changes to the formats of the chart displayed by using the Dynamic Chart Layout Options. Details on the options available can be found in the Chart Layout Options section.
5. To change the parameters used to display the chart, click on the "Change Parameters" button to return to the Chart Selection page.

Set a Default for the Metrics Page

You can set a default such that whenever you click on the Metrics icon a particular Saved Chart, Chart Layout, Input Records, and Chart Title will be ready to be displayed by clicking on the "Show Chart" button. By setting a default, you will be one click away from seeing your default chart when you go to the Metrics page. This is useful if there is a particular chart you will be displaying on a frequent basis.

To set a default for the Metrics page:

1. Select a Saved Chart, Chart Layout, Input Records, and Chart Title to be used to generate your default chart
2. Click on the Set as Default button at the top

Save

The "Save" operation allows you to change the saved chart layout, input records, or chart title associated with a saved chart. You must have the appropriate privilege to perform this operation on a group saved chart. To make changes to a saved chart on the Metrics main page:

1. Click on the Metrics icon in the top button bar
2. In the Saved Chart pulldown, select the saved chart you wish to modify
3. In the fields for Chart Layout, Input Records, and Chart Title make the desired changes
4. Click on the "Save" button

Save as New

The "Save as New" operation allows you to save a new chart based on the settings displayed on the "Select a Saved Chart" page or when previewing a saved chart. On the "Select a Saved Chart" page, this operation allows you to create a new saved chart with different selections for Chart Layout, Input Records, and Chart Title.

To use the "Save as New" operation on the "Select a Saved Chart" page:

1. Click on the Metrics icon in the top button bar
2. Make selections for the Saved Chart, Chart Layout, Input Records, and Chart Title
3. Click on the "Save as New" button
4. Enter a name for the new saved chart, then select whether the saved chart will be a group or personal saved chart. If you select "Group" for the "Saved Chart Type" field, select the group that should have access to this saved chart in the "Group" field.
5. Click OK to complete the operation

To use the "Save as New" operation after previewing a saved chart, click here for instructions.

Adding a Saved Chart

To create a saved chart, perform the following steps:

1. Click on the Metrics icon in the top button bar
2. Click on the "Add" button to the right of the "Saved Chart" pulldown
3. Enter a name for your Saved Chart in the "Saved Chart Name" field
4. In the "Saved Chart Type" field, select whether this chart will be a personal or group saved chart. Selecting "Group" indicates that any member of the user group selected in the "Group" field below will be able to access this saved chart.
5. If "Group" is selected in the field "Saved Chart Type" above, select which user group will be able to access this saved chart in the "Group" field.
6. Click "Next" to continue
7. Select the criteria for the Saved Chart. Click here for full details of the criteria selections for a saved chart.
8. Click on the Add button

Editing a Saved Chart

To edit a saved chart, perform the following steps:

1. Click on the Metrics icon in the top button bar
2. Select a saved chart in the "Saved Chart" pulldown
3. Click on the "Edit" button to the right of the "Saved Chart" pulldown
4. Make changes to the criteria of the saved chart
5. Click OK to save the changes

Deleting a Saved Chart

To delete a saved chart, perform the following steps:

1. Click on the Metrics icon in the top button bar
2. Select a saved chart in the "Saved Chart" pulldown
3. Click on the "Delete" button to the right of the "Saved Chart" pulldown
4. Click OK to confirm the operation

Preview a Saved Chart

The preview operation allows you to make changes to the criteria of a saved chart before using the "Show Chart" operation to display the chart. This operation is useful when you want to display a chart with a change in the criteria for a saved chart, but want to preserve the saved chart's original settings. This is also useful for creating a new saved chart based on the criteria of an existing saved chart.

To preview a saved chart, perform the following steps:

1. Click on the Metrics icon in the top button bar
2. Select a saved chart in the "Saved Chart" pulldown
3. Click on the "Preview" button to the right of the "Saved Chart" pulldown
4. If desired, make changes to the criteria
5. Click "Save" to save your changes. To create a new saved chart with the criteria displayed, click on the "Save as New" button. Otherwise, click on the "Show Chart" button to display the chart.
6. If you clicked on the "Save as New" button, you will be prompted to select a name, chart type, and group for the new saved chart.

Saved Chart Criteria

Each saved chart has criteria which defines the data and formats that will be displayed when the chart is generated. The options available when creating a saved chart are explained below:

- **Default Chart Layout**
  Select a chart layout to be used with this saved chart. For information on creating a Chart Layout, click here.

- **Default Input Records**
  This option determines which records will be included when displaying the chart. Select "<All Records>" to include all records in the database or choose a Saved Query to limit the records included in the chart.

- **Default Chart Title**
  Enter a title to be displayed at the top of the chart

- **Calculate the ... (y-axis for a line chart)**
  Select a calculation to be done on the set of records you chose in "Default Input Records" above. If you selected a Chart Layout to produce a line chart, the selection made in this section will become the y-axis when the chart is displayed.
  - **number of input records**
    Selecting this option indicates that the number of records included in the chart data will match the number of input records determined by the "Default Input Records" field.
    Example 1: If you select this option and "<All Records>" is selected for "Default Input Records", the chart data will display all records in the database.
    Example 2: If you select this option and a Saved Query is selected for "Default Input Records", the chart data will display all records in the database that match the criteria in the Saved Query selected.

  - **calculated value of an Integer or Float field**
    Selecting this option indicates that a calculation (average, total, minimum, maximum) should be performed on the values of an Integer or Float field present in the set of records selected in "Default Input Records".
    Example: If you select this option and "average" value of "Estimated Size" field, then the chart will calculate the average value of the Float field called Estimated Size within the set of records selected for "Default Input Records".

  - **calculated time between 2 date fields in a particular date increment**
    This option allows you to calculate a time (average, total, minimum, maximum) between the values of 2 date fields in a set of records.
    Example: If you select this option and "average" value from "Date Reported" to "Fix Date" in "days", then the chart will calculate the average time in days between the date fields selected for the set of records listed in "Default Input Records".

  - **calculated time for record to progress from one state to another**
    This option allows you to calculate a time (average, total, minimum, maximum) between the time a record was in a particular status (state 1) to the time when a record was in another status (state 2) over a set of records. This calculation uses the Record History to compare the date a record was in state 1 to the date a record was in state 2. The calculation will be the same if a record moved directly from state 1 to state 2 or passed through other states before moving to state 2.
    Example: If you select this option and "average" value from "Reported" to "Closed" in "days", then the chart will calculate the average time in days it took a record to go from the Reported state to the Closed state.

  - **number of records added**
    Selecting this option indicates that the number of records included in the chart data will match the number of records created within the set of records listed in the "Default Input Records" field.

  - **number of transitions to a state from another state**
    This option allows you to calculate the total number of transitions that were made into a state

(state 2) from another state (state 1). Selecting the option "<Any State>" for state 1 indicates that all transitions that moved a record from any state (including state 2) into state 2 will be included in the chart data. Selecting the option "<Any Other State>" for state 1 indicates that all transitions that moved a record from any state (except state 2) into state 2 will be included in the chart data. This calculation yields the total number of times a transition between 2 states occurred. The calculation will count each time the transition occurred even if it occurred on the same record multiple times.
Example: If you select "Scheduled" as state 2 and "Reported" as state 1, then the calculation will be the total number of times any record moved from the Reported state to the Scheduled state.

 - **number of records moved to a state which passed through another state**
 This option allows you to calculate the total number of records that moved to a state (state 2) and passed through another state (state 1). Selecting the option "<Any State>" for state 1 indicates that the calculation will yield any record which has moved to state 2. Selecting a specific state for state 1 limits the calculation to records that passed through state 1 and state 2. Unlike "number of transitions," this calculation will not include multiple "hits" for the same record. Even if the same record passed from state 1 to state 2 multiple times, it will only count the record once as it is counting number of records and not number of transitions. Also, if a record loops while in state 2, the record is assumed to have completed the move from state 1 to state 2, when it first moves into state 2. This calculation can take a long time to run.

- **Perform calculations ... (x-axis for line chart)**
Select an option to add a further constraint to the data that resulted from the option in the **Calculate the ... (y-axis for line chart)** option above.
 - **for every option menu item in a pulldown field**
 Selecting this option will perform the calculation selected in the **Calculate the ... (y-axis for line chart)** option above for every option menu item within the pulldown field selected.
 Example: If you select this option and "Status" as the pulldown field, the chart will display a separate calculation for each Status in your database.

 - **as of the current date and time (single calculation)**
 This option indicates that the chart should perform the calculation selected in the **Calculate the ... (y-axis for line chart)** option above as of the current date and time.

 - **as of the end of or during a time increment for the previous X time increments**
 This option indicates that the chart should generate the calculation selected in the **Calculate the ... (y-axis for line chart)** option above as of the end of or during each time increment for the number of increments selected.
 Example: If you select "as of the end of" each "day" for the previous "2" "weeks", the chart will generate 14 calculations (one value for the calculation as of the end of each day for the last 2 weeks).

 Dates are displayed as two part dates (month & day), except that the first (left most) calculation and any calculation that begins a new year will include a three part date (month, day, and year). All date parts are displayed using 2 digit values (with leading zeros if necessary), including the year. The date format is based on the personal preference of the user who clicked Show Chart. The time zone used for calculations (to determine midnight of a date) is the time zone specified in personal preferences of the user who clicked Show Chart. If you select "during each week" or "during each month," each week or month will be displayed as two dates with a hyphen between the two (a date range).

When you select week or month, the calculation may include a partial week or month as the most recent value (month to date, week to date) so that it always includes information up to and including the current day. Selecting month will always give you a partial month for the most recent (right most) value, unless today is the last day of the month. When you select "during each month," the months will always begin on the first of the month. When you select "as of the end of" or "during" each week, for the previous N weeks, you will always get data for a full week in each calculation. However, if you select "as of the end of" or "during" each week for the previous N months or years, you may get a partial week value (so that the data includes exactly N months or exactly N years). To get data that always includes exactly one week for each data point, use N weeks (rather than N months or N years).

- **as of the end of or during a time increment for a date range**
  This option indicates that the chart should generate the calculation selected in the **Calculate the ... (y-axis for line chart)** option above as of the end of or during each time increment for the specified date range. If you do not enter a value for the end of the date range (second date), the chart will use the day on which the chart is run (it will use today as the value). The dates you enter should not include a time component (only month, day, and year).
  Example: If you select "during" each "day" from "01/01/2002" to "01/05/2002", the chart will generate 5 calculations (one value for the calculation during each day in the date range specified).

  Dates are displayed as two part dates (month & day), except that the first (left most) calculation and any calculation that begins a new year will include a three part date (month, day, and year). All date parts are displayed using 2 digit values (with leading zeros if necessary), including the year. The date format is based on the personal preference of the user who clicked Show Chart. The time zone used for calculations (to determine midnight of a date) is the time zone specified in personal preferences of the user who clicked Show Chart. If you select "during each week" or "during each month," each week or month will be displayed as two dates with a hyphen between the two (a date range).

  When you select week or month, the calculations may include a partial week or month at the beginning and/or end, as necessary to fit within the date range. If you select "during each month," months are displayed from the first of the month to the end of the month, with the possible exception of the first and last months displayed. The first month may be a partial month if your date range does not begin on the first of the month. Your last month may be a partial month if your date range does not end on the last day of the month.

- **Breakdown calculations by a pulldown field**
  Checking the box for this option indicates that the calculations generated based on the selections made above should be broken down by a pulldown field. For each calculation, a value will be displayed for each option menu item in the pulldown field selected. In addition, if the chart layout selected for the saved chart contains a legend, one legend entry will be present for each option menu item in the pulldown field selected.
  Example: If you enable this option and select "Status", the chart will display a calculated value for each state in your database.

- **Don't chart data for a breakdown value if its data is all zeros**
Checking the box for this option indicates that a calculation for a particular option menu item in the field selected for "Breakdown calculations by a pulldown field" should not appear on the chart if its value is zero.

Saved Chart Layouts

A saved chart layout provides the formats used to display a saved chart. A saved chart cannot be displayed without selecting a saved chart layout. Examples of the formats that a saved chart layout provides are:

- whether a chart is a bar, pie, or line chart
- whether a legend should be displayed
- whether labels should be displayed to reflect the names of the data categories

To create a saved chart layout, perform the following steps:

1. Click on the Metrics icon in the top button bar
2. In the "Chart Layout" field, select the default saved chart layout that corresponds to the chart type you wish to use. For example, if you wish to create a saved chart layout for a bar chart, select the default saved chart layout called "Bar - default [Users]"
3. Click on the "Add" button to the right of Chart Layout field
4. Enter a name for your saved chart layout in the "Chart Layout Name" field
5. In the "Chart Layout Type" field, select whether this layout will be a personal or group layout. Selecting "Group" indicates that any member of the user group selected in the "Group" field below will be able to access this saved chart layout.
6. If "Group" is selected in the field "Chart Layout Type" above, select which user group will be able to access this saved chart layout in the "Group" field.
7. Click "Next" to continue
8. Select the options for the Saved Chart Layout. Click here for full details of the options available for a saved chart layout. A sample chart is displayed in the lower right corner of the page. As you make selections to the chart layout options, the sample chart will reflect these changes.
9. Click on the Add button to save the chart layout

Chart Layout Options

The Chart Layout Options determine the formats used to display the data of the saved chart selected.

The following chart options are available for any chart type (bar, pie, line):

- **Width x Height**
Enter the dimensions of the area that should be used to display the chart. We recommend using "600 x 400" so that the chart area is visible within the bounds of a user's screen when the browser window is maximized. Using a setting like "800 x 600" or "1200 x 800" will cause most users to have to use a browser's scroll bars to see the full chart area.

- **Label Length**
A label in the chart is generated from the records included in the chart data. Enter the maximum number

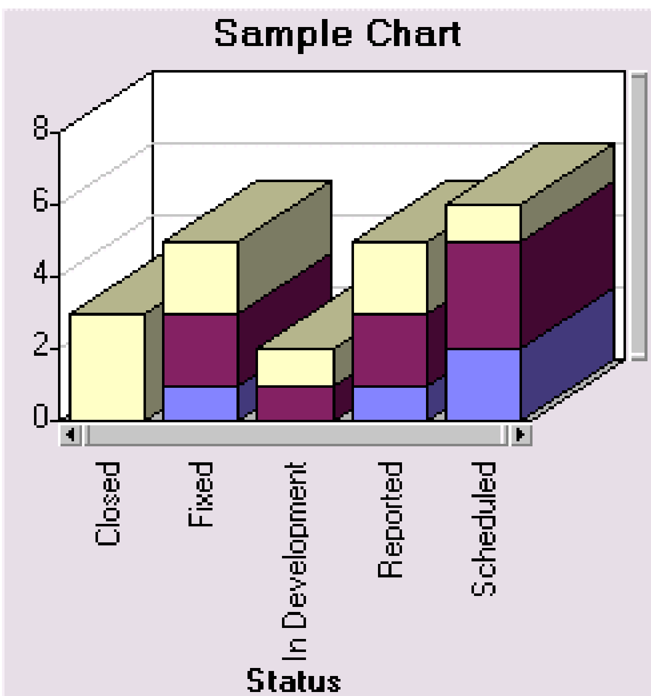
of characters allowed for a label in the chart. If a data field is longer than the number of characters specified here, it will be truncated when used as a chart label.

- **Display dynamic layout options (below) with chart**
  Checking the box for this option will display the chart layout options below a chart generated by using the "Show Chart" operation. This option enables you to make changes to a chart's layout options after the chart is displayed without altering the original saved chart layout.

Each chart type (bar, pie, line) has its own set of chart layout options as follows. Click on the link below to see the options that correspond to the chart type selected. For all chart types, checking the box to the left of the option enables the option to be applied to the chart layout:

Bar Chart Options
Pie Chart Options
Line Chart Options

Bar Chart Options



- **Use 3D mode**
  Enables the chart to be displayed in three dimensions instead of two

- **Bar Type**
  Determines how the bars should be displayed when the data is broken down by a particular pulldown field. Selecting "Side by side" will display the bar for each category side by side or "Stacked" will display the break down categories stacked upon each other for each bar.

- **Show Legend**
  Displays a color coded legend to explain the data categories displayed in each slice

- **Legend Position**
  If "Show Legend" option is enabled, this option determines whether the legend appears to the left or the right of the chart

- **Show Bar Labels**
  Determines whether the labels for each bar should be displayed

- **Bar Label Style**
  If "Show Bar Labels" is enabled, this option determines where the bar labels should be displayed. Selecting "Below and Floating" will show the labels below each bar as well as when the mouse is moved over a bar. Choosing "Floating (mouse over)" will only display the label when the mouse is moved over a bar. "Below" will display the label below each bar.

- **Show Bar Outlines**
  Whether each bar should be outlined

- **Bar Label Angle**
  If "Show Bar Labels" is enabled and "Bar Label Style" is set to either "Below and Floating" or "Below", this option determines the angle of the label. If the labels have a large number of characters, using "90" or "270" for this option will yield the best results.

- **Show Range Adjuster**
  Whether the range adjustment bar should be displayed. Enabling this option allows you to change the range of the Y-axis by scrolling the range adjuster along the bar. This option is useful for focusing in on a particular area of the chart.

- **Bar Alignment**
  Whether the bars should be displayed horizontally or vertically

- **Show Range Labels**
  Whether the labels for the Y-axis should be displayed

- **Show Range Lines**
  If the "Show Range Labels" option is enabled, this option determines whether lines should be displayed for each value marked on the Y-axis

- **Show Value Labels**
  Whether the number of items in a category should be displayed in each bar

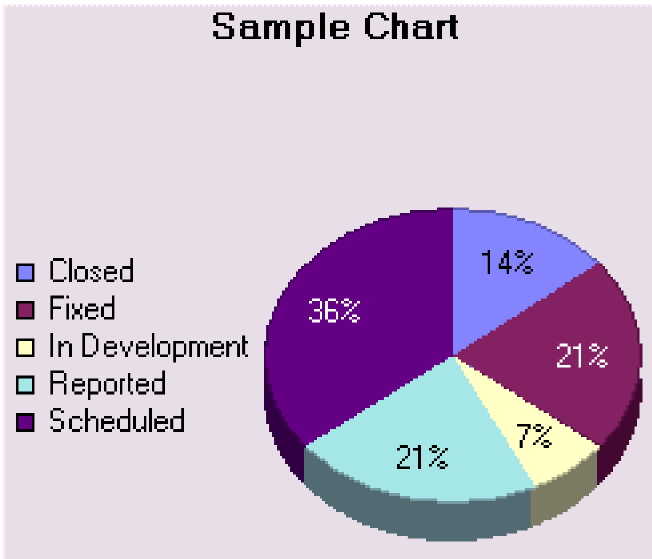
- **Value Label Style**
  If "Show Value Labels" is enabled, this option determines where the values should appear. Selecting "Floating (mouse over)" will only display the value when the mouse is moved over a particular bar, or "Inside" will display the values within each bar, or "Outside" will display the values above each bar.

- **Show Bar Scroller**
  Whether the bar scroller should be displayed. Enabling this option allows you to change the number of

bars shown on the X-axis by moving the scroller along the bar. This option is useful for focusing in on a particular area of the chart.

- **Initial Bar Display**
  If "Show Bar Scroller" is enabled, this option determines which bars should be displayed on the X-axis. Selecting "All" will display all data, or "First 20" will show the first twenty bars in the data set, or "Last 20" will show the last twenty bars in the data set.

Pie Chart Options



- **Use 3D mode**
  Enables the chart to be displayed in three dimensions instead of two

- **Show Pie Labels**
  Displays the label for each category within a slice of the pie

- **Show Legend**
  Displays a color coded legend to explain the data categories displayed in each slice

- **Legend Position**
  If "Show Legend" option is enabled, this option determines whether the legend appears to the left or the right of the chart

- **Show Slice Separators**
  Whether lines (borders) should be displayed to separate each pie slice

- **Slice Style**
  Determines how a pie slice should be formatted when it is selected by double clicking on a particular pie slice Selecting "Detached" displays the selected pie slice slightly removed from the rest of the pie, or "Circle" adds a circle inside the slice to note which one is selected, or "Triangle" adds a triangle inside the slice to note which one is selected

- **Show Slice Values**
  Whether the number of items in a category should be displayed in each pie slice

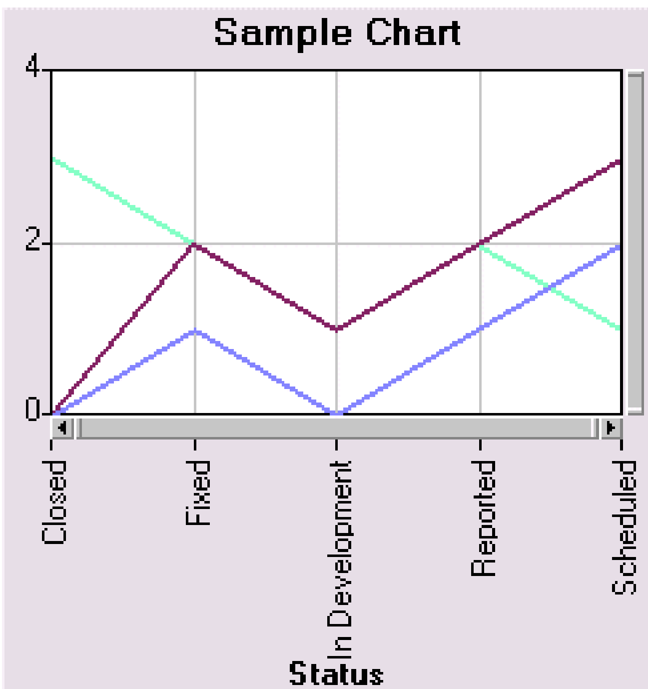
- **Slice Value Style**
  If "Show Slice Values" is enabled, this option determines where the values should appear. Selecting "Floating (mouse over)" will only display the value when the mouse is moved over a particular pie slice, or "Inside" will display the values in each pie slice.

- **Show Slice Percentage**
  Whether the percentage of a category should be displayed in each pie slice

- **Slice Percentage Style**
  If "Show Slice Percentage" is enabled, this option determines where the percent value should appear. Selecting "Floating (mouse over)" will only display the value when the mouse is moved over a particular pie slice, or "Inside" will display the values in each pie slice.

- **Show Slice Labels**
  Whether the label for each category should be displayed when the mouse is moved over a pie slice

Line Chart Options



- **Use 3D mode**
  Enables the chart to be displayed in three dimensions instead of two

- **Show Stacked**
  Enabling this option will display the lines for each break down category stacked on top of each other.

- **Show Legend**

Displays a color coded legend to explain the data categories displayed in each slice

- **Legend Position**
  If "Show Legend" option is enabled, this option determines whether the legend appears to the left or the right of the chart

- **Show Value Labels**
  Whether the number of items in a category should be displayed at the corresponding point in the line.

- **Value Label Style**
  If "Show Value Labels" is enabled, this option determines where the values should appear. Selecting "Point" will display each value on the point in the line which corresponds to the category, or "Outside" will display each value above the point in the line.

- **Show Value Scroller**
  Whether the value scroller should be displayed. Enabling this option allows you to change the values shown on the X-axis by moving the scroller along the line. This option is useful for focusing in on a particular area of the chart.

- **Initial Value Display**
  If "Show Value Scroller" is enabled, this option determines which values should be displayed on the X-axis. Selecting "All" will display all data, or "First 20" will show the first twenty points in the data set, or "Last 20" will show the last twenty points in the data set.

- **Show X-Axis Labels**
  Whether the labels for each point on the X-axis should be displayed

- **X-Axis Label Angle**
  If "Show X-Axis Labels" is enabled, this option determines the angle of the label. If the labels have a large number of characters, using "90" or "270" for this option will yield the best results.

- **Show X-Axis Lines**
  Enabling this option will display a line for each category listed on the X-Axis

- **Show Range Lines**
  If the "Show Range Labels" option is enabled, this option determines whether lines should be displayed for each value marked on the Y-axis

- **Show Range Labels**
  Whether the labels for the Y-axis should be displayed

- **Show Range Adjuster**
  Whether the range adjustment for the Y-Axis should be displayed. Enabling this option allows you to change the range of the Y-axis by scrolling the range adjuster along the bar. This option is useful for focusing in on a particular area of the chart.

- **Show Value Highlights**

Enabling this option will display a circle at each point on the line that represents a data value

Edit a Chart Layout

To edit a chart layout, perform the following steps:

1. Click on the Metrics icon in the top button bar
2. In the "Chart Layout" field, select the layout you wish to modify
3. Click on the Edit button to the right of the "Chart Layout" field
4. Make changes to the layout, then click OK

Deleting a Chart Layout

To delete a chart layout, perform the following steps:

1. Click on the Metrics icon in the top button bar
2. In the "Chart Layout" field, select the layout you wish to modify
3. Click on the Delete button to the right of the "Chart Layout" field
4. Click OK to confirm the operation

Summary Reports

To obtain a summary report, click on the Metrics icon in the top button bar, then click on the "Go To Summary Reports" button. The following summary reports are currently supported:

- **User Summary**
  This reports shows a summary for each user in ProblemTracker. The summary includes the number of records assigned to the user broken down by Status and Product.
- **Product Summary**
  This report shows a summary for each product in ProblemTracker. The summary includes the number of records with a particular product selected broken down by Status and Assignee.

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Deleting Records

To delete a record, use the Delete button located in the Button Bar. When you press this button you will be prompted to enter the Problem Record Number (PRN) of the record you would like to delete.

Note that when you delete a record, by default, ProblemTracker does not remove it from the database. Instead the "Deleted" attribute (field) of the record is set to Yes. By default, queries do not include such deleted records; however, deleted records can be included in the query results by setting the "Deleted" field to "Yes" or "*" when defining the query criteria. If, at a later time, you would like to make this record visible again, you can directly edit the record (using the record PRN) and change "Deleted" attribute to the value "No".

However, if your ProblemTracker administrator has changed the default delete behavior, the delete may be permanent. Check with your ProblemTracker administrator before performing a delete that you may wish to recover.

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Printing Records

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In order to print documents from ProblemTracker, you can click on the print icon present on the Home, Query, and View pages of ProblemTracker to print the contents of the frame where the record(s) are displayed.

To print the reports displayed on the Home Page, go to the Home Page and click on the print icon in the upper right corner of the page.

To print Query Results, run the query, then select either Table or Text for the format. Table format resembles the same table as shown on the Query Results page. Text format removes the table layout and lists each record sequentially from top to bottom. Click on the print icon to begin printing the query results.

To print individual problem records, the best method is to go to the View page for the problem record, click on the Format for Printing button, then click on the print icon at the top of the page. This method allows you to print an individual record with the full content of each field.

To print this ProblemTracker help file, there are 2 ways to print out the complete set of files.
Use Print All Linked Documents Option
Go to the Table of Contents, then select File->Print in your browser to launch the print properties dialog. Click on the option tab, then check the box for the option called "Print all linked documents". This will print the table of contents and each of the subsections listed as clickable links (each individual Help section). The availability of the "print all linked documents" option may depend on your operating system. If the option is not available, use the next method described below.

Print via Windows Explorer
This method will print all of the Help section, but the pages will need to be manually sorted. In Windows Explorer, browse to the directory where ProblemTracker is installed. Typically, C:\Inetpub\wwwroot\ProblemTracker\workgroup, where workgroup is ptdev, ptweb, pteval, etc. In the workgroup folder will be a subdirectory called Help. In the Help folder, there are three directories: Admin, Install, Std, and WMS. In each of these folders there will be a table of contents file. For Admin, the table of contents file is called admin_toc.htm. For Install, it is called install_toc.htm. For Std, it is called bots_toc.htm. For WMS, it called wms_toc.htm. Print each of these files first. Then go into the Admin directory and select all of the files, then right-click and select print. Do the same for the files in the Install, Std and WMS folders. You can use the printed table of contents files to help you sort the remaining web pages. There is one web page for each table of contents entry. The corresponding title is at the top of each web page.

If you wish to print information other than items mentioned above, use your browser's print functionality to print the information.

Windows 2000 / XP Time Zone Selection Chart

The following is a list of time zones that are supported by ProblemTracker when installed on a Windows 2000 (or Windows XP) system. Entries with (*) are only available in Windows XP.

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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Windows NT 4.0 Time Zone Selection Chart

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The following is a list of time zones that are supported by ProblemTracker when installed on a Windows NT 4.0 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	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
-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

-03:30	Newfoundland Standard Time	Newfoundland
-03:00	SA Eastern Standard Time	Buenos Aires, Georgetown
-03:00	E. South America Standard Time	Brasilia
-02:00	Mid-Atlantic Standard Time	Mid-Atlantic
-01:00	Azores Standard Time	Azores
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	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	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
+06:00	Central Asia Standard Time	Almaty, Dhaka
+06:00	Sri Lanka Standard Time	Columbo
+07:00	SE Asia Standard Time	Bangkok, Hanoi, Jakarta
+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
+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