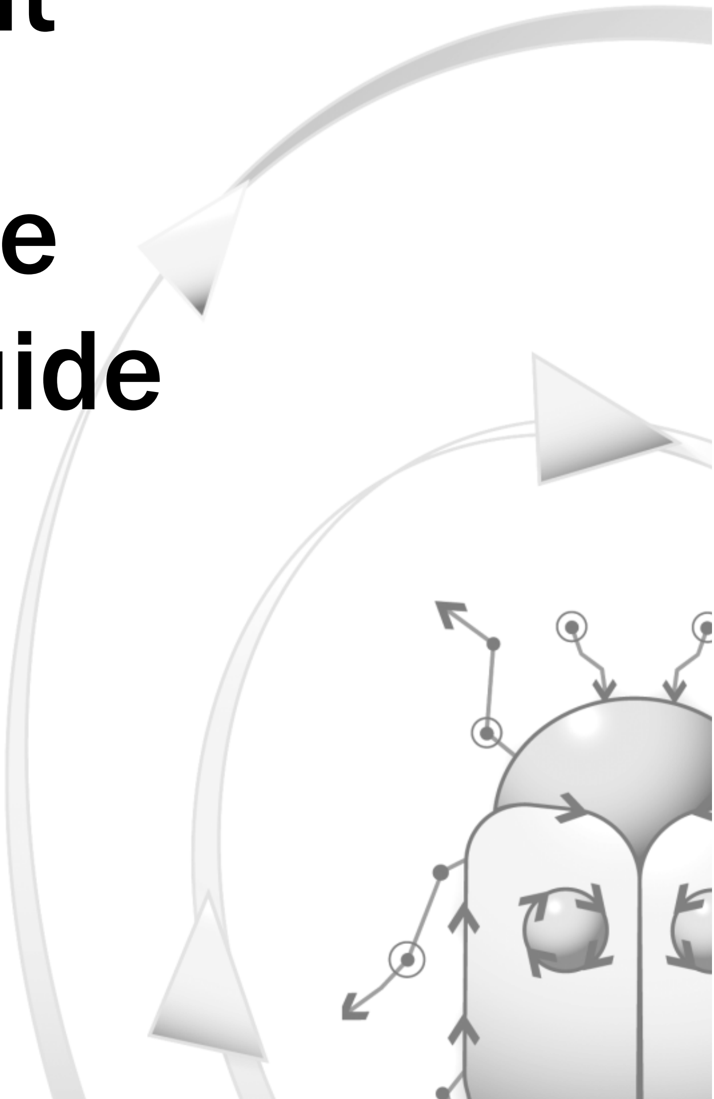
TestTrack Pro Web Client

User Guide
Admin Guide



Seapine Software™
changing the world of software development

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Admin Guide

Chapter 1
About TestTrack Pro

Welcome to TestTrack Pro!

TestTrack Pro is the premier bug tracking program. You have an important job to do - deliver a quality product on time and within budget. And, whether you are developing, testing, fixing bugs, or managing the team, you don't have time to learn another complex application.

TestTrack Pro lets you take control of your bug tracking process. Design a complex tracking structure, or simply install the software, and start tracking the TestTrack Pro way!

What's new in TestTrack Pro 6.0?

Introducing the Seapine License Server

The Seapine License Server is a client/server application that manages user licenses for all Seapine products. It also contains product-independent user demographic information for users and customers that is shared across Seapine products. All product servers connected to a license server can share the licenses and users that reside on that server.

No more choosing between Web and Windows clients

TestTrack Pro 6.0 users can log in from Web or Windows clients without purchasing separate licenses, saving money and giving your users the choice of how they access TestTrack Pro. The Web and Windows clients support both named and floating licenses, providing maximum licensing flexibility.

Fully customizable workflow

TestTrack Pro 6.0's fully customizable workflow lets you define states, events, and state transition rules. In version 6.0, you can model your most complex workflow processes. TestTrack Pro 6.0 can even diagram the workflow for you.

Multiple users assignments

Need to assign a fixed defect to your QA team for verification? TestTrack Pro 6.0 can handle this and other group assignment tasks with ease. Need everyone in the group to sign off before moving the issue to a new state? TestTrack Pro 6.0 handles this too, giving you more control over your process.

Enhanced email notifications

TestTrack Pro 6.0 provides more control over who receives email notifications for specific events, products, issue types, and more. Version 6.0 also includes an unlimited number of customizable email templates and supports HTML-based email.

Even better custom field support

You can now define up to 100 custom fields for your issues. And, TestTrack Pro 6.0's enhanced SOAP API supports full access to custom fields.

Additional fields in events

Issue event records now support file attachments, custom fields, and time tracking fields, giving you more control over the fields defined for each event.

More features...

TestTrack Pro 6 has even more features, including additional password security options for user accounts, 512-bit encrypted client/server communication, and additional automatic assignment rules.

Documentation conventions

The documentation, and most of the examples, are based on the default TestTrack Pro workflow. There are a few conventions used throughout the help that are designed to be completely predictable – making it is easy to understand what you are reading and what you're supposed to do. Many of the TestTrack Pro commands are available from menus, toolbars, shortcut menus, and shortcut keys. Throughout this guide, most commands are explained using both the menu command and the toolbar button. As you become more familiar with TestTrack Pro, you may find shortcut menus and shortcut keys more efficient to work with. When you are instructed to select a menu command, you will find the menu name, followed by an arrow. For example, to add a defect, choose **Create > Defect**. Shadowed text is also used to draw attention to notes, tips, examples, etc.

Contacting Seapine support

Telephone: 513-754-1655

Email: support@seapine.com

Web site: http://www.seapine.com

Note: Check our **web site** for the latest news and updates. You can also find help in our **Knowledgebase**!

Documentation feedback

Seapine Software welcomes your feedback on the documentation included with this product. If you have comments or suggestions about the documentation, please email: **documentation @seapine.com**. This email address is provided for documentation only. You may not receive a reply to your email. For technical questions or support, contact **support@seapine.com**.

Chapter 2
Getting Started

1-2-3 Start Tracking!

In minutes, you can start TestTrack Pro and begin tracking. Why wait any longer? Learn how to start TestTrack Pro and set your user options!

Starting TestTrack Pro server

Note: The TestTrack Pro administrator is generally responsible for starting and maintaining the TestTrack Pro server application.

The server must be running before users can access TestTrack Pro database. The server can be run as an application, as an NT/2000 service, or as a Windows pseudo service. Refer to the **TestTrack Pro Installation Guide** for more information.

If you are running the TestTrack Pro server as an NT/2000 or Windows service, the server starts automatically. If you are running the TestTrack Pro server as an application, you have to manually start the server each time the computer is restarted.

Manually starting TestTrack Pro server

1 On the Start menu, choose **Programs > TestTrack Pro > TestTrack Pro Server**.

When the TestTrack Pro server is started, it front loads any active databases.

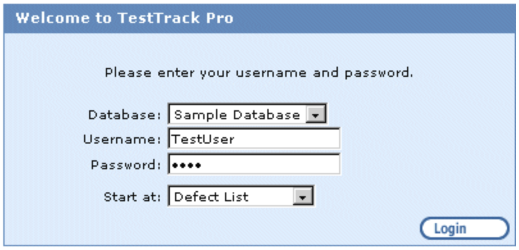
When the TestTrack Pro server is running, it places an icon in the status area on the taskbar of the server PC. If the bug remains yellow or red, TestTrack Pro server is not running properly. When the TestTrack Pro server compacts a database, it can take several minutes for the TestTrack Pro server icon to turn green.

Starting TestTrack Pro

1 Start your Web browser and enter the TestTrack Pro URL provided by your system administrator.

For example: <*http://127.0.0.1/ttweb/login.htm*> or <*http://www.yourserver.com/ttweb/login.htm*>

2 The Login to TestTrack Pro dialog opens.



3 Select the database you want to open from the **Database** menu.

4 Enter your **Username** and **Password**.

5 Select the page you want to start at from the **Start at** menu.

6 Click **Login**.

You are now logged in and ready to start using TestTrack Pro. TestTrack Pro opens on the page you selected from the **Start at** menu.

7 If there is a problem connecting to the server, check the following and try reconnecting:

- Double-check the IP address and/or port number.
- Make sure you are connected to the network, intranet, or Internet.
- Contact your TestTrack Pro administrator for help.

If you are the **TestTrack Pro administrator**, check the following:

- Make sure the server computer is on.
- Make sure the TestTrack Pro server application is running on your server computer.

Where do I start?

If you are the **Project Manager,** start with the Defects list and create filters to view specific defect information. For example, create a filter to display all defects in an Open state. You may also want to print a report that lists all defects opened in the past week.

If you are the **Lead Engineer,** start with the Defects list. Create a filter that displays all defects created, fixed, or verified in the last week **and** that are not currently assigned and not in the closed state. Then, assign the defects to the appropriate person.

If you are an **Engineer/Developer,** start with the Workbook. The Workbook displays all the defects assigned to you and any to do tasks you added. You can also start with the Defects list and create a filter to displays only the defects assigned to you.

If you are the **Lead QA** person, start with the Defects list and create a filter that displays all defects that are currently released to testing. Then, assign these defects to a QA team member for verification. You can also create a filter that displays defects that failed verification.

If you are a member of the **QA team,** start with the Workbook. The Workbook displays all the defects assigned to you and any to do tasks you added. If you need to add new defects, start with the Defects list.

Setting user options

1 Click **User Options**.

The User Options dialog opens. The options you select are user-specific.

2 Enter a **Password**.

To prevent other users from accessing your account, you should set a password. If security is not a concern, you do not need to set a password.

3 Enter the number of records you want displayed per page.

Remember, the larger the number, the longer the refresh time! It can also be difficult to navigate through a large number of records.

4 Select **Grey out closed defects** if you want closed defects to appear greyed-out and italicized.

This option can help you quickly view closed defect.

5 Click **Configure Rules** to set mail notification options.

Email notifications provide a way to stay up to date with changes to defects. You can choose as many email notification options as you want. Choose options carefully so you do not receive an email every time a defect moves to another state in the workflow. See **Configuring notification rules,** page 9 for more information.

If you are a team lead, you might want to receive an email notification when a defect is added to the database. Select **Send me mail when new defects are added.** If you are a developer, you are probably only interested in defects that are assigned to you. Select **Send me mail when new defects are added** then select **Only tell me about new defects that are assigned to me.** You will only receive an email if the new defect is assigned to you.

To control the number of emails you receive, select a filter from the corresponding filter menu. You will only receive an email if the defect passes the filter criteria.

6 Select a **Display names as** option.

TestTrack Pro defaults to Last, First (e.g., Smith, John).

7 Select a **Display assignment information in the status field** option.

You can display the status or the status and assignment information.

8 Select an **Adding multiple defects** option.

9 Select a **Time zone** option.

10 Click **Save**.

Configuring notification rules

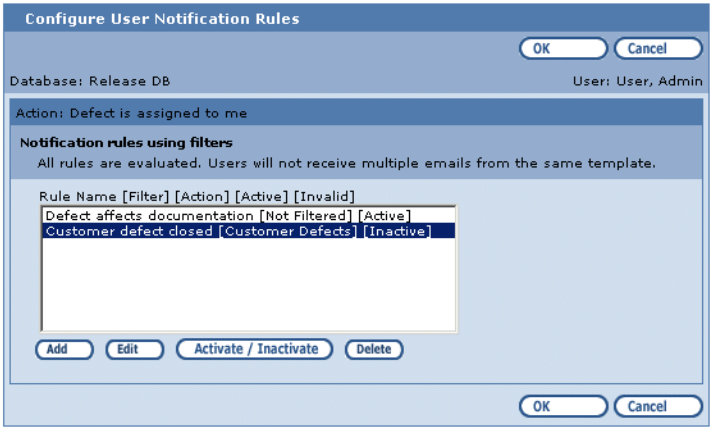
Email notifications provide a way to stay up to date with changes to defects. Select options carefully so you do not receive an email each time a defect moves to another state in the workflow. You can also select filters to further restrict the email notifications you receive. You may also receive system notifications, which the TestTrack Pro administrator configures.

Adding notification rules

1 Click **User Options**.

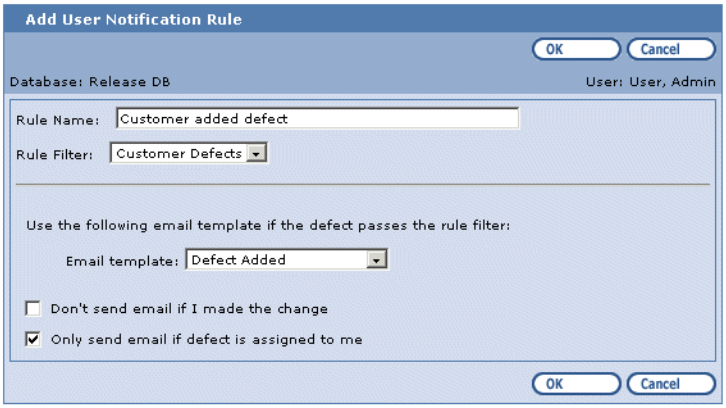
2 Select an item and click **Configure Rules**.

The Configure User Notification Rules dialog box opens. The notification name is listed in the top left corner of the dialog.



3 Click **Add** to add a rule.

The Add Notification Rule dialog box opens.



4 Enter a **Rule Name**.

5 Optionally select a **Rule Filter**.

If a database contains a large number of defects, you may want to filter the defects the rule is applied to. If you need to add filters, see **Creating filters,** page 56.

6 Select an **Email Template**.

7 Select **Don't send email if I made the change** if you do not want to receive an email if you changed the defect.

8 Select **Only send email if defect is assigned to me** to only receive an email if you are the assigned user.

9 Click **OK**.

You return to the Configure System Notification Rules dialog. Click **Add** to add another rule or click **OK** to close the dialog.

Editing notification rules

1 Click **User Options**.

2 Select an item and click **Configure Rules**.

The Configure User Notification Rules dialog box opens. The notification name is listed in the top left corner of the dialog.

3 Select a rule and click **Edit**.

4 Make any changes and click **OK**.

Your changes are saved.

Inactivating notification rules

If there is a rule that is no longer in use, inactivate it instead of deleting it. You can easily activate the rule if you decide to use it again.

1 Click **User Options**.

2 Select an item and click **Configure Rules**.

The Configure User Notification Rules dialog box opens. The notification name is listed in the top left corner of the dialog.

3 Select a rule and click **Inactivate.**

The rule is inactivated.

Note: To activate an inactive rule, select the rule and click **Activate.**

Deleting notification rules

Delete rules if you are certain you will not use the rule again. You can also inactivate a rule to disable it.

Note: Make sure you want to delete the rule. You are not prompted to confirm the deletion and this action cannot be undone.

1 Click **User Options**.

2 Select an item and click **Configure Rules**.

The Configure User Notification Rules dialog box opens. The notification name is listed in the top left corner of the dialog.

3 Select a rule and click **Delete.**

The rule is deleted.

Logging out

Make sure you logout of TestTrack Pro. If you close the browser without logging out, the TestTrack Pro connection remains open and you stay logged in. If this happens, login again on the same computer and then logout.

1 Click **Logout**.

2 You can now close your browser.

Chapter 3
Learning the Basics

Take a tour!

TestTrack Pro is easy to use, but it is even easier when you understand the basics and learn a few shortcuts. Take a few minutes to read this overview information.

About the TestTrack Pro interface

Note: Depending on your security level, you may not have access to all of TestTrack Pro's commands. If a tab, button, or link is always greyed-out and unavailable, you do not have access to that command.

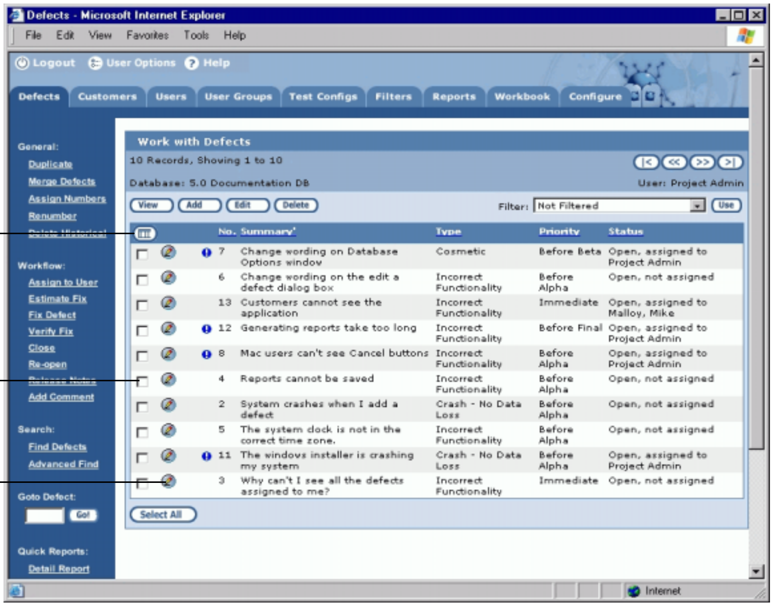
The TestTrack Pro interface is intuitive and easy to use. The interface includes eight list windows: **Defects**, **Customers**, **Users**, **User Groups**, **Test Configs**, **Filters**, **Reports**, and **Workbook**. The tabs across the top of the page correspond to the different types of records you can work with. For example, click **Reports** to set up, view, and run reports. After clicking **Reports**, the **Reports** list window opens. Information is displayed on each page in a column format.

Commands you have access to are active and underlined.

Click to configure list window columns.

Click the check box to select the record.

Click the quick link button to edit the defect.



Note: When adding or editing information, the tabs across the top of the page are disabled. TestTrack Pro cannot automatically save your work or notify you to save your work. Before you navigate away from the add or edit dialog, make sure you click **Save**.

Command buttons

Command buttons are located at the top of every list window. These buttons provide a way to access the View, Add, Edit, and Delete commands.

Button	Description
View	Opens the corresponding View dialog
Add	Opens the corresponding Add dialog
Edit	Opens the corresponding Edit dialog
Delete	Deletes the selected item

Commands list

To perform commands, such as duplicating a defect, select the command from the left-side menu bar. The commands change based on the records you are working with and your security level. You can also add quick link buttons that provide access to commonly used defect action commands. For example, if you are responsible for fixing defects, add the **Fix Defect** quick link button to the Defects list window. For more information, see **Adding quick link buttons,** page 18.

List windows

List windows are used to display basic record information. TestTrack Pro includes the following list windows: **Defects**, **Customers**, **Users**, **User Groups**, **Test Configs**, **Filters**, **Reports**, and **Workbook**.

Opening list windows

Click the corresponding tab across the top of the page. For example, click **Customers** to open the Customers list window.

Selecting records

- To open records, select the corresponding check box and click the corresponding command or command button. You can select multiple records at one time. For example, if there are 5 users you want to view, select each user's corresponding check box then click **View**. The View User dialog opens.

- You can also add quick link buttons to the list windows. Instead of selecting a check box, you can click the quick link button to edit the defect (or view it or display a detail report). For example, instead of scrolling through a list of users, selecting the user by clicking the check box, then scrolling back up the page to click **View**, you can add a **View User** quick link button to the Users list window. For more information, see **Adding quick link buttons,** page 18.

Defects list window

The Defects list window provides access to defects and defect actions. For more information, see **Chapter 4, "Working with Defects,"** page 21. This list window also includes defect indicators that point out new, changed, and closed defects and the defects assigned to you. You can filter the records that are displayed in the list window.

Defect indicators

Defect indicators, are icons on the Work with Defects page that indicate new defects, changed defects, closed defects, and the defects that are assigned to you.

Icon	Name	Indicates
	New Defect	Defects added since you last logged in
	Changed Defect	Defects that changed since you last logged in
	Closed Defect	Closed defects
	Assigned Defect	Defects assigned to you

Customers list window

The Customers list window provides access to customers and customer commands. For more information, see **Chapter 15, "Managing Customers,"** page 155.

Users list window

The Users list window provides access to users and user commands. For more information, see **Chapter 14, "Managing Users,"** page 145.

User groups list window

The User Groups list window provides access to user groups and user group commands. For more information, see **Chapter 13, "Managing User Groups,"** page 137.

Test configs list window

The Test Configs list window provides access to test configs and test config commands. For more information, see **Chapter 7, "Managing Test Configs,"** page 61.

Filters list window

The Filters list window provides access to filters and filter commands. For more information, see **Chapter 6, "Using Filters,"** page 55.

Reports list window

The Reports list window provides access to reports and reports commands. For more information, see **Chapter 8, "Generating Reports,"** page 65.

Workbook list window

The Workbook list window provides access to your personal workbook, your assigned defects, and tasks you add to the Workbook. For more information, see **Chapter 9, "Using the Workbook,"** page 81.

Configuring columns

Take the time to configure columns for each of the list windows you have access to. You can add quick link buttons, add and remove columns, and select column sort orders. Customize the list windows to provide the information you need.

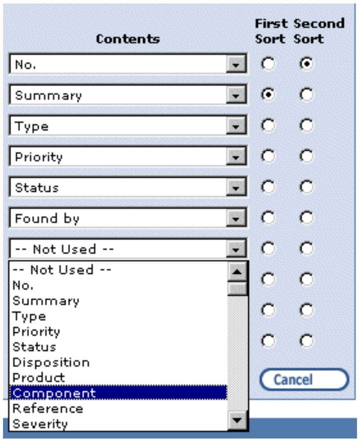
Adding columns

1 Click the **Setup Columns** button. 

The Configure Columns dialog opens.

2 Click a **-Not Used-** column field in the **Contents** area.

A list of all available column fields opens.



3 Select the column field you want to add.

4 Click **Save**.

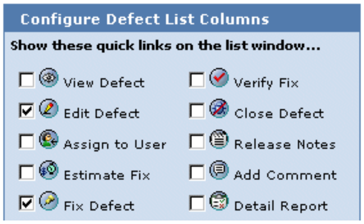
A new column, with the column heading and corresponding contents, is added to the page.

Adding quick link buttons

Quick link buttons provide a shortcut to the most popular list window commands. You can configure quick link buttons for each list window. The buttons you can set vary based on the list window. If a command is not available, the quick link button is disabled. For example, if you do not have security access to edit closed defects, the **Edit Defect** quick link is disabled if a record contains a closed defect.

1 Click the **Setup Columns** button. 

The Configure Columns dialog opens.



2 Select the corresponding check box of the quick links buttons you want to display.

3 Click **Save**.

The quick link buttons are added to the list window.

Sorting columns

To select a new primary sort column quickly, **click** the column heading on the page. A single tick mark appears to the right of the column heading.

1 Click **Setup Columns**.

The Configure Columns dialog opens.

2 Select **First Sort** for the primary sort column.

3 Select **Second Sort** for the secondary sort column.

4 Click **Save**.

The sorted list opens. A single tick mark appears to the right of the primary sort column heading. Two tick marks appear to the right of the secondary sort column heading. You can change the sort order from ascending to descending or vice versa by clicking the column heading on the page.

Changing column contents

You can change the column contents by selecting a new column field. You can also reorder columns by changing column contents.

1 Click **Setup Columns**.

The Configure Columns dialog opens.

2 Click the corresponding column field you want to change.

3 Select the new column field and click **Save**.

The column heading and contents change to match the selected column field.

Removing columns

1 Click **Setup Columns**.

The Configure Columns dialog opens.

2 Click the corresponding column menu you want to remove.

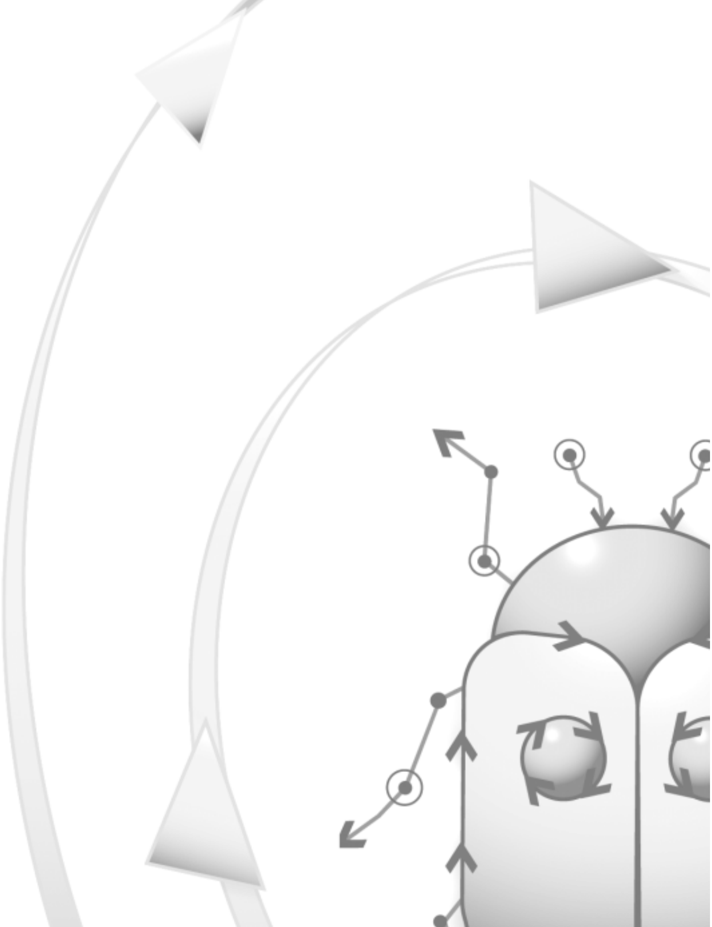
3 Select the **-Not Used-** column field from the menu and click **Save**.

The column is removed.

Chapter 4
Working with Defects

Squash the bugs...

...and move on to the next challenge. You'll be tracking defects in no time at all, after learning about adding defects, deleting defects, and everything in between.



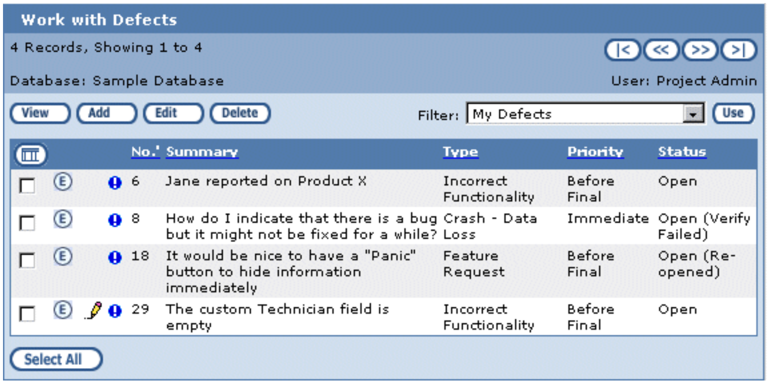
About defects

A defect is a bug, enhancement, change request or any other product-related issue you want to track and resolve. You can track "traditional bugs" such as issues that directly affect software performance. You can also track other types of issues such as documentation errors, typos, customer suggestions, comments about the interface, etc. Depending on your needs, you can configure complex tracking methods or simply use TestTrack Pro as a bug "to do" list.

Adding defects

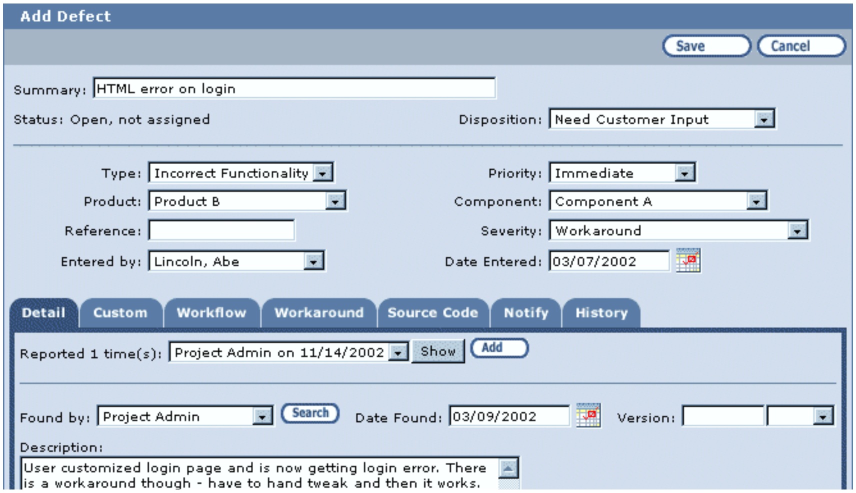
1 Click the **Defects** tab.

The Work with Defects page opens.



2 Click **Add**.

The Add Defect dialog opens. This dialog includes the following tabs: Detail, Custom, Workflow, Workaround, Source Code, Notify, and History. Depending on your database configuration, you may not access have to all tabs.

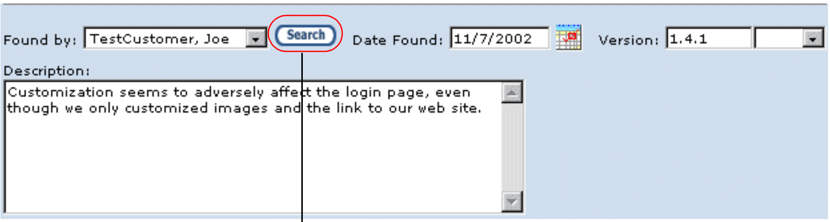


3 Enter the information in the top portion of the Add Defect dialog box.

- Enter a defect **Summary**.
- **Status** displays the what state the defect is in and whether it is assigned.
- Select the defect **disposition**.
- Select the defect **type**.
- Select the defect **priority**.
- Select the **product**.
- Select the **component**.
- Optionally enter a **reference** number pertinent to the defect.
- Select the defect **severity**.
- **Entered by** defaults to the current user or you can select another user.
- **Date Entered** defaults to the current date or you can enter another date.

4 Enter the Found by information on the **Detail** tab.

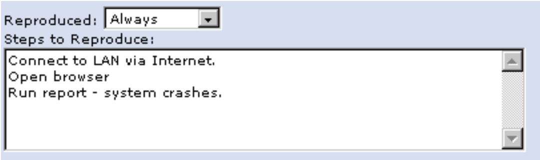
- Select a **Found by** user. Click **Search** to search for a user or customer.
- **Date found** defaults to the current date. You can enter another date or click the calendar to select a date.
- Enter a **Version Found** number. Depending on your database configuration, you may be able to enter or select a version number.
- Enter a detailed defect **Description**.



Click to search for a user or customer. Select the user or customer to populate

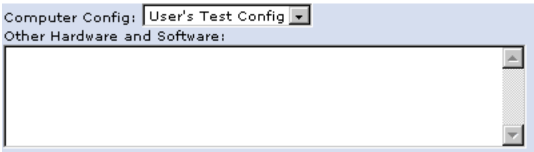
5 Enter the Reproducible information on the **Detail** tab.

- Select a **Reproduced** level.
- Enter the detailed **Steps to Reproduce** the problem. This information helps programmers, testers, etc., fix and test the defect.



6 Enter the Computer Config information on the **Detail** tab.

- Select a **Computer Config**. This field defaults to the current user's computer config.
- Enter information about other **Hardware and Software** that could be affecting the problem.

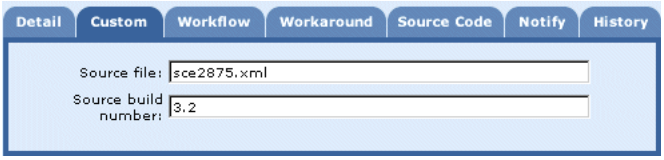


7 Optionally, attach a file to the defect.

See **Attaching files to a defect,** page 26 for more information.

8 Click the **Custom** tab and enter the custom field values.

Note: This tab is not active for all databases

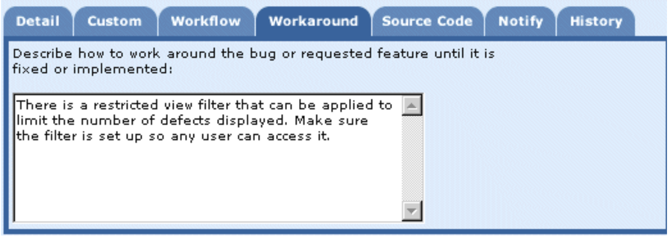


9 Skip the **Workflow** tab.

This tab is populated with defect action information and is useful when editing or viewing defects.

10 Click the **Workaround** tab.

Enter a workaround solution for the bug that can be used until it is fixed or a solution is implemented.

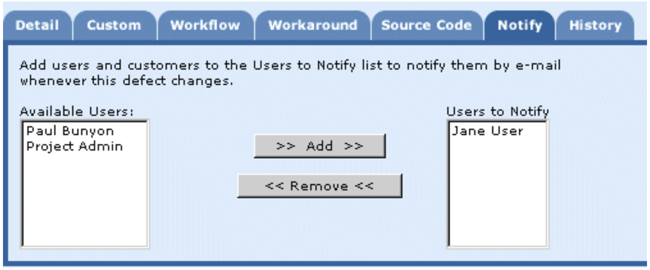


11 Skip the **Source Code** tab.

This tab is used for SCC file information.

12 Click the **Notify** tab.

Select the users or customers you want to notify when the defect changes.



13 Skip the **History** tab.

This tab is populated with defect historical information and is useful when editing or viewing defects.

14 Click **Save** when you finish entering the defect information.

The defect is added to the database and you are ready to add another defect.

Adding additional defect reports

Users, customers, or beta sites often report the same defect. To help eliminate duplicates in your database, you can add the defect once and add all additional reports to the same defect.

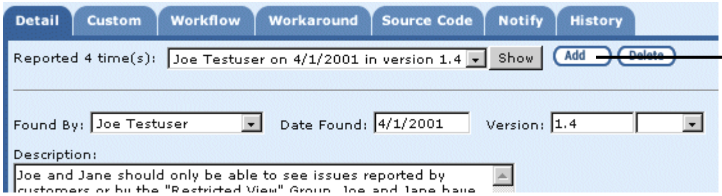
1 Click the **Defects** tab.

2 Select the defect you want to add an additional report to and click **Edit**.

The Edit Defect dialog opens.

3 On the Detail tab, click **Add** located next to the **Show** button.

The number in the **Reported (x) Times** field increases by one.



Click to add additional defect reports

> **Note:** If your browser does not support JavaScript, click **Show** to refresh the **Reported (x) Times** field.

4 Enter the defect information and click **Save**.

See **Adding defects,** page 22 for more detailed information.

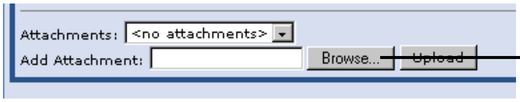
Attaching files to a defect

The more information you supply with a defect report, the easier it is to fix. For example, if a defect is corrupting a file, you can attach the corrupt data file for reference. If you want to point out a cosmetic change to a screen, you can attach a screenshot with the changes you want.

You can attach files to defects as they are added or you can edit a defect and attach a file to it.

1 On the Detail tab, click **Browse** in the Attachments area.

You can also enter the file information in the **Add Attachment** field.



Click to select the file you want to attach to the defect

2 The Choose file dialog opens.

3 Select the file you want to attach and click **Open**.

4 The file information is listed in the **Add Attachment** field.

5 Click **Upload**.

The file is added to the defect.

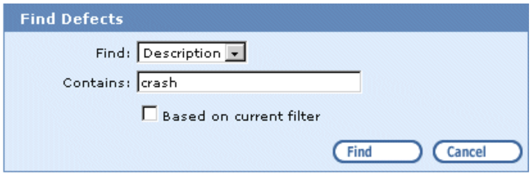
Finding defects

You can search against the summary field, the description field, or all notes. If you do not have security access to these fields, the Find Defects command is disabled. If you do not have security access to one of these fields, it is not included in the Find menu.

Tip: If you know the number of a defect, you can jump directly to that defect. Enter the defect number in the Go To Defect field and click **Go!**.

1 Click the **Defects** tab then click **Find Defects**.

The Find Defects dialog opens.



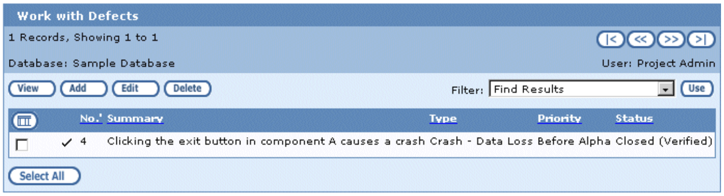
2 Select a search field from the **Find** menu.

3 Enter the text you want to search for in the **Contains** field.

Select **Based on Current Filter** if you only want to search the filtered defects.

4 Click **Find**.

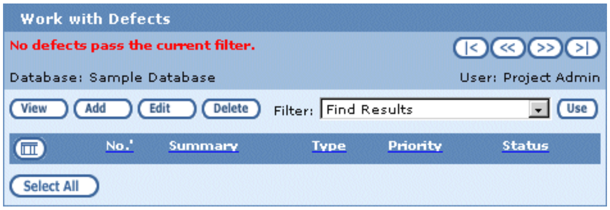
5 If matching defects are found, the search results are displayed on the Work with Defects page. Notice the **Find Results** filter is applied.



Note: If your browser does not support JavaScript, click **Use** to refresh the screen and view found defects.

---

6 If matching defects are not found you return to the Work with Defects page, which is empty. Notice the **Find Results** filter is applied.



Note: If your browser does not support JavaScript, click **Use** to refresh the screen and view found defects.

Go to command

If you know the number of a specific defect, use the go to command to quickly find the defect.

1 Enter the defect number in the Go To Defect field and click **Go!**.

The defect is opened.

Using advanced find

Advanced find lets you perform a more powerful search using filters and Boolean logic. You can also search on multiple restrictions. For more information about filters and Boolean logic, see **Chapter 6, "Using Filters,"** page 55.

1 Click the **Defects** tab then click **Advanced Find**.

The Advanced Find Defects dialog opens.

2 Click **Add** to add a search restriction.

See **Adding restrictions,** page 57 for more information.

Note: If you are using a filter and click **Advanced Find,** the Advanced Find Defects dialog is populated with defects that meet the filter criteria. If you do not want to use these restrictions, click **Clear** to clear the restrictions and start over.

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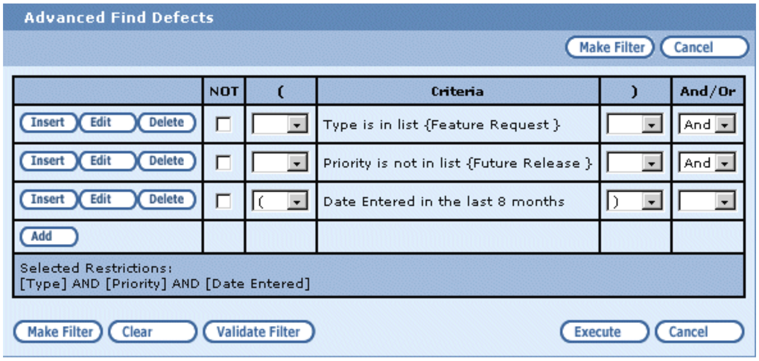
3 Select NOT/AND/OR operators and parentheses to build the Boolean logic for the filter (optional step).

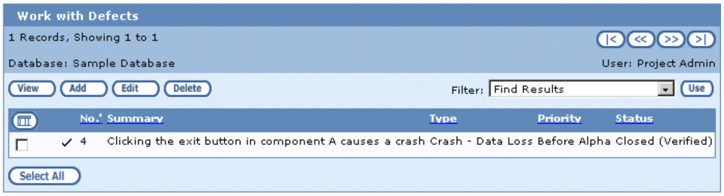


4 Click **Validate Filter** to validate the search criteria.

If the criteria is not valid, an error is displayed on the Advanced Find Defects dialog. Correct the error and click **Validate Filter** again.

5 Click **Execute** to begin the search.

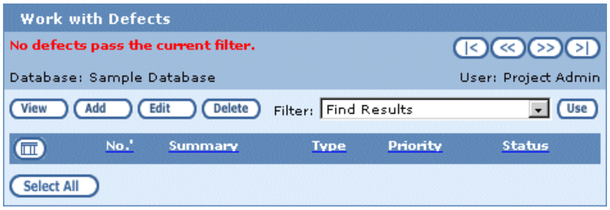
6 If matching defects are found, the search results are displayed on the Work with Defects page. Notice the **Find Results** filter is applied.



Note: If your browser does not support JavaScript, click **Use** to refresh the screen and view found defects.

---

7 If matching defects are not found you return to the Work with Defects page, which is empty. Notice the **Find Results** filter is applied.



Note: If your browser does not support JavaScript, click **Use** to refresh the screen and view found defects.

Viewing defects

1 Click the **Defects** tab.

2 Select a defect and click **View.**

The View Defect dialog opens. All fields are read-only.

3 Click the **Workflow** tab.

This tab includes an overview of where the defect is in the workflow, what defect actions were assigned, who the actions were assigned to, and any comments or additional information a user entered.

4 Click the **History** tab.

Each time a defect action is assigned, TestTrack Pro adds this information to the defect's history. The History tab includes who created the defect, when the defect was created, the creation method, who last modified the defect, and the date of the last modification.

5 Click **Done** to close the View Defect dialog.

Editing defects

1 Click the **Defects** tab.

2 Select the defect and click **Edit**.

The Edit Defect dialog opens.

Tip: If another user is editing the defect, the View Defect dialog opens. The message **"IN USE BY (Username)"** appears in the title bar.

3 Make any changes and click **Save**.

Opening attached files

You can open the attachment with the application used to create it. If a customer sends a Microsoft Word document, TestTrack Pro opens the file in Word.

1 Click the **Defects** tab.

The Work with Defects page opens.

2 Select the defect with the attachment you want to open and click **Edit**.

3 In the Attachments area, select the file from the **Attachments** menu and click **Open**.

The File Download dialog box opens. You are prompted to either open the file or save it to your computer.

4 Click **Open**.

The file is opened.

Downloading attached files

You can download and save the attached file. For example, if a a corrupted data file is attached to a defect, you can download the file to a specific folder.

1 Click the **Defects** tab.

2 Select the defect with the attached file you want to download and click **Edit**.

3 In the Attachments area, select the attached file from the **Attachments** menu.

4 Click **Download**.

The File Download dialog box opens. You are prompted to either open the file or save it to your computer.

5 Click **Save**.

The Save As dialog box opens.

6 Select a directory and enter a file name.

7 Click **Save**.

The file is downloaded to the folder you selected.

Duplicating defects

Note: Depending on your security level, you may not have access to this command.

If you are adding defects with the same basic information, you can save time by duplicating and modifying a defect.

1 Click the **Defects** tab.

2 Select the defect and click **Duplicate**.

The defect is duplicated and assigned the next available defect number.

3 Edit the defect and save your changes.

Merging defects

Note: Depending on your security level, you may not have access to this command.

Merging defects helps avoid confusion and keep your database organized. For example, two defects report the same issue. JoeDeveloper is assigned one defect and JaneDeveloper is assigned the other one. The developers are working on the same issue and do not realize it.

1 Click the **Defects** tab.

2 Select the defects and click **Merge Defects**.

A warning message opens, letting you know the defects will be merged and deleted from the database.

3 Click **Merge**.

The merged defect assumes the lowest defect number and the type, priority, and severity of that defect. All defect information is retained as **multiple defect records**. If you merge three defects, the Detail tab shows three defect records. Each defect record includes the original defect information.

Editing additional defect reports

1 Click the **Defects** tab.

2 Select the defect and click **Edit**.

The Edit Defect dialog opens.

3 On the Detail tab, select the report you want to edit from the **Reported (x) time(s)** menu.

4 Make any changes and click **Save**.

Deferring defect numbering

Note: Depending on your security level, you may not have access to this command.

During product testing, bug reports are rapidly submitted from a variety of sources. Many are new bugs or feature requests that you need to track; some are not unique or do not need to be tracked. You can store new defects in the database and number them after confirming they are unique defects. This feature is **deferred defect numbering**. You can perform the same action on an unnumbered defect that you perform on a numbered defect.

When deferred defect numbering is active, new defects appear in the defect list with a dash in the column instead of a defect number. These are **unnumbered defects**. The TestTrack Pro administrator, or another user with a high level of security access, should periodically review unnumbered defects and assign defect numbers, merge them with existing defects, or delete them.

1. Click the **Configure** tab.
2. Click **Database Options**.

   The Edit Database Options dialog opens.
3. Click the **Defects** tab and select the deferred numbering options.
4. Click **Save** to save the options.

Assigning defect numbers

Note: Depending on your security level, you may not have access to this command.

1. Click the **Defects** tab.
2. Select the unnumbered defects and click **Assign Numbers**.

   The next available number is assigned.

Renumbering defects

Note: Depending on your security level, you may not have access to this command.

Over the duration of your project, you may delete or merge defects that leave gaps in the defect numbers sequence. Or, at the start of a new development cycle, you may want to purge all closed defects from the project and use it as a fresh starting point for testing. In both cases, you will want to renumber defects.

1. Click the **Defects** tab.
2. Select the defects and click **Renumber**.

   The Renumber Defects dialog opens with the starting number set to the next available defect number.

3 Enter an unused defect number and click **Renumber**.

The Renumber Defects dialog closes and the defect is renumbered.

- If the renumbered defect uses a number that is higher than the next available defect number, the next available defect number is set to one higher than the renumbered defect. For example, if the next defect added to the database would be numbered 1011 and you renumber a defect to 1200, the next defect added will be 1201.
- If you renumber the entire defect list, you still need to set the next available defect number to one greater than the highest defect number.

Changing bulk fields

Note: The following security options must be enabled to access this command: Edit Defect, Edit Database Options, and Import from XML.

You can quickly, and easily, update multiple records in the TestTrack Pro database. Use this command to replace values for specific fields, search for and replace strings in text fields, or add text.

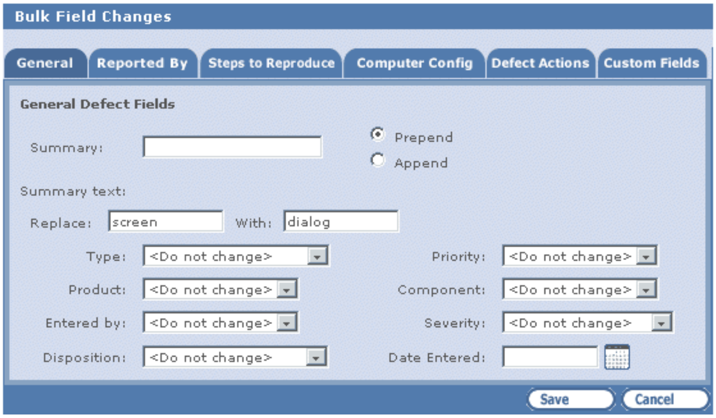
You can replace values for the following field types: General, Reported By, Steps to Reproduce, Computer Config, Defect Actions, and Custom Fields. For example, you can change the disposition for 100 records to *on hold*. Or you can change the *Found by User* for specific records.

Replacing general field values

1 Click the **Defects** tab.

2 Select the defect(s) and click **Bulk Field Changes**.

The Bulk Field Changes dialog opens with the **General** tab selected.



3 Make any changes.

- To add text, enter the text in the **Summary** field and select **Prepend** or **Append**.
- To replace text, enter the string you want to search for in the **Replace** field and the replacement string in the **With** field.
- To change values, select the value from the corresponding list.

4 Click **Save**.

You are prompted to confirm the changes.

5 Click **OK**.

The records are updated.

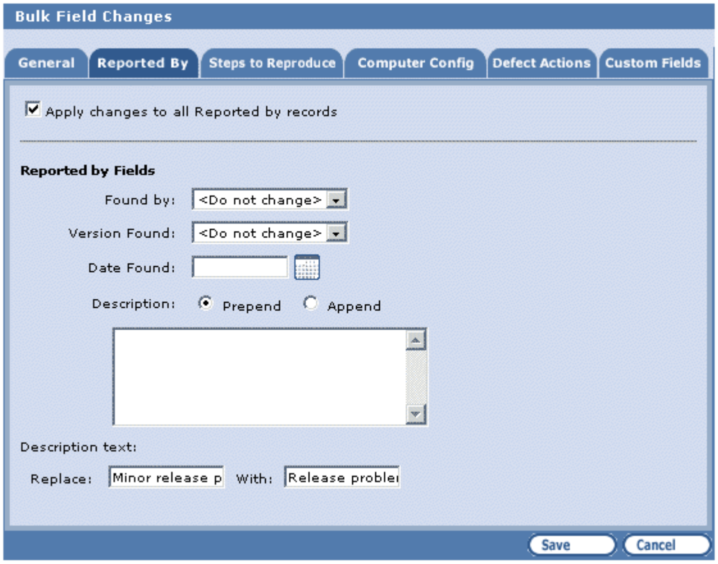
Replacing reported by field values

1 Click the **Defects** tab.

2 Select the defect(s) and click **Bulk Field Changes**.

The Bulk Field Changes dialog opens.

3 Click the **Reported By** tab.



4 Make any changes.

- To change all reported by records, select **Apply changes to all Reported by records**. For example, you want to change the Found by user for 50 defects. Some of the defects were reported multiple times. Select this option to change the found by user for each reported by record. If you do not select this option, only the first reported by record is changed.
- To change values, select the value from the corresponding list.
- To add text, enter the text in the **Description** field and select **Prepend** or **Append**.
- To replace **Description** text, enter the string you want to search for in the **Replace** field and the replacement string in the **With** field.

5 Click **Save**.

You are prompted to confirm the changes.

6 Click **OK**.

The records are updated.

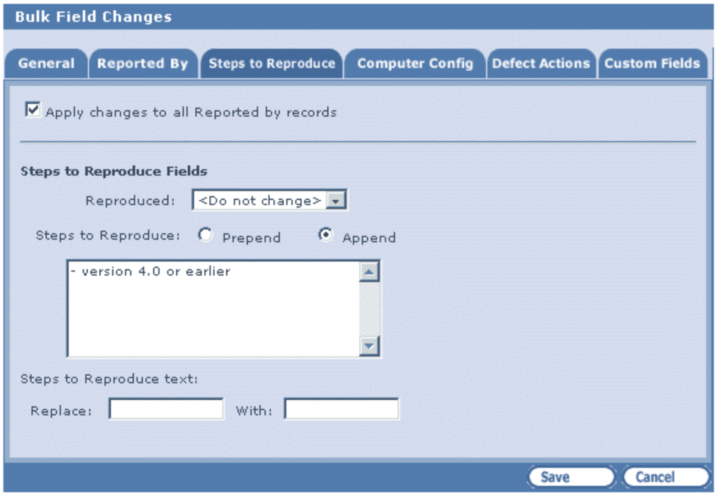
Replacing steps to reproduce field values

1 Click the **Defects** tab.

2 Select the defect(s) and click **Bulk Field Changes**.

The Bulk Field Changes dialog opens.

3 Click the **Steps to Reproduce** tab.



4 Make any changes.

- If defects are reported multiple times and you want to change all reported by records, select **Apply changes to all Reported by records**. To change the first reported by record only, do not select this option.
- To change values, select the value from the corresponding list.
- To add text, enter the text in the **Steps to Reproduce** field and select **Prepend** or **Append**.
- To replace **Steps to Reproduce** text, enter the string you want to search for in the **Replace** field and the replacement string in the **With** field.

5 Click **Save**.

You are prompted to confirm the changes.

6 Click **OK**.

The records are updated.

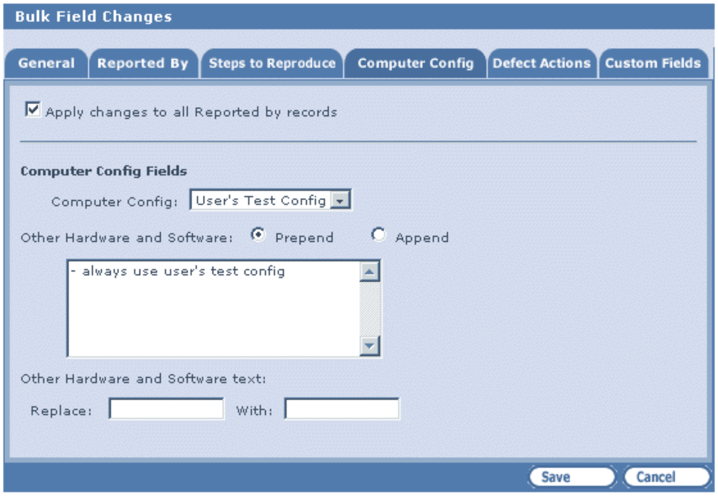
Replacing computer config field values

1 Click the **Defects** tab.

2 Select the defect(s) and click **Bulk Field Changes**.

The Bulk Field Changes dialog opens.

3 Click the **Computer Config** tab.



4 Make any changes.

- To change all reported by records, select **Apply changes to all Reported by records**. To change the first reported by record only, do not select this option.
- To change values, select the value from the corresponding list.
- To add text, enter the text in the **Other Hardware and Software** field and select **Prepend** or **Append**.
- To replace **Other Hardware and Software** text, enter the string you want to search for in the **Replace** field and the replacement string in the **With** field.

5 Click **Save**.

You are prompted to confirm the changes.

6 Click **OK**.

The records are updated.

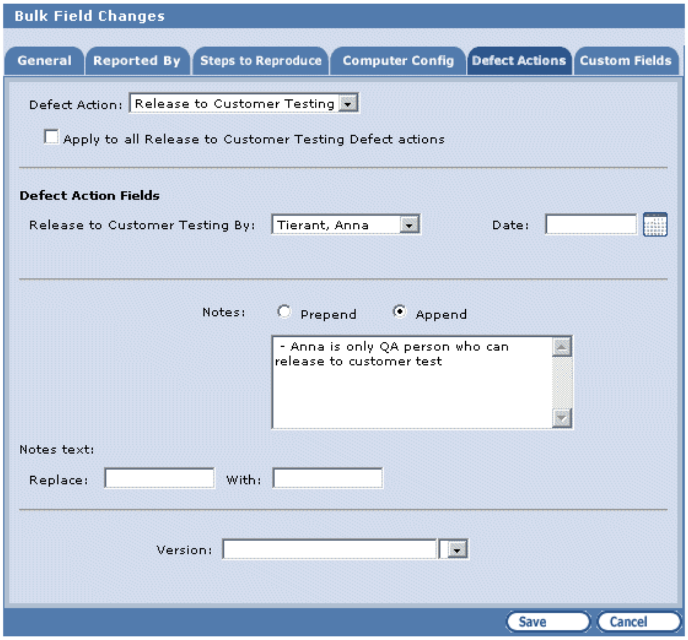
Replacing defect actions field values

1 Click the **Defects** tab.

2 Select the defects and click **Bulk Field Changes**.

The Bulk Field Changes dialog opens.

3 Click the **Defect Actions** tab.



4 Select a **Defect Action**.

The fields on this tab change based on the defect action you select.

5 Make any changes.

- To change all defect actions select **Apply to all actions**. To change the newest defect action only, do not select this option. For example, you need to change by Assign By user for 100 defects. Most of these defects have been manually assigned multiple times. Select this option to change every assign by record for all defects. If you do not select this option, only the newest assign by record is changed.
- To change values, select the value from the corresponding list.
- To add text, enter the text in the **Notes** field and select **Prepend** or **Append**.
- To replace **Notes** text, enter the string you want to search for in the **Replace** field and the replacement string in the **With** field.

6 Click **Save**.

You are prompted to confirm the changes.

7 Click **OK**.

The records are updated.

Replacing custom field values

1 Click the **Defects** tab.

2 Select the defects and click **Bulk Field Changes**.

The Bulk Field Changes dialog opens.

3 Click the **Custom Fields** tab.

4 Select a **Custom Field**.

The fields on this tab change based on the custom field you select.

5 Make any changes.

6 Click **Save**.

You are prompted to confirm the changes.

7 Click **OK**.

The records are updated.

Deleting additional defect reports

Note: Make sure you want to delete the report. You are not prompted to confirm the deletion and this action cannot be undone!

1 Click the **Defects** tab.

2 Select the defect that contains the record you want to delete and click **Edit**.

3 On the Detail tab, select the report you want to delete from the **Reported (x) time(s)** menu.

4 Click **Delete** located next to the **Show** button.

The additional defect report is deleted.

Deleting attached files

Note: Make sure you want to remove the file - this action cannot be undone!

1 Click the **Defects** tab.

2 Select the defect with the attached file you want to remove and click **Edit**.

In the Attachments area, select the attached file from the Attachments list and click **Remove**.

3 The attached file is deleted.

Deleting defects

1 Click the **Defects** tab.

2 Select the defect you want to delete and click **Delete**.

You are prompted to confirm the deletion.

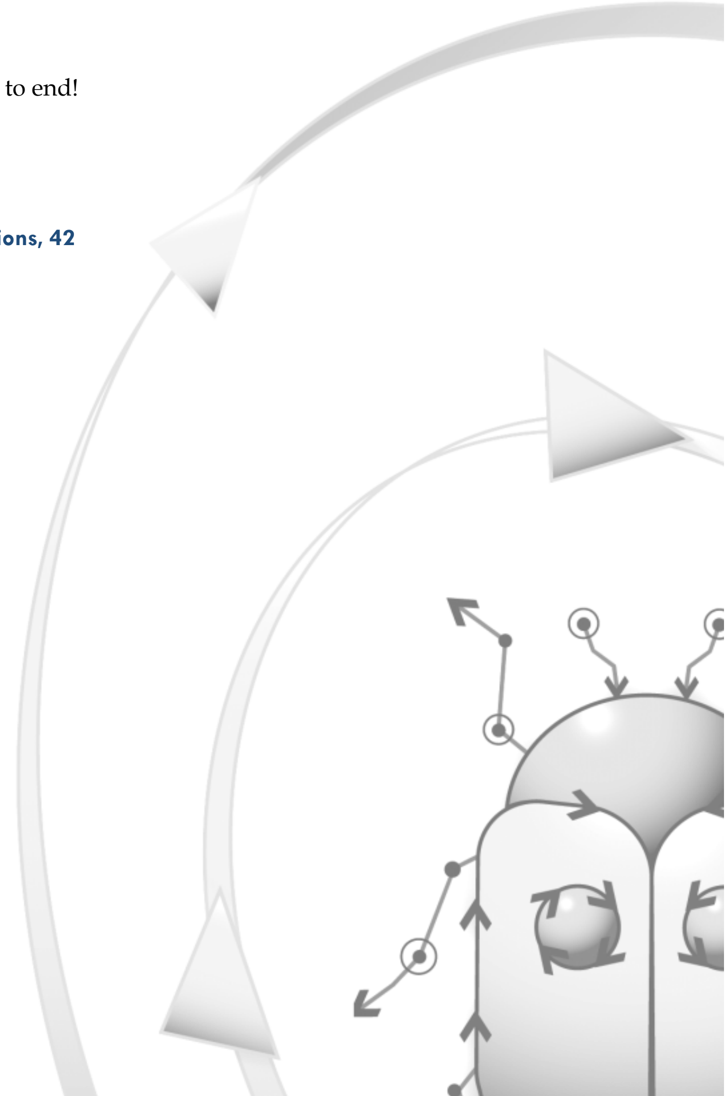
3 Click **Delete**.

The defect is deleted.

Chapter 5
Managing the Workflow

Jump into the workflow...

...and track your defects from beginning to end!



About the workflow

The workflow consists of states, events, and transitions that define the path a defect takes from initial reporting to resolution. To move a defect from state to state, the defect is assigned to users who perform the action assigned to them. The status field, on the Edit Defect dialog box, corresponds to the defect state. The status field changes based on the defect action. For example, the status field changes to Fixed when a defect moves to the Fixed state.

TestTrack Pro's workflow can be used "out of the box" to track defects and other issues such as change requests. It can also be customized to follow your company's business processes. Workflows can include custom events and actions that support your company's business processes.

Note: The TestTrack Pro administrator is generally responsible for configuring the workflow. See **Chapter 11, "Customizing the Workflow,"** page 97 for information.

About the default workflow

The information in this section is specific to the default workflow. The default workflow, which can be used out of the box, includes the following events:

- Assign
- Estimate
- Fix
- Verify
- Force Close
- Reopen
- Release Notes
- Comments

The steps you follow, and the defect actions you use, can differ depending on your company's workflow.

Understanding defect assignments and actions

Accountability, such as who is responsible for estimating, fixing, or verifying a fix, is an important component of defect tracking. Defects, and defect actions, are assigned to users to ensure someone is accountable and to move the defect through the workflow states. Depending on your security level and the database configuration, you may not have access to all, or some, of the defect actions.

Each company uses defect assignments and actions differently. One company might let all users assign defects. Another company might only want team leads to be responsible for assigning defects while the users are responsible for such things as estimating a fix, fixing a defect, or verifying the fix.

Following is an example of one company’s use of defect actions:

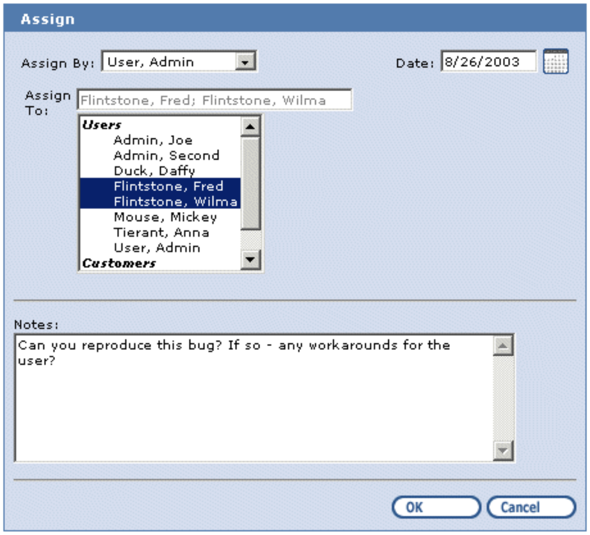
The Lead Engineer is notified when a defect is added to the database. After reviewing the defect, she assigns the defect to Joe Estimator. Joe Estimator is notified of the defect assignment in two ways: the assigned defect indicator appears next to the defect on the Work with Defects page and he receives an email notification about. Joe Estimator opens the defect and clicks the Workflow tab. He can view who assigned the defect and what action he needs to perform. He enters the estimate information and moves on to his next task.
The Lead Engineer is notified when the defect changes. She reviews Joe Estimator’s work and assigns the fix to Jane User. The next time Jane User logs in, she is notified of the defect assignment.

Jane User opens the defect and clicks the Workflow tab. She can view the defect assignment information and also view Joe Estimator’s notes – this helps her begin working on the fix. When Jane User finishes entering the Fix Defect information, the Lead Engineer is notified that the defect changed. The Lead Engineer reviews Jane User’s fix and assigns the next defect action. This process continues until the defect is fixed, tested, verified, and closed.

Assigning defects

1 Select the defect on the Work with Defects page. Click **Assign**.

The Assign dialog opens.



2 Check the **Assign by** field.

This field defaults to the current user.

3 Select an **Assign to** user.

To select multiple users **Ctrl + click** each user.

4 The **Date** defaults to the current date.

You can enter another date or click the calendar to select a date.

5 Enter any **Notes** about the defect you are assigning or any additional information.

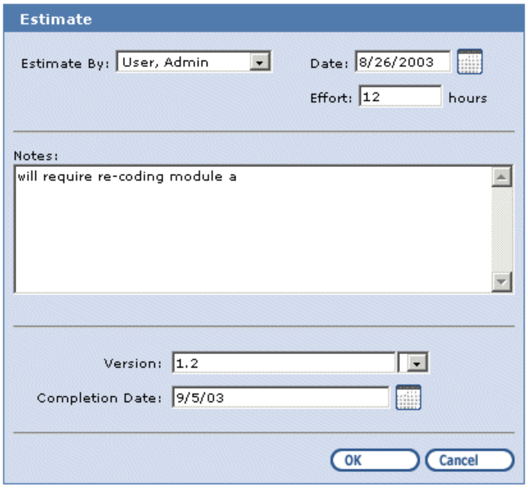
6 Click **OK**.

If you accessed this defect action from the Edit Defect dialog, you **must** click **Save** on the Edit Defect dialog to save the changes.

Estimating fix time

1 Select the defect on the Work with Defects page. Click **Estimate**.

The Estimate dialog opens.



2 Select an **Estimate by** user.

This field defaults to the current user.

3 The **Date** defaults to the current date.

You can enter another date or click the calendar to select a date.

4 Enter the estimate **Effort**.

5 Enter any **Notes** about the estimate.

6 Select a **Version** number.

You may also be able to enter a version number.

7 Enter a **Completion Date**.

You can also click the calendar to select a date.

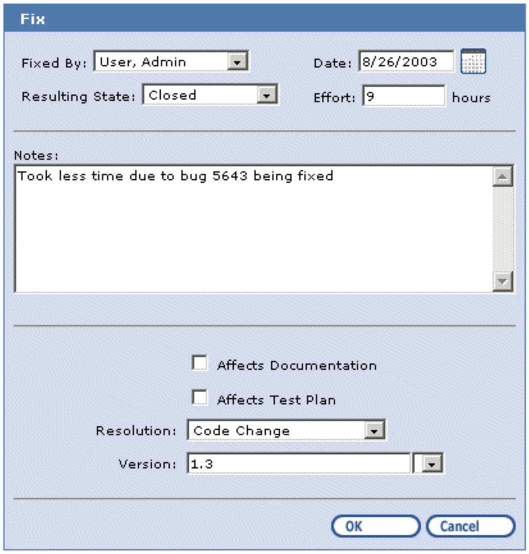
8 Click **OK**.

If you accessed this defect action from the Edit Defect dialog, you **must** click **Save** on the Edit Defect dialog to save the changes.

Fixing defects

1 Select the defect on the Work with Defects page. Click **Fix**.

The Fix dialog opens.



2 Select a **Fixed By** user.

This field defaults to the current user.

3 The **Date** defaults to the current date.

You can enter another date or click the calendar to select a date.

4 Optionally select a **Resulting State**.

Note: You can only select a state if the workflow allows multiple resulting states.

5 Enter the fix **Effort**.

6 Enter any **Notes** about the fix.

7 Select the **Affects Documentation** check box or the **Affects Test Plan** check box if either applies.

8 Select a fix **Resolution**.

9 Select the **Version** number.

You may also be able to enter a version number.

10 Click **OK**.

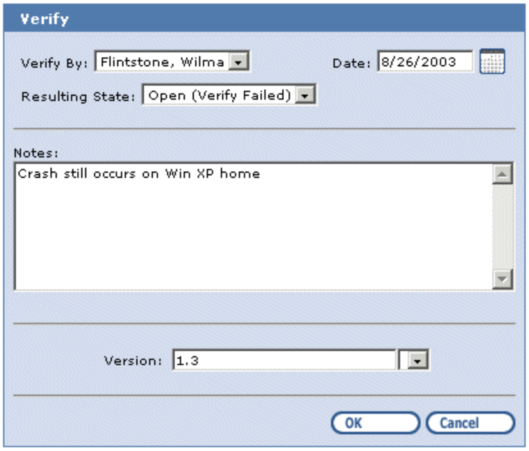
If you accessed this defect action from the Edit Defect dialog, you **must** click **Save** on the Edit Defect dialog to save the changes.

Verifying a fix

Note: A defect must be fixed before it can be verified.

1 Select the defect on the Work with Defects page. Click **Verify**.

The Verify dialog opens.



2 Select a **Verify By** user.

This field defaults to the logged in user.

3 The **Date** defaults to the current date.

You can enter another date or click the calendar to select a date.

4 Optionally select a **Resulting State**.

Note: You can only select a state if the workflow allows multiple resulting states.

5 Enter any **Notes** about the verification.

If a fix fails, record why the fix failed. It can help with future planning.

6 Select the **Version** number.

You may also be able to enter a version number.

7 Click **OK**.

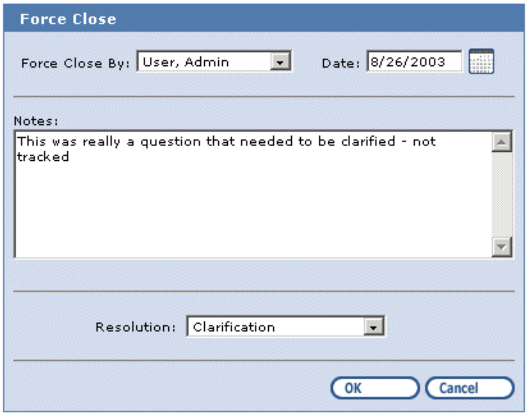
If you accessed this defect action from the Edit Defect dialog, you **must** click **Save** on the Edit Defect dialog to save the changes.

Closing defects

The resolution of some defects does not follow the standard fix/verify model. For example, a defect might not actually be a bug. In this situation, you can close the defect immediately.

1 Select the defect on the Work with Defects page. Click **Force Close**.

The Force Close dialog opens.



2 Select a **Force Close By** user.

This field defaults to the logged in user.

3 The **Date** defaults to the current date.

You can enter another date or click the calendar to select a date.

4 Enter any **Notes** about why the defect was closed.

5 Select a **Resolution**.

6 Click **OK**.

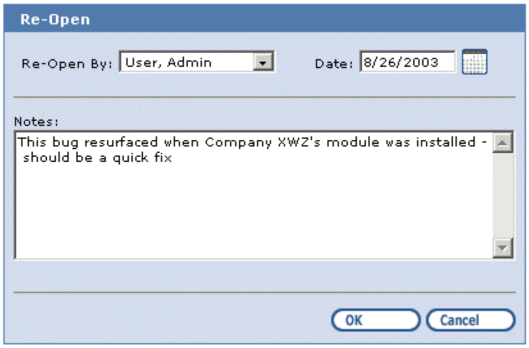
If you accessed this defect action from the Edit Defect dialog, you **must** click **Save** on the Edit Defect dialog to save the changes.

Re-opening defects

Occasionally, a closed or verified defect resurfaces. To return the defect to the Open state and restart its lifecycle, you need to **re-open** the defect.

1 Select the defect on the Work with Defects page. Click **Re-open**.

The Re-open Defect dialog opens.



2 Select a **Re-Open By** user.

This field defaults to the logged in user.

3 The **Date** defaults to the current date.

You can enter another date or click the calendar to select a date.

4 Enter any **Notes** about why the defect was re-opened.

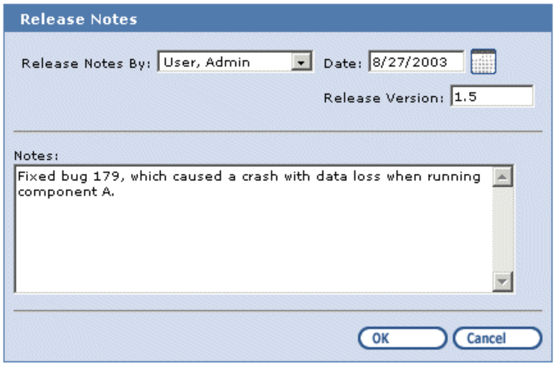
5 Click **OK**.

If you accessed this defect action from the Edit Defect dialog, you **must** click **Save** on the Edit Defect dialog to save the changes.

Adding release notes

1 Select the defect on the Work with Defects page. Click **Release Notes**.

The Release Notes dialog opens.



2 Select a **Release Notes By** user.

This field defaults to the logged in user.

3 The **Date** defaults to the current date.

You can enter another date or click the calendar to select a date.

4 Enter the **Release Version**.

5 Enter the release notes.

The notes are recorded with the defect history.

6 Click **OK**.

If you accessed this defect action from the Edit Defect dialog, you **must** click **Save** on the Edit Defect dialog to save the changes.

Generating release notes is a two-step process. After you add release notes to a defect, you need to generate the release notes file. You can generate a file containing all the release notes for a specific version, date, etc. You can insert this file in your Read-me file or use it to create a separate Release Notes guide. For more information, see **Creating release notes**, page 50.

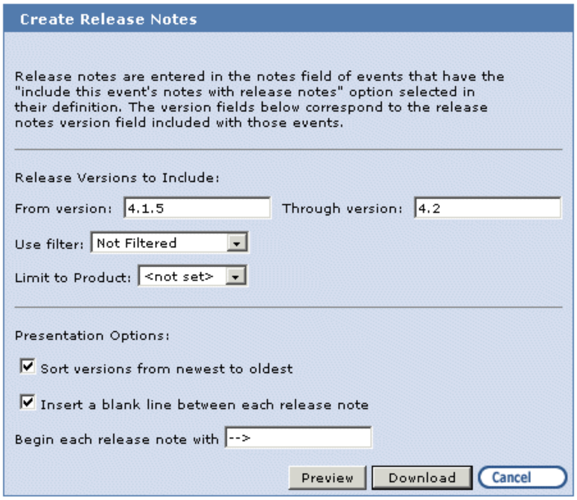
Creating release notes

You can create release notes for any defect. You may want to include the text file in a Read Me file or include the notes with your installer to inform users of new features and bug fixes. Before you can generate release notes, make sure the notes were added to the defect.

Note: To generate release notes for just a **few defects,** select the defects on the Work with Defects page. If you do not know which defects contain release notes, add a column to the Work with Defects page to display the **Has Release Notes?** field.

1 Click **Create Rel. Notes** on the Work with Defects page.

The Create Release Notes dialog opens.



2 Enter the **From version** and the **Through version** you want to include in the release notes.

If the release notes are specific to one version, enter the same version number in both fields.

3 Select a filter from the **Use Filter** list to generate release notes for defects that meet the filter criteria.

4 Select a product from the **Limit to Product** list to generate release notes for a specific product.

5 Enter a character in the **Begin each release note with** field if you want each release note to start with the specific character (e.g., a bullet). You can also enter ASCII characters or leave the field empty.

6 Click **Preview**.

The Release Notes preview dialog opens. If you need to make changes, you can edit the release notes in the preview window.

7 Click **Download** to save the release notes.

The Save Release Notes As dialog box opens.

8 Select the directory where you want to save the release notes and enter a file name. Click **Save**.

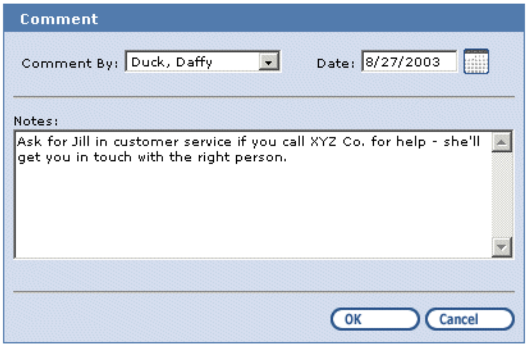
TestTrack Pro generates the release notes and saves the text file in the specified directory.

Adding comments

You can add comments to a defect to point something out to other users, clarify an issue, or just as a reminder. Other users can view your comments on the Workflow tab.

1 Select the defect on the Work with Defects page. Click **Comment**.

The Comment dialog opens.



2 Select a **Comment By** user.

This field defaults to the current user.

3 The **Date** defaults to the current date.

You can enter another date or click the calendar to select a date.

4 Enter the comments.

The comments are recorded with the defect history.

5 Click **OK**.

If you accessed this defect action from the Edit Defect dialog, you **must** click **Save** on the Edit Defect dialog to save the changes.

Note: To view defect comments, select the defect, click **View** or **Edit**, and then click the **Workflow** tab. All comments are included on the Workflow tab.

Viewing defect actions

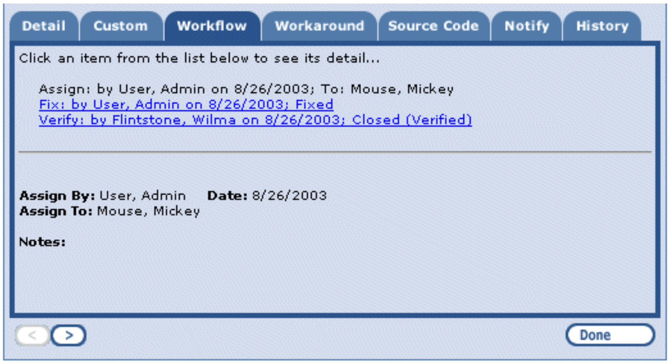
1 Select the defect on the Work with Defects page. Click **View**.

The View Defect dialog opens.

2 Click the **Workflow** tab.

All the defect actions are listed on the Workflow tab.

3 Click the defect action you want to view. Read-only defect action information opens.



4 Click **Done** to close the View Defect dialog.

Editing defect actions

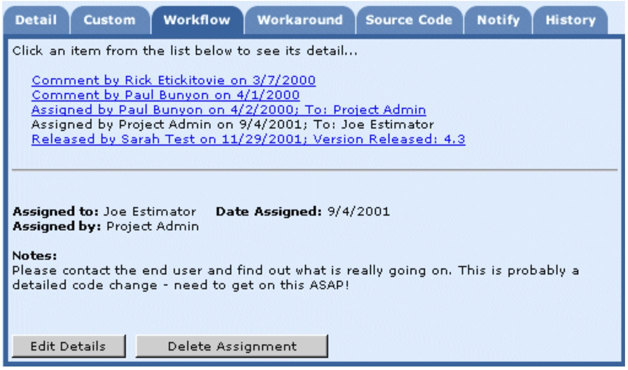
You can edit defect actions to add more information or correct mistakes. For example, a defect resolution affects documentation, but you forgot to select the Affects Documentation check box. You can edit the action to select the check box.

1 Select the defect on the Work with Defects page. Click **Edit**.

The Edit Defect dialog opens.

2 Click the **Workflow** tab.

All the defect actions are listed on the Workflow tab.



3 Click the defect action then click **Edit Details**.

4 Make any changes and click **OK**.

5 Click **Save**.

All changes are saved and you return to the Work with Defects page.

Deleting defect actions

1 Select the defect on the Work with Defects page. Click **Edit**.

The Edit Defect dialog opens.

2 Click the **Workflow** tab.

All the defect actions are listed on the Workflow tab.

3 Click the defect action then click **Delete <defect action>**.

The button changes based on what you are deleting. For example, if you are deleting a close action, the button is labeled **Delete Close**. Likewise, it is labeled **Delete Assignment** if you are deleting an assignment action.

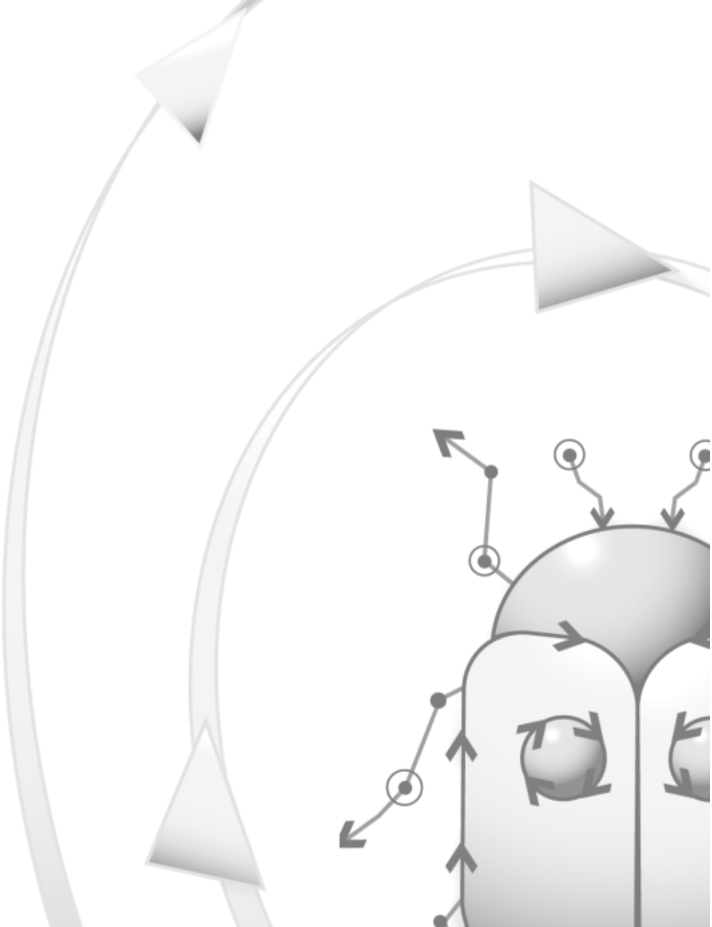
Note: Make sure you want to delete the defect action. You are not prompted to confirm the deletion and it cannot be undone.

4 The defect action is deleted.

Chapter 6
Using Filters

Filter Out the Noise!

TestTrack Pro includes extensive filtering capabilities. You can use filters to sort defect records and list only those defects that meet the criteria you select. You can create a simple filter, for example a filter that only shows fixed defects.



Creating filters

If your database has a large number of defects, or you only need to work with certain types of defects, you should create a filter and use it to keep your defects list manageable.

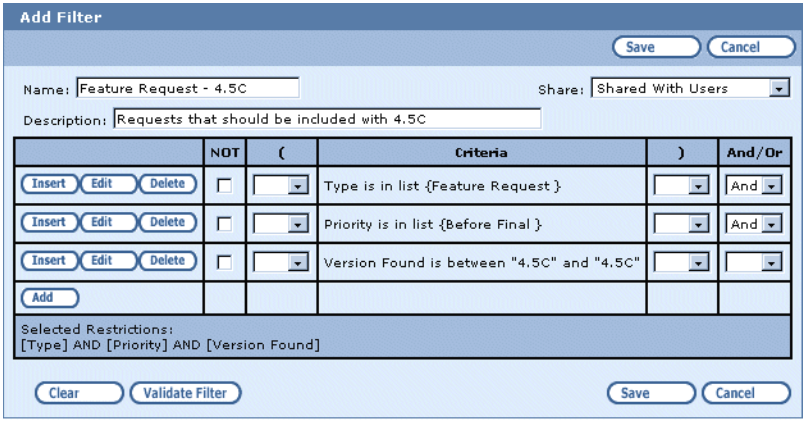
Create custom filters so you can quickly view lists of bugs. For example, you could set up filters for projects, filters to track your bugs in order of priority, to track bugs that have to be fixed for an upcoming release, etc.

1. Click the **Filters** tab.

   The Work with Defect Filters page opens

2. Click **Add**.

   The Add Filter dialog opens.



3. Enter a **Name** and **Description**.

4. Select a **Share** option.

   The default is private. If you share the filter, other users can edit the filter.

5. Click **Add** to add filter restrictions.

   See **Adding restrictions,** page 57 for more information.

6. Select NOT/AND/OR operators and parentheses to build the Boolean logic for the filter (optional step).

   See **About Boolean logic,** page 59 for more information.

7 Click **Validate Filter** to validate the filter criteria.

8 Click **Validate**.

- If the filter criteria is valid, click **OK**.
- If the filter criteria is not valid, an error message opens. Click **OK** to return to the Defect Filter dialog box and correct the error.
- Click **Clear** to clear all restrictions and start over.

9 Click **Clear** to clear all restrictions and start over.

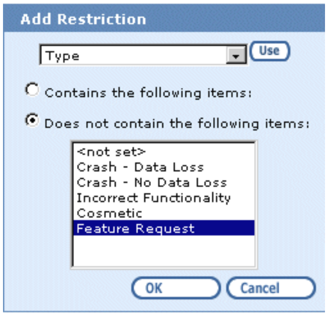
10 When you finish building the filter, click **Save**.

The filter is added to the database.

Adding restrictions

1 Click **Add** on the Add Filter or Edit Filter dialog.

The Add Restriction dialog opens.



2 Select the field you want to add to the restriction.

When you select a field, the restrictions options for that field open.

Note: If your browser does not support JavaScript, click **Use** to refresh the screen.

3 Select any options and enter the restrictions for the field. The restrictions you can set changed based on the selected restriction.

- When selecting restrictions options, **<Unknown>** represents an empty field. For example, if you select **<Unknown>** with Restrict by set to Assigned To, it is interpreted as “Show all defects not assigned to anyone.”

- If you are creating or editing restrictions with fields that include a text value, you can leave the text value empty. When the filter is applied, TestTrack Pro searches for the Restrict by field with an empty text value. This is useful if you are cleaning up your defect records and want to make sure that every defect includes a summary. Select **Restrict by: Summary** and leave the text value empty. When you apply the filter, all defects with an empty Summary field are listed.

4 Click **OK** to add the restriction.

5 Repeat **steps 1-3** to continue adding restrictions.

6 Select any options and enter the restrictions for the field and click **OK**.

The restriction is added and you return to the Advanced Find Defects dialog.

Editing restrictions

1 Select a filter and click **Edit**.

The Edit Defect Filter dialog opens.

2 Click **Edit** to edit the restriction.

The Edit Restriction dialog opens.

3 Make any changes and click **OK**.

4 Click **Save** to save the changes and close the Edit Defect Filter dialog.

Inserting restrictions

If your filter contains a large number of restrictions, you can insert a restriction in a specific position.

1 Select a filter and click **Edit**.

The Edit Defect Filter dialog opens.

2 Click **Insert** to insert a restriction.

The Insert Restriction dialog opens.

3 Select the field you want to include in the restriction.

4 Select any options and enter the restrictions for the field. Click **OK**.

The restriction is inserted.

5 Click **Save** to save the changes and close the Edit Defect Filter dialog.

Deleting restrictions

Note: You are not prompted to confirm the deletion and this action cannot be undone!

1 Click **Delete** on the Advanced Find Defects dialog, in the row corresponding to the restriction you want to delete.

2 You are prompted to confirm the deletion.

3 Click **Delete**.

The restriction is deleted.

About Boolean logic

You can use Boolean logic to create complex and highly precise filters. Boolean logic uses three connecting operators (AND, OR, NOT) to narrow or broaden a search or to exclude a term from a search.

And is a **narrowing** term. When you connect your filter or search criteria with the **and** operator, the filter or search returns records that match **all** of the criteria you chose. For example, if you search for Component A AND Component B, TestTrack Pro only lists defects containing both components.

Or is a **broadening** term. When you connect your filter or search criteria with the **or** operator, the filter or search returns records that match **any** of the criteria you chose. For example, if you search for Component A OR Component B, TestTrack Pro lists defects in which either term appears.

Not is an **excluding** term. When you connect your filter or search criteria with the **not** operator, the filter or search returns records that **do not** contain any of the criteria you chose. For example, if you search for NOT Component A, TestTrack Pro lists all defects except for those containing the term Component A.

Nesting - with Boolean operators

You can combine searches in a variety of ways using the different combinations of Boolean operators. Parentheses are important because they keep the logic straight. In the grouping **(Component A OR Component B) AND (Component C OR Component D)** the parentheses around the first set tells the database to create a final set of records that may include either Component A OR Component B, but only when the records also include either Component C OR Component D.

Using filters

1 On the Work with Defects page, select a filter from the **Filter** menu.

Note: If your browser does not support JavaScript, click **Use** to refresh the screen and update the Filter list.

2 The filter is applied to the defects.

Defects that meet the filter criteria are listed on the Work with Defects page. To return to a list of all defects, select **Not Filtered** from the Filter list.

Viewing filters

1 Click the **Filters** tab.

2 Select the filter and click **View**.

The View Filter dialog opens. All fields are read-only.

3 Click **Close** when you are finished.

Editing filters

1 Click the **Filters** tab.

2 Select the filter and click **Edit**.

3 Make any changes and click **Save**.

Your changes are saved and you return to the Work with Defect Filters page.

Duplicating filters

If you are adding filters with similar restrictions, you can save time by duplicating and modifying a filter.

1 Click the **Filters** tab.

2 Select the filter and click **Duplicate**.

TestTrack Pro duplicates the filter(s).

3 Modify the filter and save your changes.

Deleting filters

1 Click the **Filters** tab.

2 Select the filter and click **Delete**.

You are prompted to confirm the deletion.

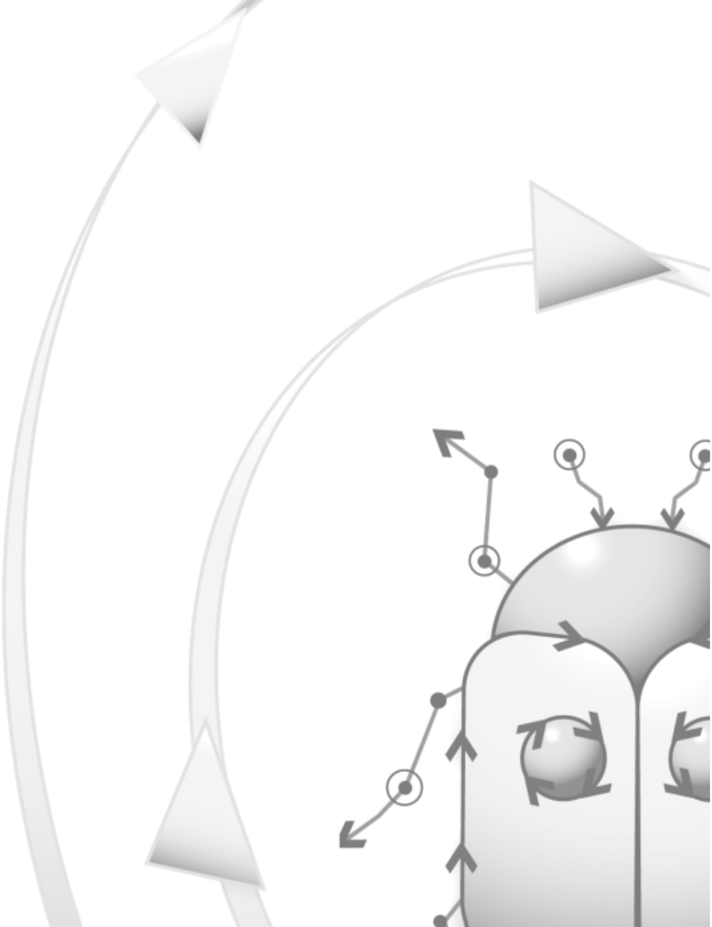
3 Click **Delete**.

The filter is deleted.

Chapter 7
Managing Test Configs

Track the nuts and bolts!

It's important to pay attention to the computers defects are found on. A serious bug may be lurking on a specific test configuration. Is this a hardware problem, related to memory, or a display driver bug? Track test configurations to help identify the patterns.



About test configs

A test configuration simply refers to a specific computer used for testing. You may want to keep track of all your systems to see if bugs are computer-specific. Tracking test configurations helps you identify patterns in defects that may be related to specific hardware configurations or software configurations.

Adding test configs

1 Click the **Test Configs** tab.

The Work with Test Configs page opens.

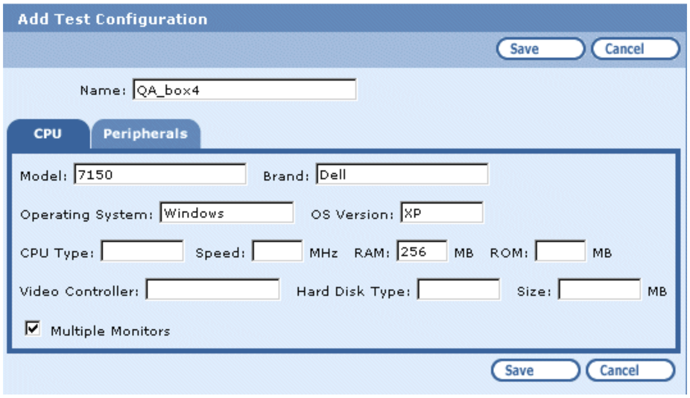
2 Click **Add**.

The Add Test Configuration dialog opens.

3 Enter a **Name** to uniquely identify the test config.

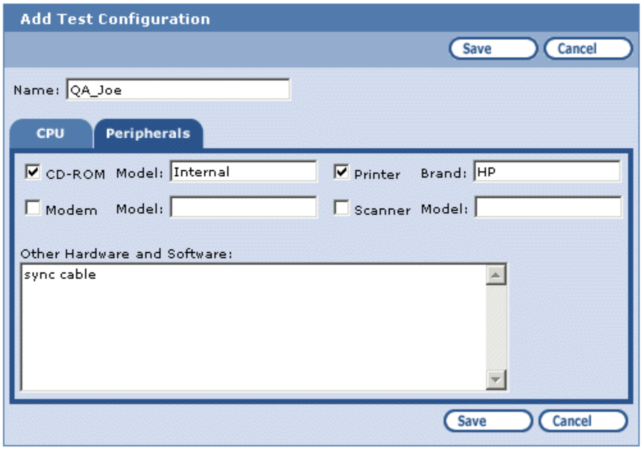
4 Enter the information on the **CPU** tab.

These fields are optional but you should enter as much information as possible.



5 Click the **Peripherals** tab and enter the peripherals information.

These fields are optional but you should enter as much information as possible.



6 Click **Save** when you finish entering the test config information.

The test config is added.

Viewing test configs

1 Click the **Test Configs** tab.

2 Select the test config and click **View**.

The View Test Configuration dialog opens. All fields are read-only.

3 Click **Close** when you are finished.

Editing test configs

1 Click the **Test Configs** tab.

2 Select the test config and click **Edit**.

The Edit Test Configuration opens.

3 Make any changes and click **Save**.

Your changes are saved.

Duplicating test configs

If you are adding similar test configs, you can save time by duplicating and modifying a test config.

1 Click the **Test Configs** tab.

2 Select the test config and click **Duplicate**.

The test config is duplicated. A number, incremented by 1, is added to the end of the name. For example, if you select and duplicate Eng-cube, the duplicated test config is named Eng-cube1.

3 Modify the duplicated test config and save your changes.

Deleting test configs

1 Click the **Test Configs** tab.

2 Select the test config and click **Delete**.

You are prompted to confirm the deletion.

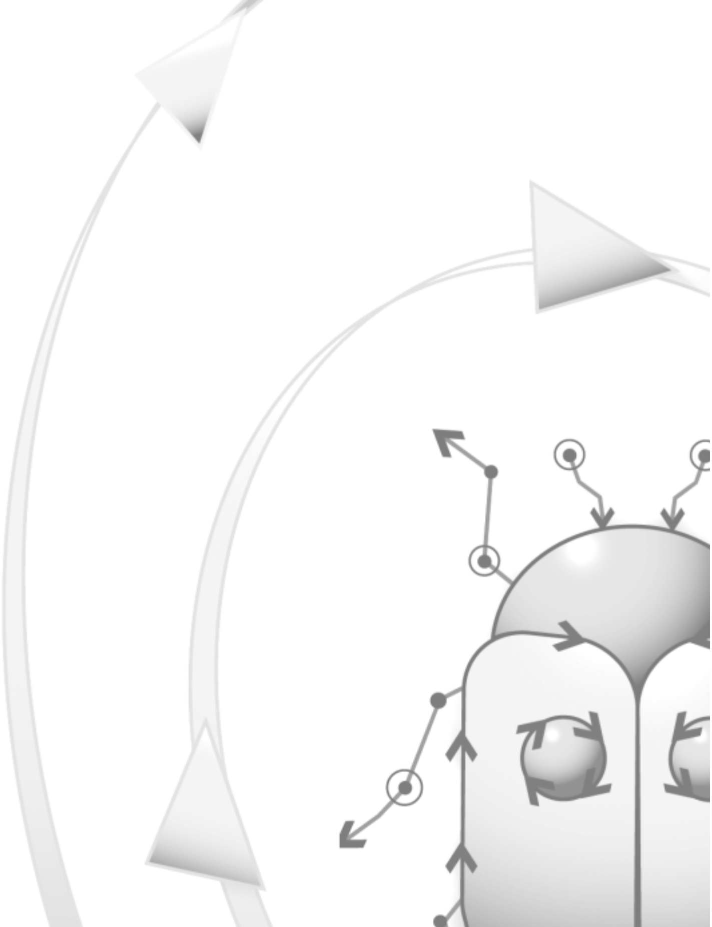
3 Click **Delete**.

The test config is deleted.

Chapter 8
Generating Reports

Analyze and Report!

TestTrack Pro makes reporting simple—point, click, print, and read. You can design and preview each report before printing. You can also share your report with other users or keep it private.



About reports

Reports are used to analyze the data collected in your database. You can use filters to build reports that focus on the data you need. You can also share your reports with others or keep them private. You can create the following four kinds of reports:

- **Detail reports** include detailed information about defects, customers, users, user groups, or test configurations.
- **Distribution reports** include the distribution of defects. You can choose options such as defects found by user, defect status by component, etc. You can add a chart to the report for additional impact. For example, you could build a distribution report that shows the number of fixed defects for each user.
- **List reports** include summary information about defects, customers, users, user groups, or test configurations. You select the fields to include in the report.
- **Trend reports** include defect events over time. For example, how many defects have been fixed this week? You can add a chart to the report for additional impact. Use this report to determine how well you are managing defects.

Using stylesheets

Stylesheets are templates you can use to quickly generate formatted reports. Several Extensible Style Language (XSL) stylesheets are installed with TestTrack Pro to help you easily create reports with predefined layout and design options. The stylesheets are available to all TestTrack Pro users with access to the database.

Customizing stylesheets

You can customize an existing XSL stylesheet or create your own and add it to the TestTrack Pro database. Stylesheets are generally located in the **Program Files/TestTrack Pro/StyleSheets** directory or the **Program Files/ Seapine/ TestTrack Pro/ Stylesheets** directory. Each report type has a corresponding folder in the Stylesheets directory.

- To customize an existing stylesheet, open the corresponding report folder, select the stylesheet, and modify it using a third-party tool, such as Altova's XML Spy.
- To add a new stylesheet, use a third-party tool to create the stylesheet. Copy the completed stylesheet to the corresponding report folder.
- To include an image with a stylesheet, copy the image to the **Images** folder in the TestTrack Pro directory. Include the following script in the stylesheet:

```
<img>
  <xsl:attribute name=”src”>
      <xsl:value-of select=”external:get-server-image(‘imagename.gif’)” />
  </xsl:attribute>
</img>
```

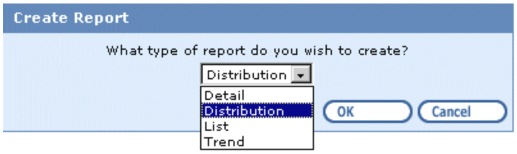
Creating detail reports

1 Click the **Reports** tab.

The Work with Reports page opens.

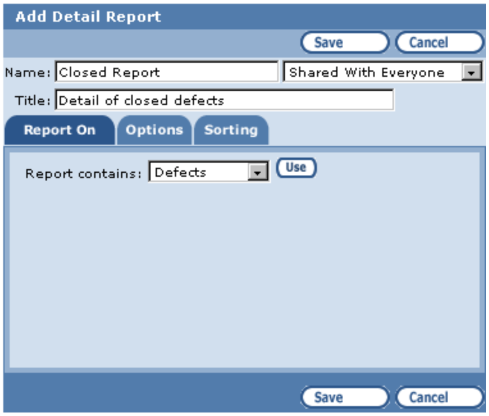
2 Click **Add**.

The Create Report dialog opens.



3 Select **Detail** and click **OK**.

The Add Detail Report dialog opens.



4 Enter a **Name** and **Title**.

5 Select a **Share** option.

If you share the report, other users may be able to edit it.

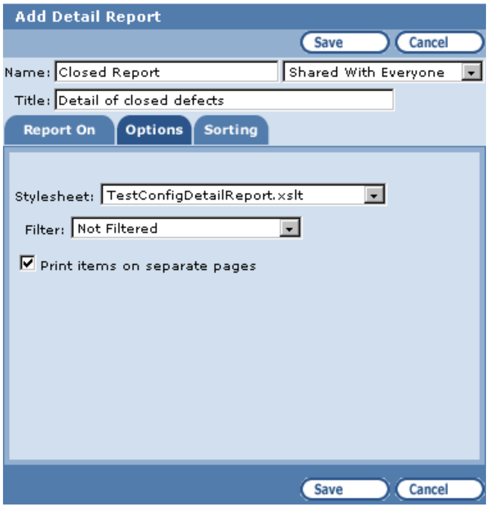
6 Select the **Report On** options.

- Select the record type from the **Report contains** list.
- If you select **Customers**, **Users**, **User Groups**, **Customers**, or **Test Configs** you can build a report on all, or selected, records.

Note: If your browser does not support JavaScript, click **Use** to refresh the screen.

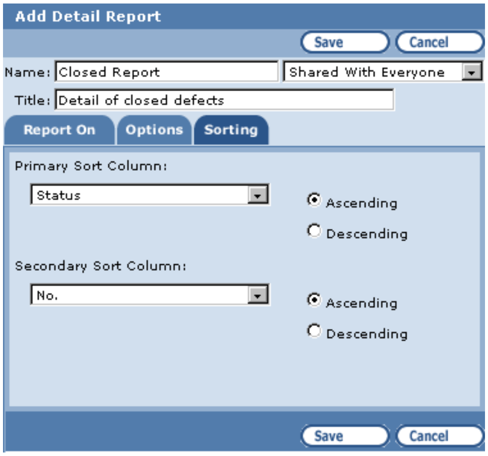
7 Click the **Options** tab.

- Select a **Stylesheet**.
- Select a **Filter** if you are reporting on defects and only want to include filtered defects.
- Select **Print items on separate pages** if you want page breaks between each item in the report. Internet Explorer is the only browser that supports page breaks.



8 Click the **Sorting** tab.

Select a Primary or Secondary sort column and set the column sort order.



9 Click **Save**.

The report is saved.

Creating distribution reports

1 Click the **Reports** tab.

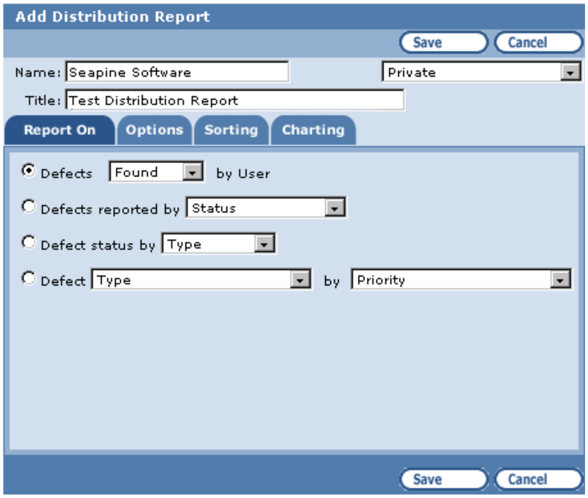
The Work with Reports page opens.

2 Click **Add**.

The Create Report dialog opens.

3 Select **Distribution** and click **OK**.

The Add Distribution Report dialog opens.



4 Enter a **Name** and **Title**.

5 Select a **Share** option.

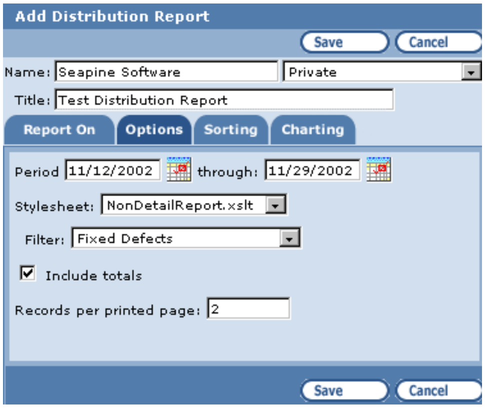
If you share the report, other users may be able to edit it.

6 Select the **Report On** options.

- Select **Defects <field> by User** to build a report that includes action by user. For example, Defects Found by User.
- Select **Defects report by <field>** to build a report that includes the number of defects based on the chosen category. For example, Defects reported by Status.
- Select **Defect status by <field>** to build a report that includes the defect status based on the chosen category. For example, Defects status by Type.
- Select **Defect <field> By <field>** to build a report that includes the defect status using two criteria. For example, Defect Type by Priority.

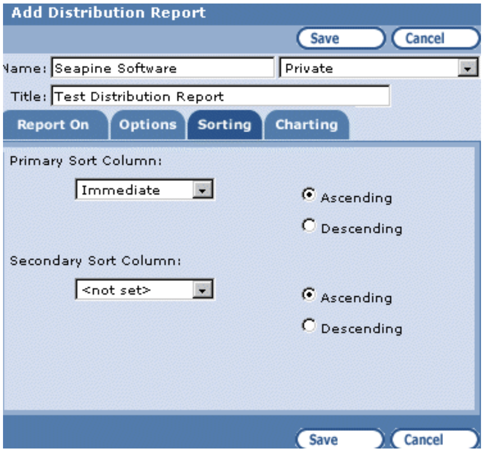
7 Click the **Options** tab.

- Enter the date parameters for your report in the **Period** and **through** fields.
- Select a **Stylesheet**.
- Select a **Filter** if you are reporting on defects and only want to include filtered defects.
- Select **Include totals** to include totals for the selected report items. If you select this option, you can add the totals to a chart using the **Data to Graph** menu on the **Graphing** tab. Totals cannot be graphed with any other report items.



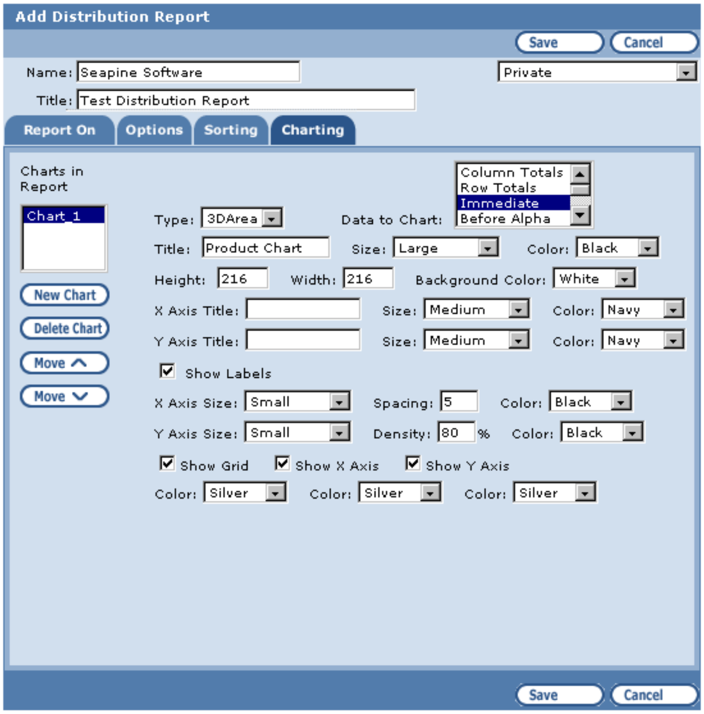
8 Click the **Sorting** tab.

Select a Primary or Secondary sort column and set the column sort order.



9 Click the **Charting** tab.

This tab is used to add and design charts. For more information, see **Charting report data,** page 76.



10 Click **Save**.

The report is saved.

Creating list reports

1 Click the **Reports** tab.

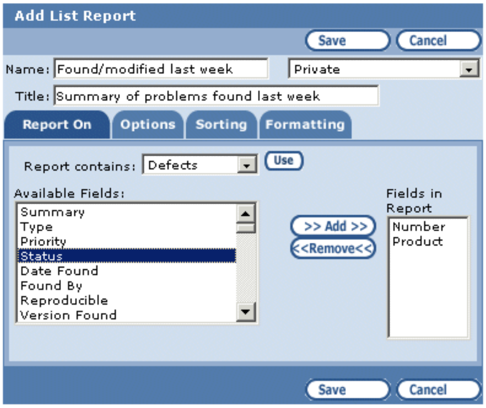
The Work with Reports page opens.

2 Click **Add**.

The Create Report dialog opens.

3 Select **List** and click **OK**.

The Add List Report dialog opens.



4 Enter a **Name** and **Title**.

5 Select a **Share** option.

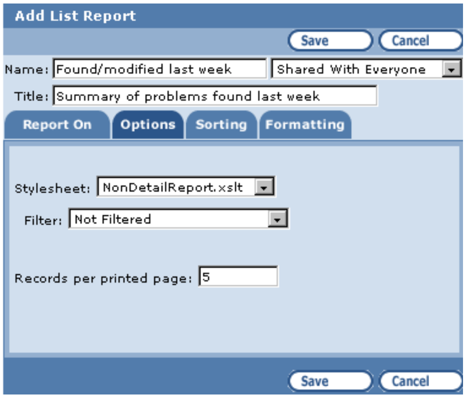
If you share the report, other users may be able to edit it.

6 Select the **Report On** options.

- Select the record type from the **Report contains** menu.
- Select the fields you want to add to the report.

7 Click the **Options** tab.

- Select a **Stylesheet**.
- Select a **Filter** if you are reporting on defects and only want to include filtered defects.
- Enter the number of **Records per printed page**.

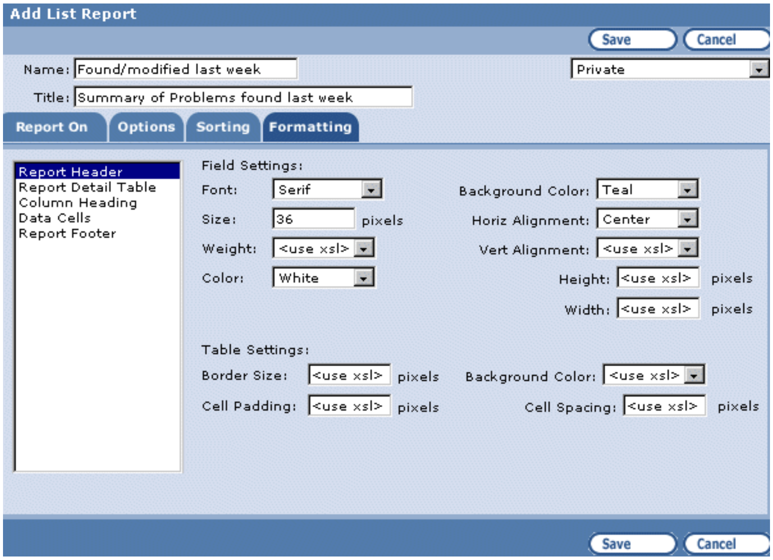


8 Click the **Sorting** tab.

Select a Primary or Secondary sort column and set the column sort order.

9 Click the **Formatting** tab.

You can override the stylesheet settings for a list report. For example, you can change the header font style, size, color, or alignment. Select **Report Header** and use the field settings to make any adjustments.



10 Click **Save**.

The report is saved.

Creating trend reports

1 Click the **Reports** tab.

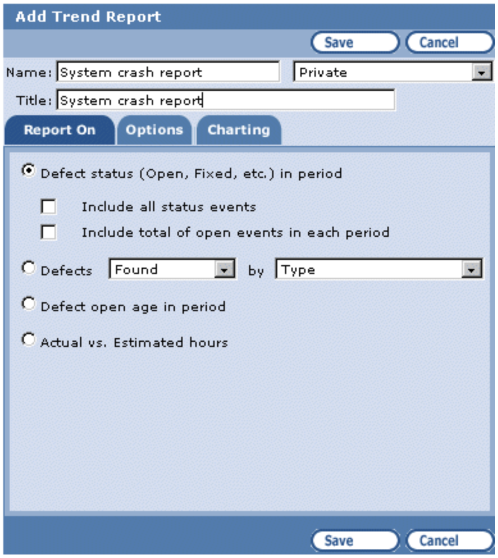
The Work with Reports page opens.

2 Click **Add**.

The Create Report dialog opens.

3 Select **Trend** and click **OK**.

The Add Trend Report dialog opens.



4 Enter a **Name** and **Title**.

5 Select a **Share** option.

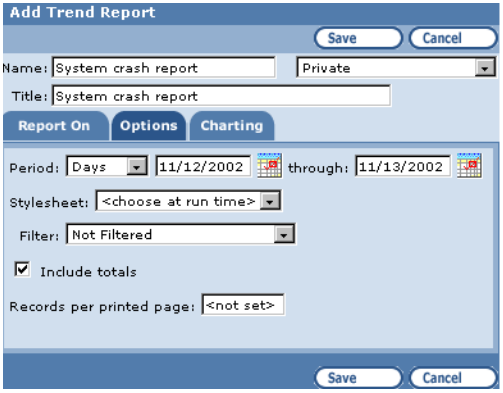
If you share the report, other users may be able to edit it.

6 Select the **Report On** options.

- Select **Defect status in period** to report the number of defects in each state (Open, Fixed, etc.) over the specified reporting period.
- Select **Defects <field> by <field>** to report on the number of defects that are Open, Fixed, Closed, etc. by Type, Priority, or Resolution.
- Select **Defect open age in period** to report on the number of defects open over the specified period.
- Select **Actual vs. Estimated hours** to report on the difference between the actual and estimated fix time.

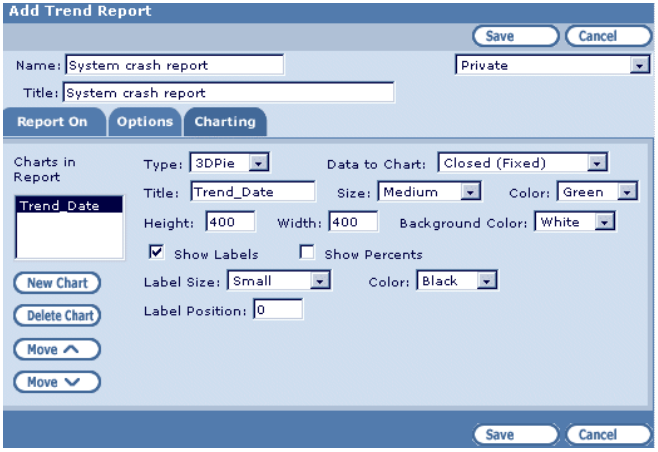
7 Click the **Options** tab.

- Select a unit from the **Period** menu and enter the date parameters.
- Select a **Stylesheet**.
- Select a **Filter** if you are reporting on defects and only want to include filtered defects.
- Select **Include totals** to include totals for the selected report items. If you select this option, you can add the totals to a chart using the **Data to Graph** menu on the **Graphing** tab. Totals cannot be graphed with any other report items.
- Enter a number in the **Records per printed page** field to set page breaks for the report.



8 Click the **Charting** tab.

This tab is used to add and design charts. For more information, see **Charting report data**, page 76.



9 Click **Save**.

The report is saved.

Charting report data

You can add charts to distribution and trend reports. The available charts include pie, 3D pie, bar, 3D bar, area, 3D area, line, and 3D line.

Bar, area, and line charts

The following fields are used to design bar, area, or line charts.

Graphing field:	Use to:
Type	Select the type of report
Data to Chart	Select report data
Title	Enter a chart title
Size	Select the chart title size
Color	Select the chart title font color
Height	Select the chart height
Width	Select the chart width
Background Color	Select the chart background color
X Axis Title	Enter an X axis title
Y Axis Title	Enter a Y axis title
Size	Select the X and Y axis title size
Color	Select the X and Y axis title font colors
Show Labels	Show chart component labels
X Axis Size	Select the X axis label size
Y Axis Size	Select the Y axis label size
Spacing	Enter the amount of space you want, in pixels, between labels
Color	Select the X and Y axis label colors
Density	Enter a density percentage. 80% displays all labels, 40% displays half, etc.
Show Grid	Select to show the chart grid pattern
Show X Axis	Select to show the X axis
Show Y Axis	Select to show the Y axis
Color	Select the color for the grid lines and the X and Y axis lines

Pie charts

The following fields are used to design pie charts.

Graphing field:	Use to:
Type	Select pie or 3D pie
Data to Chart	Select report data
Title	Enter a chart title
Size	Select the chart title size
Color	Select the chart title font color
Height	Select the chart height
Width	Select the chart width
Background Color	Select the chart background color
Show Labels	Show chart data labels
Show Percents	Show chart data in percents
Label Size	Select the chart label size
Color	Select the label colors
Label Position	Set the spacing of the pie chart labels

Note: Pie charts are scaled based on a number of factors, including image size, label size, and number of labels. You may need to change the image height and width dimensions for the pie chart to display correctly.

Viewing report settings

1 Select the report on the Work with Reports page.

2 Click **View**.

The View Report dialog opens. All fields are read-only.

3 Click **Done** when you are finished.

Running reports

1 Select the report on the Work with Reports page.

2 Click **Run**. 

The report opens in a new browser window.

3 Depending on the browser you are using, you can print the report, export the data, save the report to view later, or simply close the report are you view it.

Running quick reports

You can run a quick detail or list report from the Work with Defects page. These reports cannot be customized.

1 Select the defects you want to include on the Work with Defects page.

2 Click **Detail Report** or **List Report**.

The report runs automatically and opens in a new browser window.

Editing reports

1 Select the report on the Work with Reports page.

2 Click **Edit**.

The Edit Report dialog opens.

3 Make any changes and click **Save**.

Your changes are saved and you return to the Work with Reports page.

Duplicating reports

If you are creating reports with similar information, duplicate and modify a report to save time.

1 Click the **Reports** tab.

2 Select the report and click **Duplicate**.

The report is duplicated.

3 Modify the report and save your changes.

Deleting reports

1 Select the report on the Work with Reports page.

2 Click **Delete**.

You are prompted to confirm the deletion.

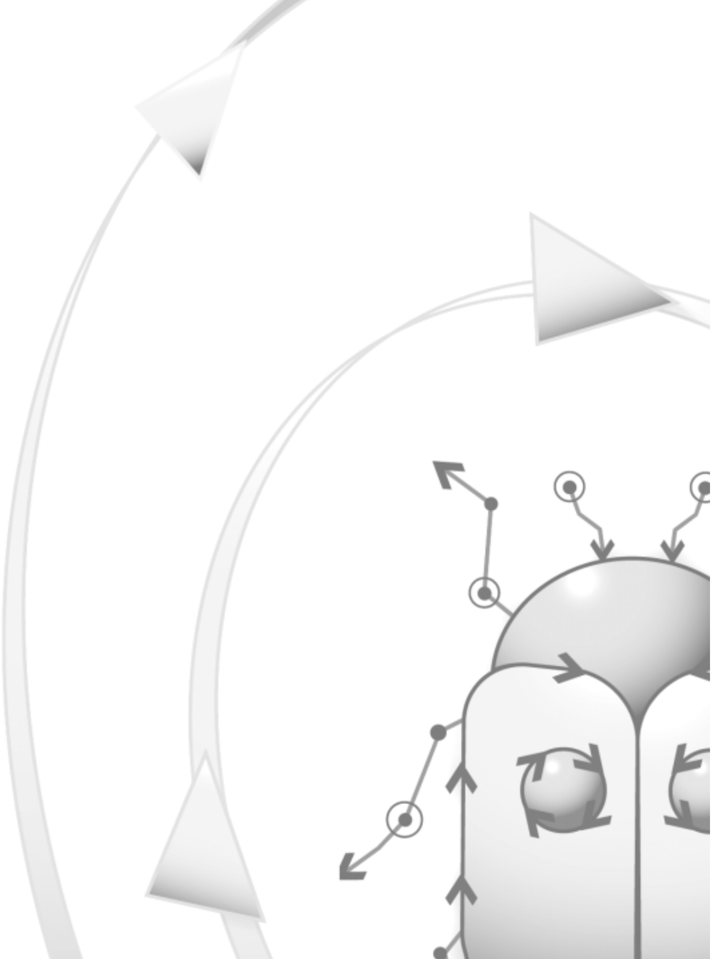
3 Click **Delete**.

The report is deleted.

Chapter 9
Using the Workbook

So much to do...

so little time to do it? Not when you use TestTrack Pro to help you keep track of the loose ends and organize other project-related tasks.



About the workbook

Use the TestTrack Pro Workbook to help you keep track of your defects, loose ends, and other tasks. For example, you can add To Do tasks to remind you about meetings are upcoming deadlines.

Understanding Workbook tasks

You can track defect tasks and To Do tasks in the Workbook. Defects are automatically added to the Workbook. You add To Do tasks to your Workbook. To Do tasks are listed as reminders in the Type column

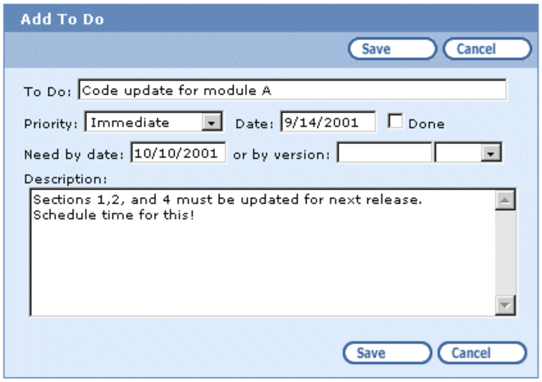
Adding tasks

1 Click the **Workbook** tab.

The Work with Workbook page opens.

2 Click **Add**.

The Add To Do dialog opens.



3 Enter a task name in the **To Do** field.

4 Select the task **Priority**.

5 Check the date.

6 Select a **Need by date** or **Version**.

7 Enter a **description**.

8 Click **Save**.

The task is saved.

Viewing tasks

1 Click the **Workbook** tab.

2 Select the task and click **View**.

The View To Do dialog opens. All fields are read-only.

3 Click **Close** when you are finished.

Editing tasks

1 Click the **Workbook** tab.

2 Select the task and click **Edit**.

The Edit To Do dialog opens.

3 Make any changes and click **Save**.

Your changes are saved and you return to the Work with Workbook page.

Note: Select the **Done** check box if the task is complete.

Duplicating tasks

To save time entering tasks, duplicate and modify a similar task.

1 Click the **Workbook** tab.

2 Select the task and click **Duplicate**.

The task is duplicated.

3 Modify the task and save your changes.

Deleting tasks

Note: You can only delete tasks. You cannot delete defects.

1 Click the **Workbook** tab.

2 Select the task and click **Delete**.

You are prompted to confirm the deletion.

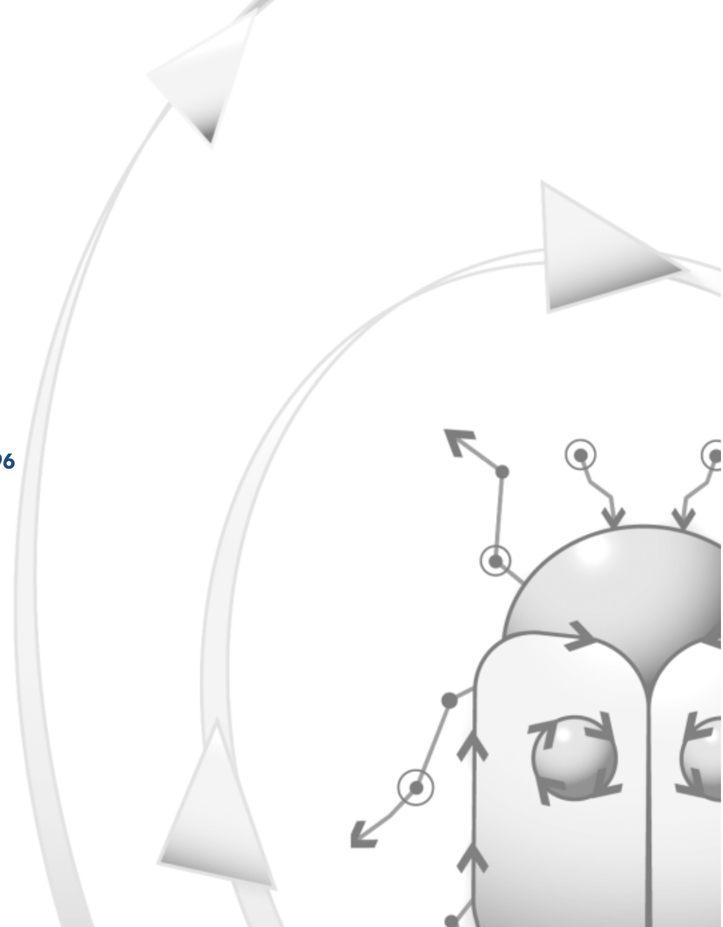
3 Click **Delete**.

The task is deleted.

Chapter 10
Configuring Databases

Lay the foundation!

Databases are one of the most important components of TestTrack Pro - take the time to configure your databases and keep your users productive!



About databases

A TestTrack Pro database contains all the information you track, including defects, user groups, users, customers, filters, test configurations, reports, and workbook tasks. You can configure various database options that control such things as defect numbering, field relationships, and email options.

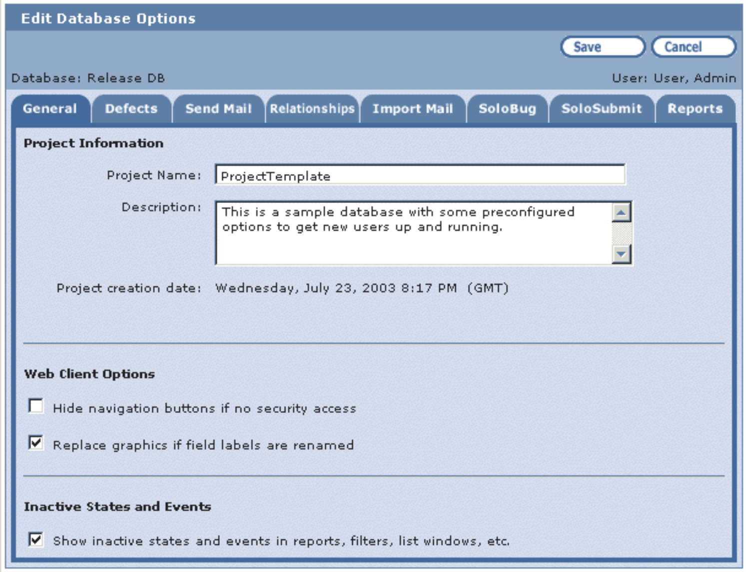
Note: Database are created using the Server Admin Utility. For more information, refer to the **Server Admin Utility Guide.**

Setting general options

1 Click the **Configure** tab.

2 Click **Database Options**.

The Edit Database Options dialog opens, with the **General** tab selected.



3 Enter a **Project Name** and **Description**.

The project name does not change the database name.

4 Select **Hide navigation buttons if no security access** to hide the web navigation buttons.

If a user does not have security access to the navigation buttons, the buttons are hidden on the web page. If this option is not selected, and the user does not have security access, the buttons are disabled.

5 Select **Replace graphics if field labels are renamed** to automatically replace the field label graphics.

Do not select this option if you use custom graphics for renamed fields.

6 Select **Show inactive states and events in reports, filters, list windows, etc.** if you want inactive states and events to be included in the reports dialog, the filter dialog, the list window column pop-up menu, and reports.

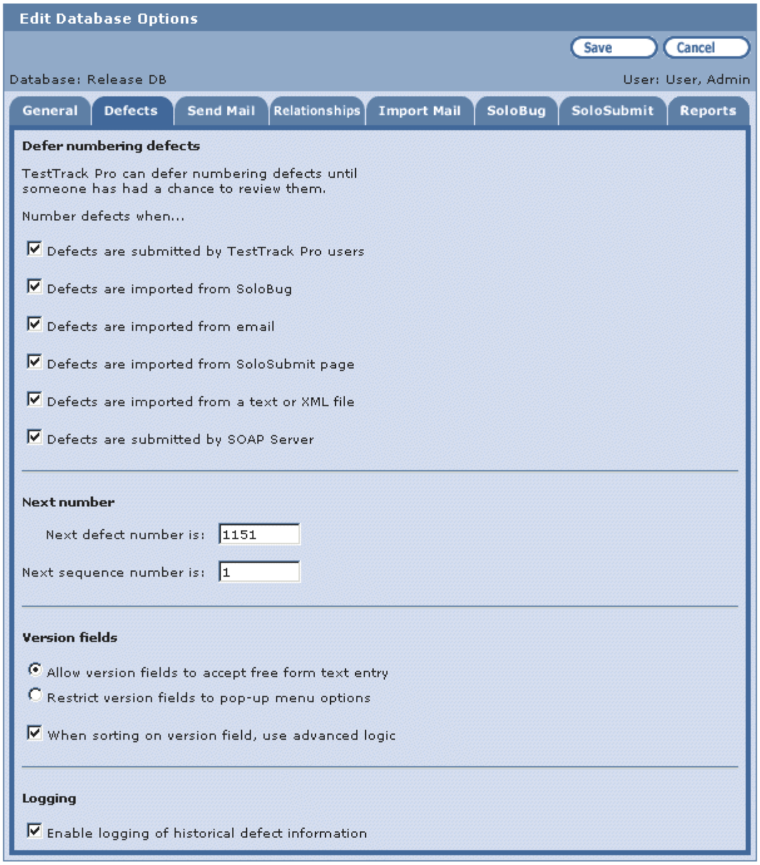
7 Click **Save** or click another tab to continue setting options.

Setting defect options

1 Click the **Configure** tab.

The Project Configuration page opens.

2 Click **Database Options** then click the **Defects** tab.



3 Select the **Defer numbering defects** options.

For each of the options, select the check box to automatically assign a defect number.

4 Select the **Next number** options.

- The next defect number can be set to any value greater than the largest defect number.
- The next sequence number can be set to any value greater than the largest sequence number.

5 Select the **Version fields** options. These options affect the following fields: version found, version fixed, version verified, version released, and estimated completion.

You can configure version field menus to accept text entries or restrict version fields to pop-up menus.

Note: When sorting on version field, use advanced logic tells TestTrack Pro to look for delimiters and sort the alphanumeric characters in that section.

6 Select **Enable logging of historical defect information** to log historical information.

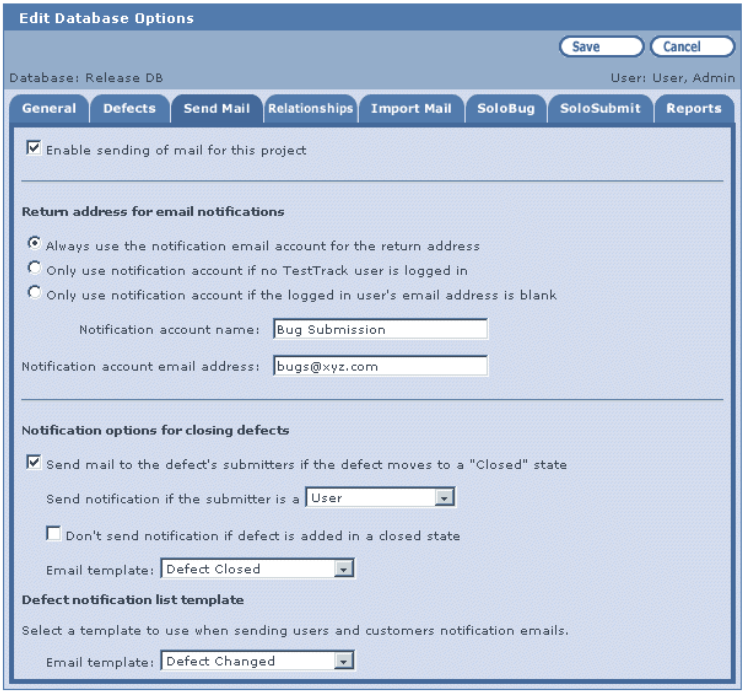
For more information, see **Enabling historical defect logging**, page 95.

7 Click **Save** or click another tab to continue setting options.

Setting send mail options

1 Click the **Configure** tab.

2 Click **Database Options** then click the **Send Mail** tab.



3 Select **Enable sending of mail for this project** to enable mail.

If you do not select this option, users cannot send mail or receive email notifications.

4 Select the **Return address** options.

- **Always use the notification email account for the return address** is the default option.
- **Only use notification account if no TestTrack user is logged in** uses the notification account information. if a user is not logged in.
- **Only use notification account if the logged in user's email address is blank** ensures that an email address is available if the logged in user did not provide an email address.
- Enter a **notification account name** and **email address**.

5 Select the **Closing defects** options. These options send notifications for closed defects.

- Select **Send mail to defect's submitters if defect moves to a "Closed" state** to notify defect submitters of the change. Select a submitter option from the dropdown list. If a defect is submitted by more than one person, each person is sent an email.
- Select **Don't send notification if defect is added in a closed state** if you do not want a notification sent for defects added in a closed state.

6 Select a **defect notification list template**.

This template is used when notifications are sent to users or customers.

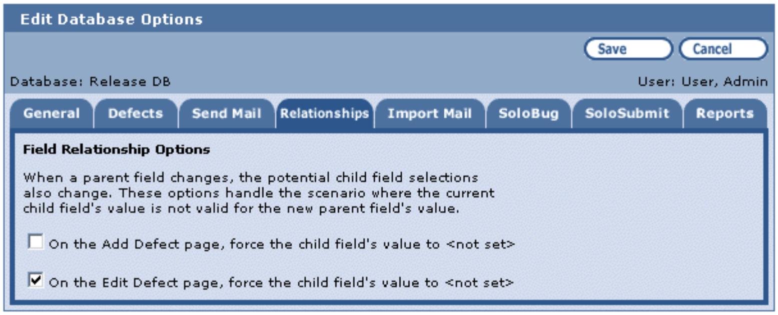
7 Click **Save** or click another tab to continue setting options.

Setting field relationship options

These options force a child field's value to not set if a parent field changes, invalidating the child field value.

1 Click the **Configure** tab.

2 Click **Database Options** then click the **Relationships** tab.



3 Select **On the Add Defect window, force the child field's value to <not set>** to enforce the field relationship and prevent data that does not make sense from being added.

4 Select **On the Edit Defect window, force the child field's value to <not set>** to enforce the field relationship and prevent data that does not make sense from being added.

Do not select this option if historical defect information is important and you want to preserve the original defect information.

Text entries in version fields decrease the power of field relationships. If **Version Found** is a child field, and users can add text entries, the value cannot be forced to **<not set>** because field relationship rules cannot be enforced.

5 Click **Save** or click another tab to continue setting options.

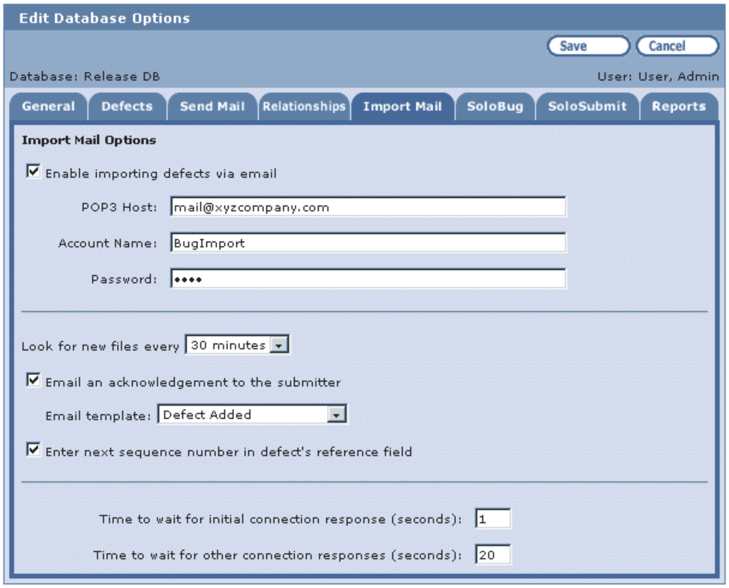
Setting import mail options

TestTrack Pro can automatically import mail from most email accounts. Customers and users can send defect reports directly to this email; TestTrack Pro will automatically import the defects!

Note: TestTrack Pro requires a dedicated email address for importing mail. All email, including personal email such as jokes, is imported into the database.

1 Click the **Configure** tab.

2 Click **Database Options** then click the **Import Mail** tab.



3 Select **Enable importing defects via email** to enable email import.

4 Enter the **POP3 Host** IP address or domain name.

Do not use a personal email address as the import mail account. TestTrack Pro imports everything, including personal email like jokes, into the database.

5 Enter the **Account Name** and **Password**.

Leave the password field empty if a password is not required.

6 Select a **Look for new files** time interval.

7 Select **Email an acknowledgement to the submitter** to automatically acknowledge the email.

Select the email template you want to use.

8 Select **Enter next sequence number in defect's reference field** to automatically enter the next number.

9 Enter the **Time to wait for initial connection response**.

This is the time the TestTrack Pro server waits for an initial response from the email server.

10 Enter the **Time to wait for other connection responses**.

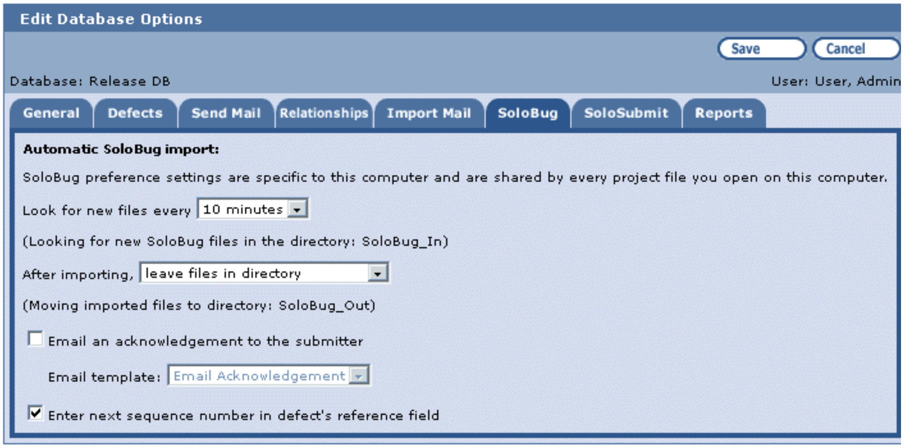
This is the time the TestTrack Pro server waits for other connection responses from the email server.

11 Click **Save** or click another tab to continue setting options.

Setting SoloBug options

1 Click the **Configure** tab.

2 Click **Database Options** then click the **SoloBug** tab.



3 Select a **Look for new files** time interval.

4 Select an **After importing** option.

5 Select **Email an acknowledgement to the submitter** to automatically acknowledge the email.

Select the email template you want to use.

6 Select **Enter next sequence number in defect's reference field** to automatically enter the next number.

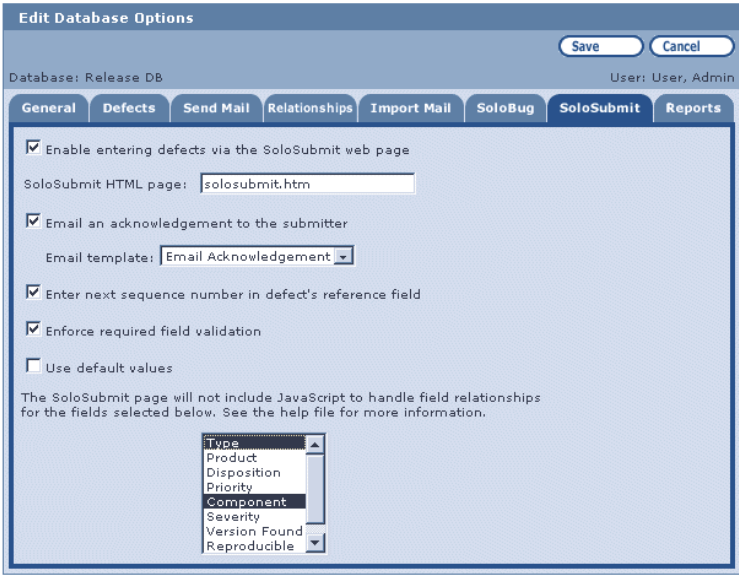
7 Click **Save** or click another tab to continue setting options.

Setting SoloSubmit options

Note: The **TestTrack Pro SoloSubmit Admin Guide** includes detailed information about configuring and customizing SoloSubmit.

1 Click the **Configure** tab.

2 Click **Database Options** then click the **SoloSubmit** tab.



3 Select **Enable entering defects via the SoloSubmit web page** to enable SoloSubmit.

Remember, this option is database-specific. SoloSubmit must be enabled for each database.

4 The SoloSubmit HTML page field defaults to **solosubmit.htm**.

If you use a customized SoloSubmit HTML page, enter the file name. Make sure the HTML file is in the correct TestTrack Pro directory on your web server.

5 Select **Email an acknowledgement to the submitter** to automatically acknowledge the email.

Select the email template you want to use.

6 Select **Enter next sequence number in defect's reference field** to automatically enter the next number.

7 Select **Enforce required field validation** to ensure that values are entered for all required fields.

The required field validation is **not** enforced for the **Entered By** field because users do not log into SoloSubmit. If **Entered By** is a required field, defects entered via SoloSubmit cannot pass the required field validation check.

8 Select **Use default values** to initially populate the SoloSubmit web page with default values.

SoloSubmit **cannot** determine which time zone to use as **default values** for **date/time custom fields**. When a defect is submitted via SoloSubmit, there is no associated user in the database. Consequently, there are no user options to check to determine which time zone to use. The current time of the computer the SoloSubmit CGI is running on, when the SoloSubmit page is loaded, is used as the default value for date/time custom fields. In addition, the date is assumed to be in the server's time zone. The date/time is converted to GMT.

9 Select fields you do not want JavaScript to handle field relationships for on the SoloSubmit web page. You would choose **not** to include the JavaScript for one of the following reasons:

- The SoloSubmit web page includes hidden fields. For example, you comment out a field that you do not want customers to view. You can delete the HTML, but the field, and its values, will still show up in the JavaScript. If the customer chooses View Source on the SoloSubmit web page, the field and its values will be shown. Choosing not to include the JavaScript resolves this issue.
- You customize the SoloSubmit web page and you do not want to overwrite the customization. For example, you only want a customer to be able to choose 3 out of 6 values for a field so you hard code a list of field values in the HTML. If you include the JavaScript, your customization is overwritten. By ignoring JavaScript for the field, the hard coded list values are used.

If neither reason applies, and you select a field from the list, it can result in unexpected behavior. For example, you ignore JavaScript for **Component**, which is a child of **Product**. When SoloSubmit is accessed, **Product** and **Component** are populated with the initial values. If the user chooses a different **Product**, the **Component** values are not changed.

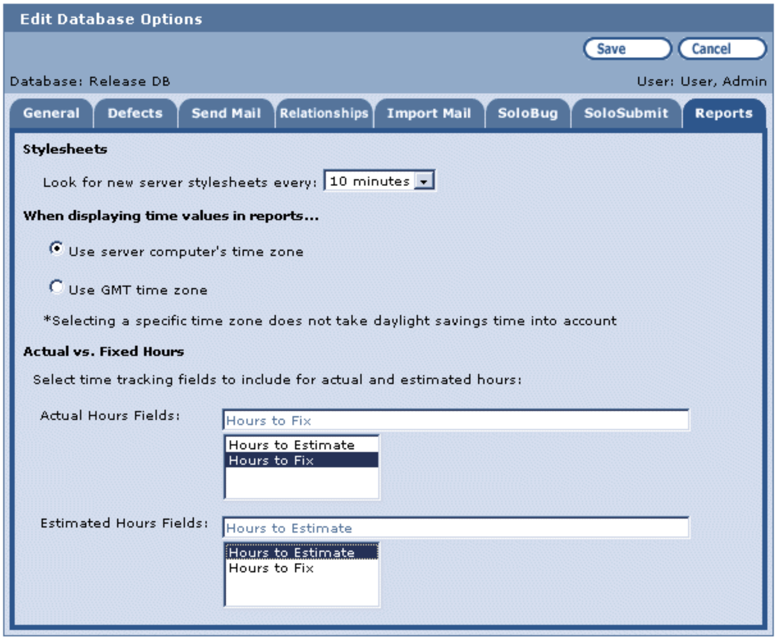
10 Click **Save** or click another tab to continue setting options.

Remember to give users and customers the SoloSubmit URL. To submit bug reports or feature requests, they simply open a browser and enter the SoloSubmit URL..

Setting report options

1 Click the **Configure** tab.

2 Click **Database Options** then click the **Reports** tab.



3 Select a **Look for new stylesheets** time interval.

The server periodically searches the database for new stylesheets and updates the stylesheet menus.

4 Select a **time zone** option.

Detail reports display the creation and modified time at the bottom of the report. Configure the report to use the server's time zone or GMT.

Select the **time tracking** fields.

You can select which event time tracking fields to use for actual and estimated hours. When calculating the value, TestTrack Pro uses the selected events and determines which defect historical event(s) to use based on the "Sum of hours from all events of this type" or "Hours from last event of this type entered" event type setting.

5 Click **Save** or click another tab to continue setting options.

Logging historical defect information

Historical defect logging is an optional feature is used to record the changes made to a specific defect. It lets users see what has changed in a particular defect record, who made the change, and when the change was made.

Note: The TestTrack Pro administrator is generally responsible for historical defect logging functions. Depending on your security level, you may not have access to the historical defect logging commands.

Following are some of the actions that generate a historical defect log message:

- Adding or editing a defect
- Adding, editing, or deleting a found by record
- Adding, editing, or deleting a defect action
- Merging defects
- Renumbering a defect or assigning a defect number

Enabling historical defect logging

When historical defect logging is enabled, all changes made to a defect are logged and added to the historical defect information.

1. Click the **Configure** tab then click **Database Options**.

   The Edit Database Options dialog opens.

2. Click the **Defects** tab.

3. Select **Enable logging of historical defect information**.

   Historical defect information will now be logged. Disabling this option does not affect any information already logged in the database.

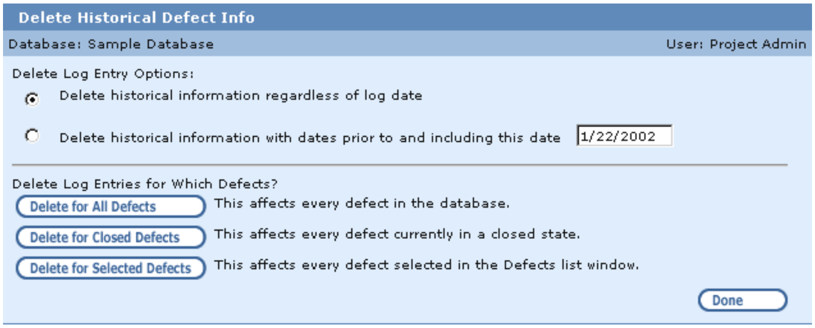
Deleting historical defect log information

If the database is becoming too large because of the historical log entries, you can delete the entries. Deleting historical defect log entries does not reduce the amount of disk space used until the database is compressed. For more information, see **Understanding database settings** in **The Server Admin Utility Guide**.

1 Click the **Defects** tab then click **Delete Historical**.

> **Note:** To delete historical log entries for specific defects, select the defects on the Defects list window before proceeding.

The Delete Historical Defect Info dialog opens.



2 Select the Delete Log Entry options.

- **Delete historical information regardless of log date** deletes all log entries.
- **Delete historical information with dates prior to and including this date:** deletes log entries prior to and including the date you enter.

3 Click a **Delete Log Entries For Which Defects?** button.

You are prompted to confirm the deletion.

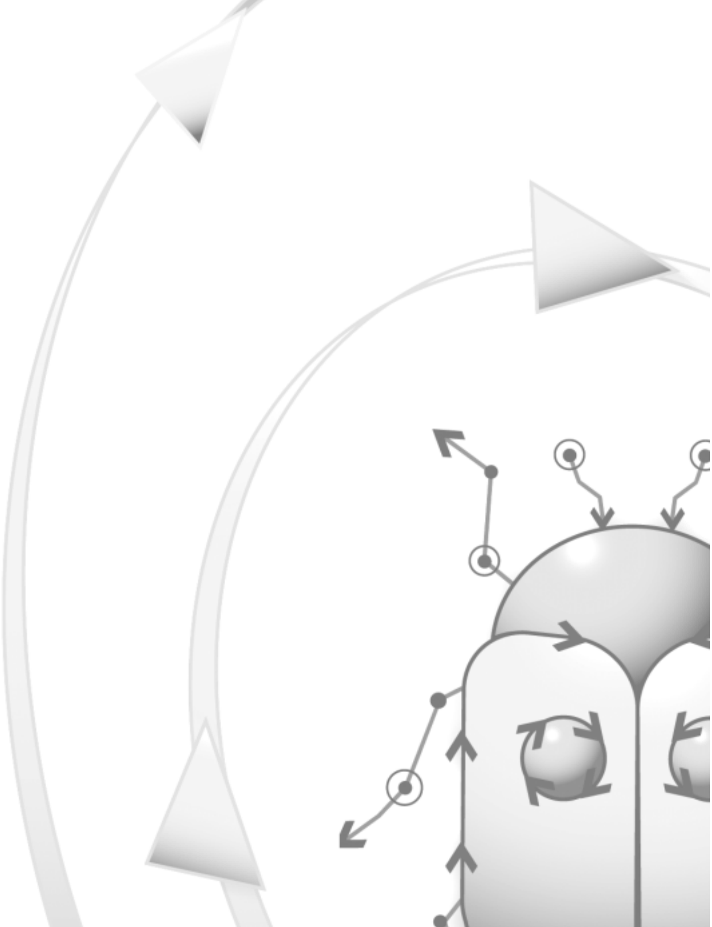
4 Click **Delete**.

The defect historical log information entries are deleted.

Chapter 11
Customizing the Workflow

Tailor your workflow...

...to match your existing processes. A customized workflow lets you define and follow your company's business processes. Customize the workflow instead of asking your users to change how they work.



About the workflow

A workflow consists of states, events, and transitions that define the path a defect takes from initial reporting to resolution. TestTrack Pro's standard workflow can be used "out of the box" to track software defects or you can customize the workflow to meet your company's business processes.

The workflow guides all users that participate in the process and tracks their activities. The complexity of your workflow depends on the process. Simple processes may only require a few steps while more complex processes may include multi-user assignments and stricter resolution requirements.

States

States represent a step in the workflow. The status field indicates the current state. For example, a defect is Open, Awaiting Customer Verification. States can also include rules for processing multi-user assignments. Defects move from state to state based on transition rules.

Events

Events represent the action that can be performed at each state, or step, in the workflow. For example, a QA engineer must test a bug fix.

Transitions

Transitions specify the initial state when a defect is created and the events that can be added for each state. They move defects from one state to another. For example, the allowed events for a Fixed state are Assign, Verify, or Force Close.

Analyzing your workflow

Before you customize the workflow, you should take the time to document and understand your company's business process. Analyzing your workflow helps you easily determine the states that are used, the actions that users perform, and how information moves through the workflow. A clearly defined workflow ensures that issues move from initial reporting to resolution and do not get stranded.

A carefully understood and customized workflow can guard against wasted time, redundancy, and disorganization. When analyzing your workflow, you should identify the steps that make up your business process and determine the actions that you want to associate with each step. The workflow should include a state for each step. In addition, consider the business process, the individuals involved in the process, the types of events they perform, the type of data they track, and the types of transitions that are used.

After the workflow is analyzed, you should be able to list most states, events, and transitions used throughout the process. To begin customization, you should first create the workflow states. Next, to transition defects, define the events that can be performed for each state. You can graphically view a workflow to help understand how the states, events, and transitions work together.

Customizing workflows

TestTrack Pro's workflow can be used "out of the box" to track defects and other issues such as change requests. However, your company may have other processes you want to track. You can create multiple TestTrack Pro databases, each with its own customized workflow, to track additional company processes.

For example, you may want to create a TestTrack Pro database and customized workflow for your human resources department. Most companies have a defined process for hiring new personnel. Customize the workflow to provide an easy and convenient way for your human resources staff to track hiring new staff from receiving a staffing request from a manger to training a new hire.

To customize a workflow, perform the following steps:

- Define states
- Define events
- Define transition rules, including multi-user assignments
- Define state assignment rules
- Configuring auto-assignment rules
- Configuring notification rules

Note: All other users must be logged out before you can customize the workflow.

It can be difficult to keep track of states, events, and transition and how they relate to each other. You can evaluate and graph the workflow to view potential problems and see a graphic representation of the workflow. See **Evaluating the workflow,** page 119 and **Graphing the workflow,** page 119 for more information.

Defining states

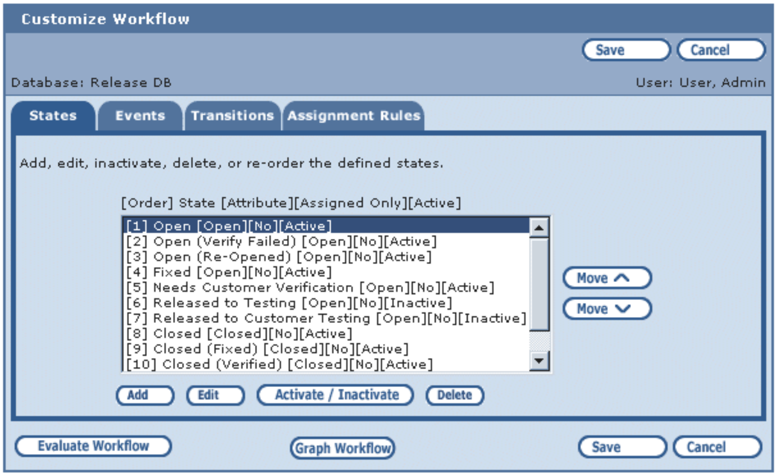
A defect is either open or closed. However, there are different states that an open or closed defect can have, based on process. For example, an open defect can be Open, On-Hold, Fixed, or Pending Verification. A closed defect can be Fixed, User Error, or Not Reproduced.

Your company workflow determines the number and variety of open and closed states. Each state includes a name, description, and attribute (open, closed).

Adding states

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens with the **States** tab selected. The States tab list the defined states.



2 Click **Add**.

The Add State dialog box opens.

3 Enter a **State Name** and **Description**.

4 Select an **Attribute**.

5 Click **Save**.

The state is added.

Editing states

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens with the **States** tab selected.

2 Select a state and click **Edit**.

The Edit State dialog box opens.

3 Make any changes and click **Save**.

Your changes are saved.

Inactivating states

To preserve historical information, inactivate a state instead of deleting it. You cannot inactivate a state if a defect is currently in the state.

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens with the **States** tab selected.

2 Select a state and click **Activate/Inactivate**.

The state is inactivated.

Note: To activate an inactive state, select the state and click **Activate/Inactivate.**

Deleting states

You cannot delete states that are referenced in the database. If a state is referenced in the database, and you no longer want users to have access to it, inactivate it.

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens with the **States** tab selected.

2 Select a state and click **Delete**.

You are prompted to confirm the deletion.

3 Click **Delete**.

The state is deleted.

Defining events

Events define the activities that can be performed on a defect. Each event defines an operation in the workflow that may cause the defect to move to a new status, cause another operation such as assigning the defect to other users, or simply record that the event occurred. A defect's history includes the events that have occurred for the defect. Some events are performed by users and other are automatic system events. For example, auto-assignment of defects based on auto-assign rules are system events.

Adding events

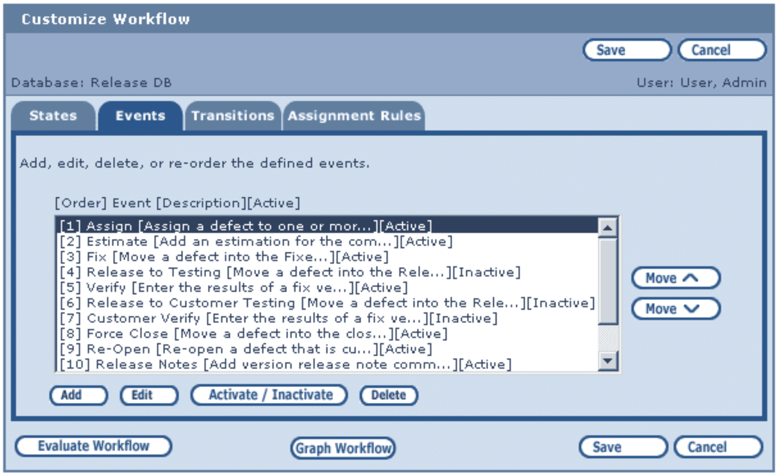
Events are accessed from the Activities menu or the defects shortcut menu.

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens.

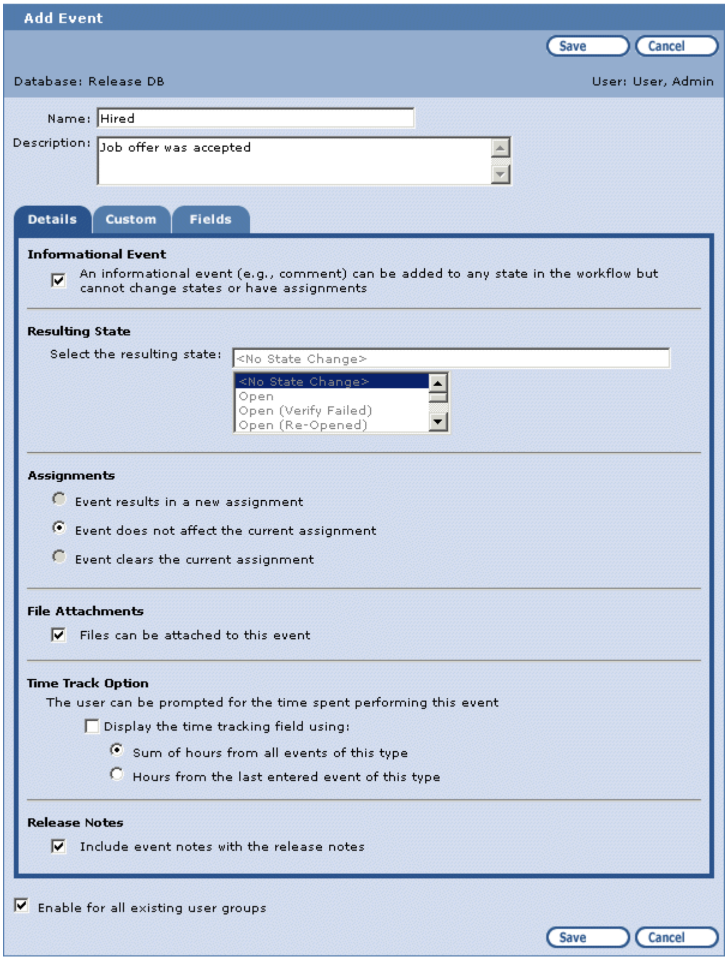
2 Click the **Events** tab.

The Events tab lists the defined events.



3 Click **Add**.

The Add Event dialog box opens with the **Details** tab selected.



4 Enter a **Name** and **Description**.

5 Select any **Details** options. The Details tab specifies the event details that determine the resulting state after the event is entered and what optional pre-defined fields are added to the event dialog.

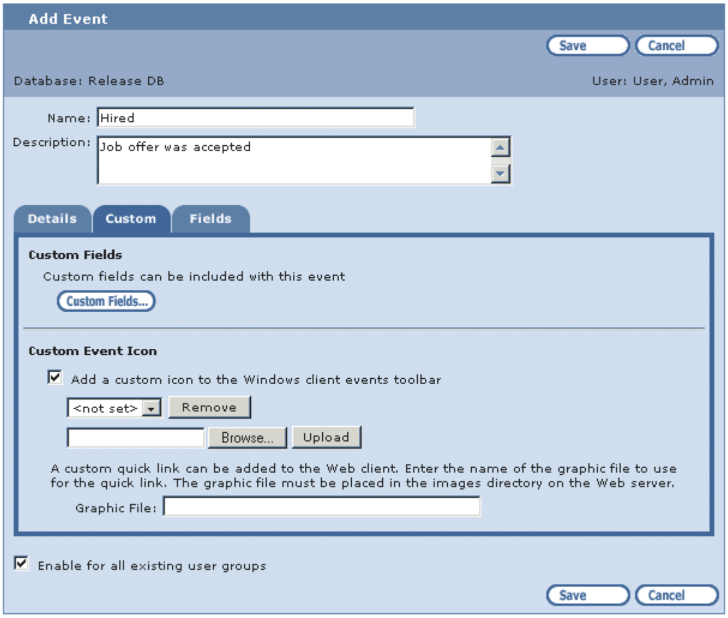
- Select **informational event** to designate the event as an information-only event. Informational events can be added to the defect from any state in the workflow because they do not affect the workflow. When this option is selected, the assignment options are disabled.

- Select a **resulting state** to determine the state the defect moves to after the event is entered. You can also select multiple states if you want the user to choose a state. For example, you may want users to select a specific state for a fix event so you select Fixed, Closed, or Closed (Fixed) as the resulting states. When users enter fix events, they are prompted to select a resulting state.

- Select an **assignments** option. These options indicate if the event results in an assignment. If **Event results in a new assignment** is selected, an assign to field is added to the event dialog.
- Select **Files can be attached to this event** to let users attached files to the event. If this option is selected, an attachments section is added to the event dialog.
- Select **Display time tracking field using:** to track event time. Then select an hours option. If time tracking is selected, a time spent field is added to the event dialog. For example, you want to track time for fix and estimate events. You can set the estimate event to only display the hours from the last estimate event. You can set the fixed event to display the sum of hours from all fix events. You can add these fields to a report to view the estimated time and actual time.
- Select **Include event notes with the release notes** to add any event notes to the release notes.

6 Click the **Custom** tab. The Custom tab is used to add custom fields and custom icons to the event.

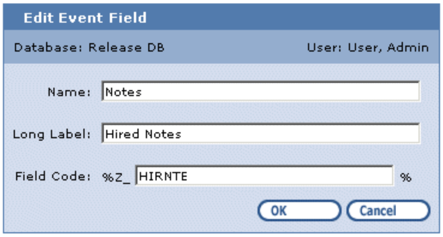
- Click **Custom Fields** to add a custom field to the event. If this option is selected, a custom fields section is added to the event dialog. See **Configuring custom fields,** page 124 for more information.
- Click **Choose Icon** to add a custom event icon to the TestTrack Pro Windows defect action toolbar. The icon must be a .bmp file that is 16x16 pixels or smaller. If you do not add an icon to an event, the event will only be available from the Activities and shortcut menus.
- Enter a **graphic file** name to add a quick link icon to the TestTrack Pro Web page. The web pages require two quick link icons, one for the enabled event and one for the disabled event. The disabled quick link icon should use the same name and be preceded with “d_”. For example, the disabled hire icon is named d_hir.gif because the enabled icon is named hire.gif. Both images must be added to the ttweb/images folder on the web server.



7 Click the **Fields** tab.

The Fields tab lists the standard fields that are displayed on the event dialog. The list includes the field name, the long label, and the field code. The field name may also be referred to as a short label.

- Select a field and click **Edit** to edit the name, the long label, or the field code.
- Make any changes and click **OK**.



Field names, or short labels, are displayed in generated event dialogs. Long labels are displayed in dropdown lists. Long labels help users distinguish between the same fields in different events. Field codes automatically generate data and are used with such things as email templates or reports.

8 Click **Save**.

The event is added.

Editing events

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens.

2 Click the **Events** tab.

3 Select an event and click **Edit**.

The Edit Event dialog box opens.

4 Make any changes and click **Save**.

Your changes are saved.

Inactivating events

To preserve historical information, inactivate an event instead of deleting it.

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens.

2 Click the **Events** tab.

3 Select an event and click **Activate/Inactivate**.

The event is inactivated.

Note: To activate an inactive event, select the event and click **Activate/Inactivate.**

Deleting events

You cannot delete events that are referenced by the transitions tab or that are part of any defect's historical events.

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens.

2 Select an event and click **Delete**.

You are prompted to confirm the deletion.

3 Click **Delete**.

The event is deleted.

Defining transitions

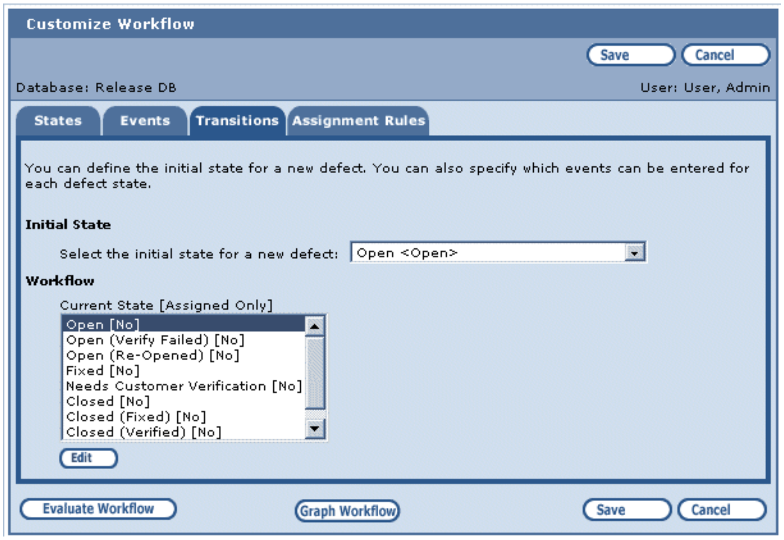
Transitions specify the initial state when a defect is created and the events that can be added for each state. Transitions help enforce the workflow by enabling event menu items and icons based on the current state of the defect. You can quickly view the events that are enabled for each state. You can also edit transitions to add or remove allowed events for each state.

Selecting the initial defect state

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens.

2 Click the **Transitions** tab.



3 Select the **initial state for new defects**.

All new defects will be added in the selected state.

4 Click **OK**.

Editing transitions

1 Click the **Configure** tab then click **Workflow Rules**.

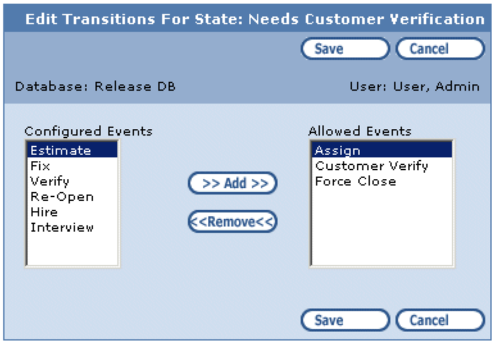
The Customize Workflow dialog opens.

2 Click the **Transitions** tab.

3 Select a state to view the allowed events.

4 Click **Edit** to add or remove the allowed events.

The Edit Transitions dialog opens.



5 **Add** or **Remove** events.

6 Click **Save**.

Your changes are saved and the Edit Transitions dialog closes.

7 Click **Save**.

Defining assignment rules

Assignment rules specify how state assignment events are processed. You can restrict which users can enter an event, specify multi-user assignment options, and change the process order of rules.

1 Click the **Configure** tab then click **Workflow Rules**.

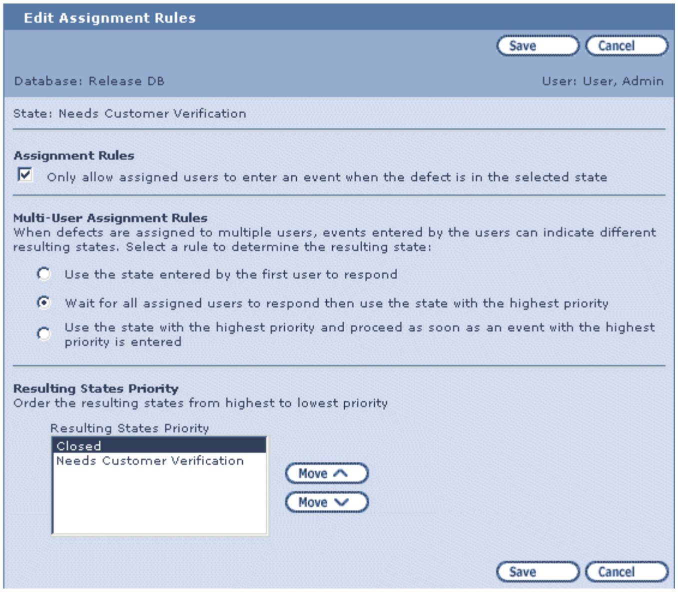
The Customize Workflow dialog opens.

2 Click the **Assignment Rules** tab.

Select a state to view its assignment rules and resulting state priorities.

3 Select a state and click **Edit** to change assignment rules or the resulting states priority.

The Edit Assignment Rules dialog box opens.



4 Select **Only allowed assigned users to enter an event when the defect is in the selected state** to make sure that only assigned users can enter an event.

5 Select a **multi-user assignment rules** option to determine the resulting state if a conflict occurs. Defects may have different resulting states when they are assigned to multiple users.

Note: Options change based on the selected assignment rules. For example, if **Use the state entered by the first user to respond** is selected, the resulting states priority cannot be changed because priority does not affect this option.

- **Use state entered by first user to respond** processes the event entered by the first user and moves the defect to the corresponding state. If the event moves the defect to a new state or affects the current assignment, the remaining assignments are removed. If the event leaves the defect in the current state or does not affect the current assignment, the remaining assignments are not removed and users can still enter events. For example, the first user enters a "Verify Fixed" event. The defect moves to "Close" and the other assigned users are removed from the list of current assignments.

- **Wait for all assigned users to respond then use the state with the highest priority** accepts events from assigned users then uses the event with the highest resulting state to determine the next state. For example, one user enters "Verify Fixed" resulting in a Close state and another user enters "Verify Failed" resulting in an "Open" state. The defect moves to "Open" because it has the highest priority.

- **Use the state with the highest priority and proceed as soon as an event with the highest priority is entered** accept events from assigned users until an event with the highest resulting state priority is entered or until all users have responded. If all users respond, and an event with the highest resulting state is not entered, the highest resulting state of the entered events is used. For example, "Open" is the highest resulting state. As soon an event with "Open" as a resulting state is entered, the defect moves to "Open" and the assignment list is cleared. If all users enter events with "Close" as a resulting state, the defect moves to "Close".

6 To reorder the **resulting states priority**, select a state and click **Up** or **Down**.

7 Click **Save**.

Your changes are saved and you return to the Customize Workflow dialog.

Configuring auto-assignment rules

Auto-assignment rules, which only run if a defect is not assigned to a user when changes are saved, automatically move a defect from state to state and assign the defect to a specified user. When a defect is moved into a state with an auto-assignment rule, TestTrack Pro checks the rules in top-down order. If the defect passes a filter, the assignment action is applied. If the defect does not pass the filter, the next rule is checked until the defect passes a filter. If the defect does not pass any of the filters, the default action is applied.

For example, if your team is in Beta testing, you want to make sure that defects failing verification get immediate attention. If the **Defect fails verification,** two auto-assignment rules are checked. If the defect's filter is **Failed Fix**, the defect is automatically assigned to the last Fixed by User. This user can review why the fix failed and make the necessary adjustments so the defect can pass. If the filter is not **Failed Fix**, the second rule is checked. If the defect's filter is **On hold**, the defect is automatically assigned to the project administrator. The administrator determines if the issue needs to be resolved in Beta or at a later time.

You can also select a default auto-assignment action to use if you do not want to configure rules or if a defect does not pass the auto-assignment rule filter. For more information, see **Setting default actions,** page 113.

Keep the following in mind:
A state will only show up in the auto-assignment rules state list if it has at least one valid assignment event that can be entered for that state in the workflow transition. A valid assignment event is an assignment event that cannot change the current state of the defect.

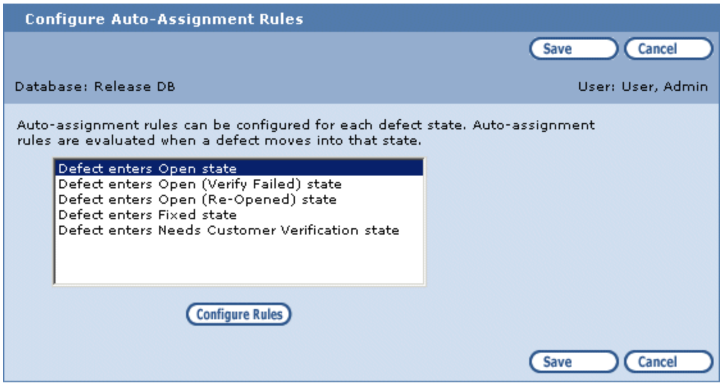
Auto-assignment rule exceptions

Auto-assignment processing is skipped when a defect is created using XML import, text import, or by duplication. For example, if you duplicate a defect that is unassigned, the new defect is also unassigned. If you duplicate a defect that is assigned to Barry, the new defect is also assigned to Barry.

Adding auto-assignment rules

1 Click the **Configure** tab then click **Auto-Assignment Rules**.

The Configure Auto-Assignment Rules dialog box opens.

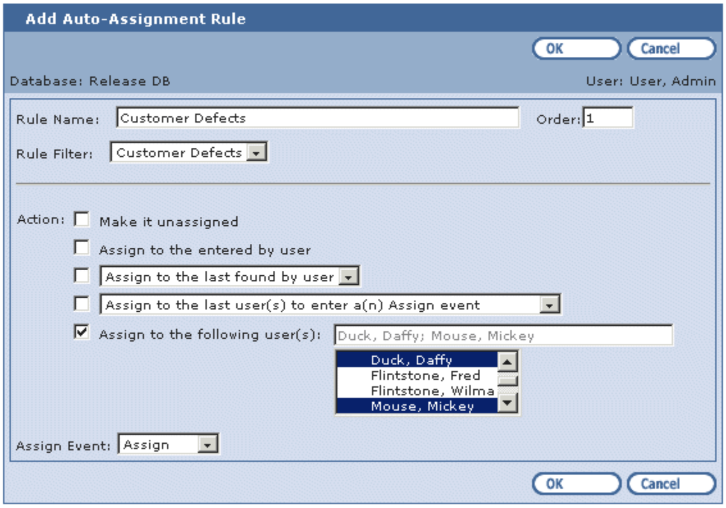


2 Click **Configure Rules**.

The Configure Rules dialog box opens.

3 Click **Add**.

The Add Auto-Assignment Rule dialog box opens.



4 Enter a **Rule Name**.

5 Select a **Rule Filter**.

The filter list displays the public and private filters you have access to.

6 Select an auto-assign **Action**.

- **Make it unassigned** does not assign the defect to a user.
- **Assign to the entered by user** assigns the defect to the user who entered the defect.
- **Assign to the found by user** assigns the defect to all found by users, the first found by user, or the last found by user.
- **Assign to the last user(s) to enter...** assigns the defect to the user who last entered the selected defect event. The list includes all of the events defined for the workflow in the database. If the last user entered the event in response to a multi-user assignment event, the auto-assignment is applied to all users who responded to the event.
- **Assign to the following user(s)** assigns the defect to the selected users or customers.

7 Select an **Assign Event**.

To save rules, select a valid assign event from the dropdown list. Valid events must be active, result in a new assignment, and only allow <No State Change> as the resulting state.

8 Click **OK**.

The rule is added. You return to the Configure Auto-Assignment Rules dialog.

9 Rules are checked in top-down order. To change the rule order on the Configure Rules dialog, select a rule and click **Move Up** or **Move Down**.

10 Click **Save** to save your changes.

Setting default actions

You can set a default action for each defect state if you do not want to configure auto-assignment rules.

Note: You should set a default action for each defect event.

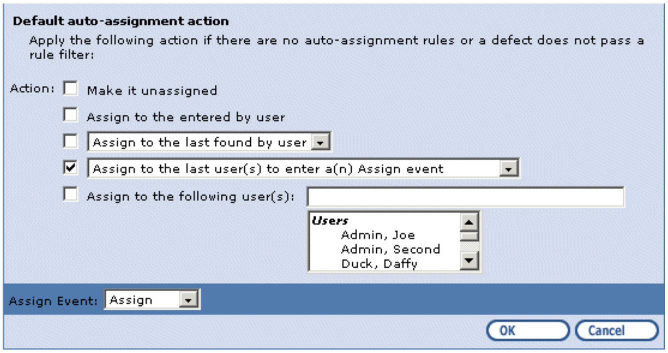
1 Click the **Configure** tab then click **Auto-Assignment Rules**.

The Configure Auto-Assignment Rules dialog box opens.

2 Select a defect state and click **Configure Rules**.

The Configure Rules dialog box opens.

3 Select a **Default action**.



4 Click **OK**.

You return to the Configure Auto-Assignment Rules dialog.

5 Click **Save** to save your changes.

Editing auto-assignment rules

1 Click the **Configure** tab then click **Auto-Assignment Rules**.

The Configure Auto-Assignment Rules dialog box opens.

2 Select a defect state and click **Configure Rules**.

The Configure Rules dialog box opens.

3 Select a rule and click **Edit.**

4 Make any changes and click **OK**.

You return to the Configure Auto-Assignment Rules dialog.

5 Click **Save** to save your changes.

Inactivating auto-assignment rules

If there is a rule that is no longer in use, inactivate it instead of deleting it.

1 Click the **Configure** tab then click **Auto-Assignment Rules**.

The Configure Auto-Assignment Rules dialog box opens.

2 Select a defect state and click **Configure Rules**.

The Configure Rules dialog box opens.

3 Select a rule and click **Activate/Inactivate.**

The rule is inactivated.

Note: To activate an inactive rule, select the rule and click **Activate.**

Deleting auto-assignment rules

Delete rules if you are certain you will not use the rule again. You can also inactivate a rule to disable it.

1 Click the **Configure** tab then click **Auto-Assignment Rules**.

The Configure Auto-Assignment Rules dialog box opens.

2 Select a defect state and click **Configure Rules**.

The Configure Rules dialog box opens.

3 Select a rule and click **Delete.**

The rule is deleted.

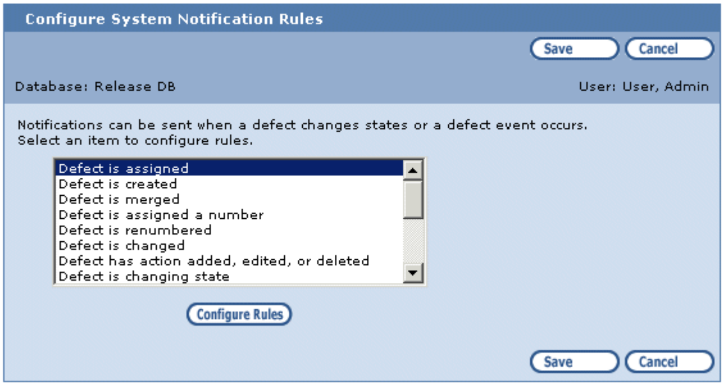
Configuring system notification rules

Set up system auto-notification rules to automatically inform users about events, such as status changes, via email. Email notifications can be configured for each state defined for defects. Notifications only inform users of the event change, they do not assign users a task. System auto-notifications rules are configured by the administrator and are run in addition to any personal email notifications users set up.

Adding system notification rules

1 Click the **Configure** tab then click **System Notification Rules**.

The Configure System Notification Rules dialog box opens.

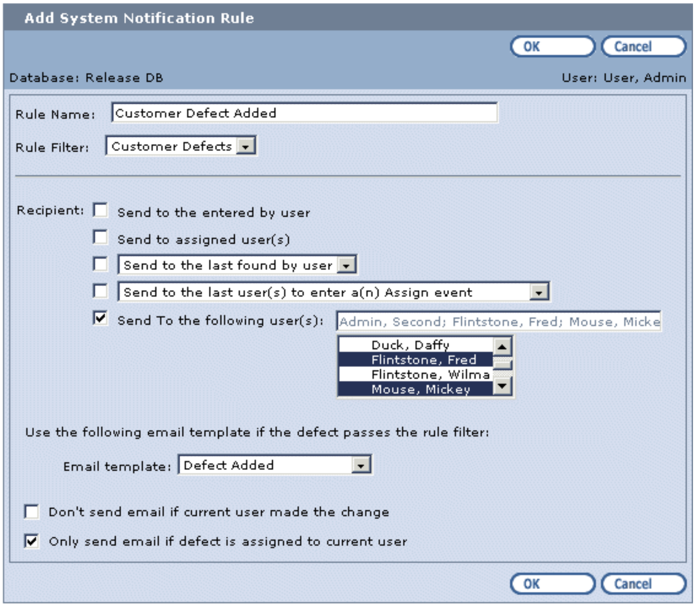


2 Click **Configure Rules**.

The Configure System Notification Rules dialog box opens.

3 Click **Add**.

The Add System Notification Rule dialog box opens.



4 Enter a **Rule Name**.

5 Optionally select a **Rule Filter**.

If a database contains a large number of defects, you may want to filter the defects the rule is applied to. If you need to add filters, see **Creating filters,** page 56.

6 Select a **Recipient**.

- **Send to the entered by user** sends the email notification to the user who entered the defect.
- **Send to assigned user(s)** sends the email notification to all assigned users.
- **Send to the found by user** sends the email notification to all found by users, the first found by user, or the last found by user.
- **Send to the last user(s) to enter...** sends the email notification to the user who last entered the selected defect event. The list includes all of the events defined for the workflow in the database. If the last user entered the event in response to a multi-user assignment event, the notification is sent to all users who responded to that event.
- **Send to the following user(s)** sends the email notification to the selected users or customers.

7 Select an **Email Template**.

Remember, users will be able to view all information in the email that is sent. For example, you add a system notification rule that sends an email when a customer reports a defect. Do not select an email template that includes restricted information, such as the defect status or the defect number. You may not want customers to have access to this information.

8 Select **Don't send email if current user made the change** if you do not want the user who made the change to receive an email notification. For example, if JoeQA changes a defect, he probably does not need to be sent an email notifications regarding the status change.

9 Select **Only send email if defect is assigned to current user** if you only want the assigned user who made the change to receive an email notification.

10 Click **OK**.

The rule is added. You return to the Configure System Notification Rules dialog.

Editing system notification rules

1 Click the **Configure** tab then click **System Notification Rules**.

The Configure System Notification Rules dialog box opens.

2 Select a rule and click **Edit.**

3 Make any changes and click **OK**.

Your changes are saved.

Inactivating system notification rules

If there is a rule that is no longer in use, inactivate it instead of deleting it. You can easily activate the rule if you decide to use it again.

1 Choose **Configure > Auto-Notification Rules**.

The Configure System Notification Rules dialog box opens.

2 Click **Configure Rules**.

The Configure Rules dialog box opens.

3 Select a rule and click **Inactivate.**

The rule is inactivated.

Note: To activate an inactive rule, select the rule and click **Activate.**

Deleting system notification rules

Delete rules if you are certain you will not use the rule again. You can also inactivate a rule to disable it.

Note: Make sure you want to delete the rule. You are not prompted to confirm the deletion and this action cannot be undone.

1 Choose **Configure > Auto-Notification Rules**.

The Configure System Notification Rules dialog box opens.

2 Click **Configure Rules**.

The Configure Rules dialog box opens.

3 Select a rule and click **Delete.**

The rule is deleted.

Overriding the workflow

If a defect is assigned to multiple users and events can only be entered by assigned users, the defect can be delayed if a user is out of the office or busy with other tasks. You can override the workflow to move the defect to another state.

1 Select the defect you need to override the workflow for on the Defects List window.

2 Click **Edit**.

All workflow events are disabled after the defect is open.

3 Click the **Override Workflow** link.

The valid workflow events for the current state are enabled.

4 Click the corresponding event link. For example, click **Fix** to add a defect fix.

The defect moves to the resulting state for the selected event. A workflow override entry is added to the workflow tab.

5 Click **Save**.

Evaluating the workflow

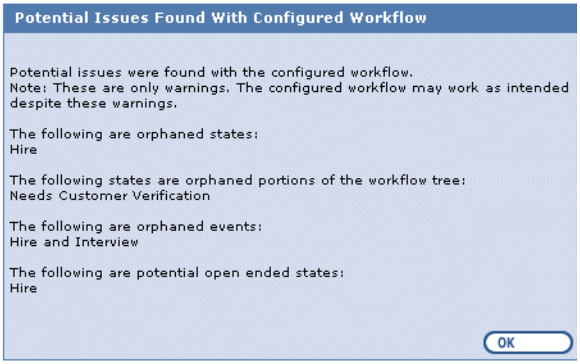
When you customize a workflow, you may find it helpful to periodically evaluate the workflow for potential issues. If any issues are found, you can correct the issues before continuing. For example, if a state is set to only allow assigned users to enter an event for that state, but the state can be reached through an event other than as assign event, it is returned as a potential issue that should be fixed.

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens.

2 Click **Evaluate Workflow**.

The Potential Issues dialog opens. All potential issues are listed on the dialog.



3 Click **OK** to close the dialog.

Graphing the workflow

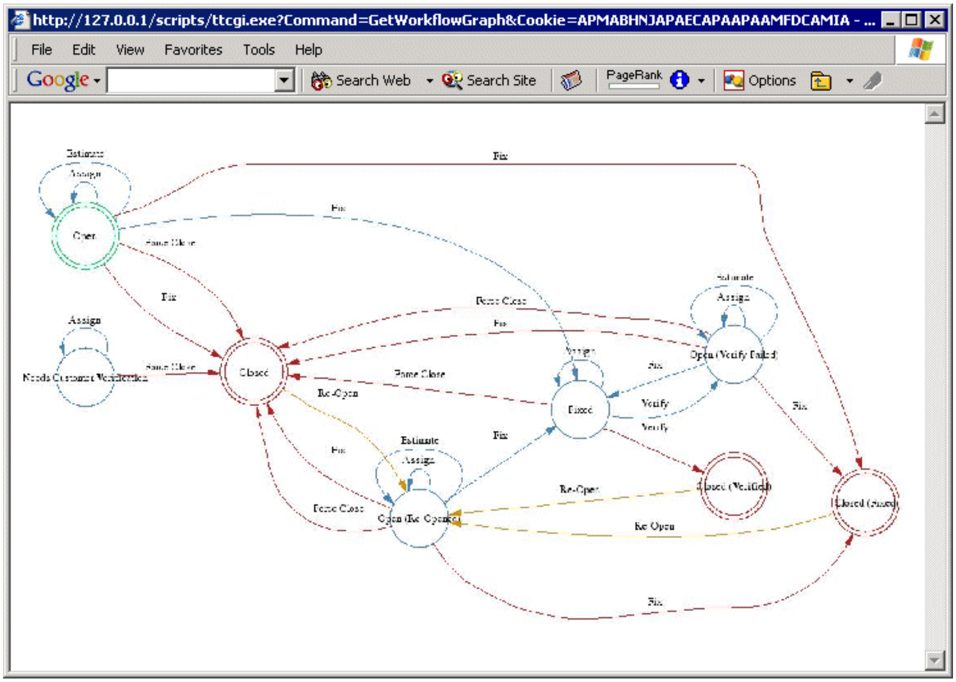
Graph the workflow to view a visual representation of the workflow. This can help you solve issues and quickly view configured states and events the state, events, and transitions.

1 Click the **Configure** tab then click **Workflow Rules**.

The Customize Workflow dialog opens.

2 Click **Graph Workflow**.

A graphical representation of the workflow open in a browser window.

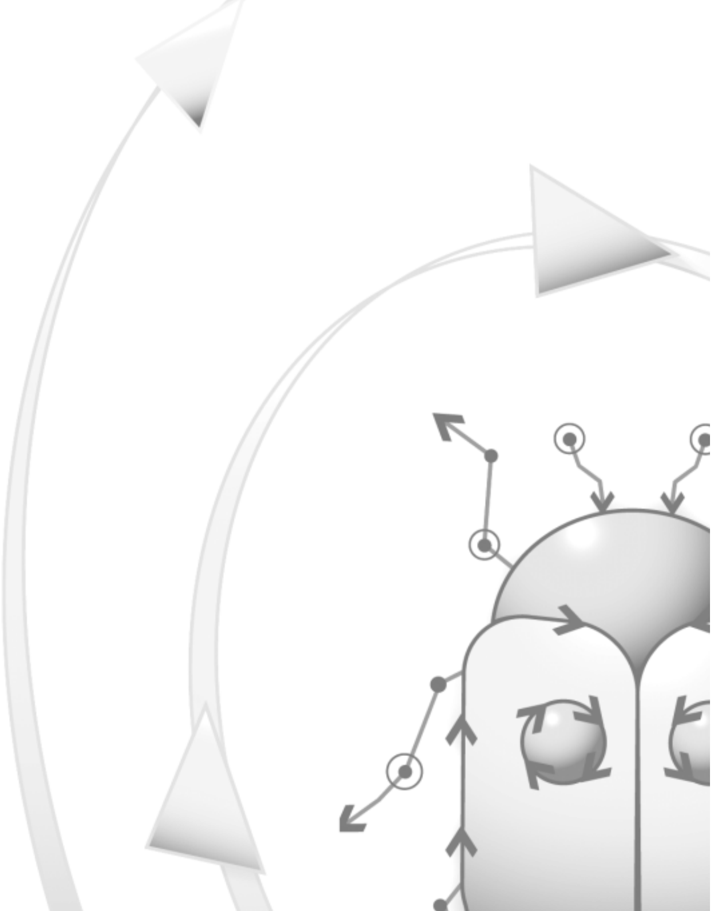


3 Use the browser menu to save or print the file.

Chapter 12
Customizing Fields

Customize fields...

to collect the data you need. The data you collect is one of the most important parts of the defect tracking process. TestTrack Pro lets you customize fields to meet your company's requirements and make sure users are providing the information you need. You can also rename field labels and change existing field data.



Configuring list values

You can configure menu list values to customize TestTrack Pro with your company's terminology. The list values you configure are database-specific. You can configure type names, priority names, severity names, product names, component names, disposition names, reproduced names, and version names.

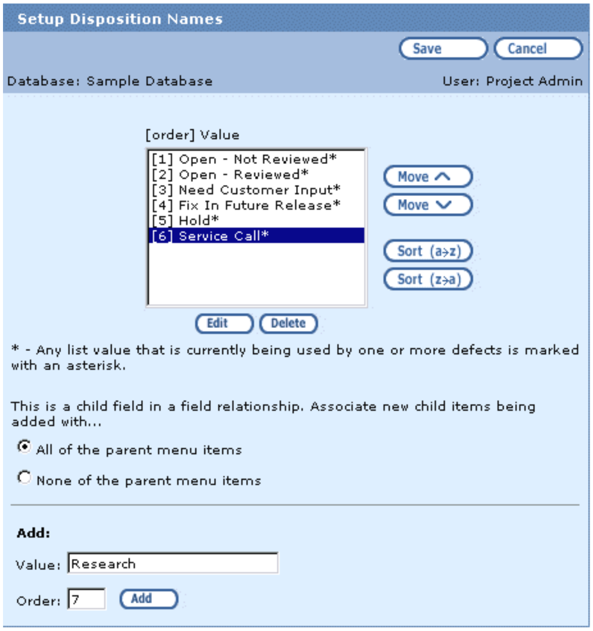
Adding list values

Note: The following example uses Disposition Names. You follow the same steps for all list values.

1 Click the **Configure** tab.

2 Click the corresponding **Edit List Values** link. For this example, click Disposition Names

The Setup dialog opens.



Note: The setup dialog changes based on the type of field being configured. For example, if you add a value to a parent field, you are reminded to configure field relationships for the new value. Likewise, if you add a child field, you can associate the new field value with all or none of the parent values.

3 Enter the **Value**.

4 Enter an **Order** number.

By default, the value is added to the end of the list. Enter a different number to change the order.

5 Click **Add**.

6 Click **Save** when you finish adding field values.

Editing list values

1 Click the **Configure** tab. Click the corresponding **Edit List Values** link.

The Setup dialog opens.

2 Select the value and click **Edit**.

3 Make any changes.

You can edit the value name and the value order.

4 Click **OK**.

5 Click **Save** when you finish editing field values.

Deleting list values

Note: You are not prompted to confirm the deletion. If you delete a list value by mistake, click **Cancel** on the Setup dialog.

1 Click the **Configure** tab. Click the corresponding **Edit List Values** link.

2 Select the value and click **Delete**.

3 Click **Save** to save the changes.

If a database uses field relationships and you delete an item from a menu, you may cause a child field's value to no longer follow field relationship rules. If you try to delete a field that is used in a field relationship, you will receive a warning indicating the action may result in defects that do not follow the field relationship rules.

Configuring custom fields

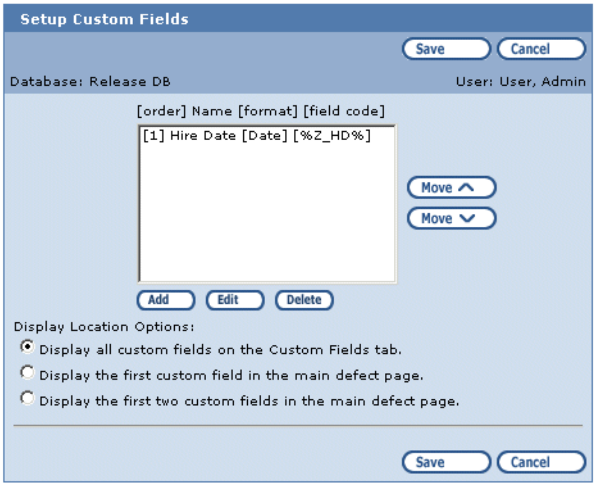
You can add up to 100 custom fields to a database. All custom fields can be displayed on the Custom Fields tab or up to two custom fields can be displayed in the main area of the Add Defect, Edit Defect, and View Defect dialog.

Note: Make sure all users are logged out of TestTrack Pro. You cannot add custom fields if other users are logged in.

Adding custom fields

1 Click the **Configure** tab then click **Custom Fields**.

The Setup Custom Fields dialog opens.

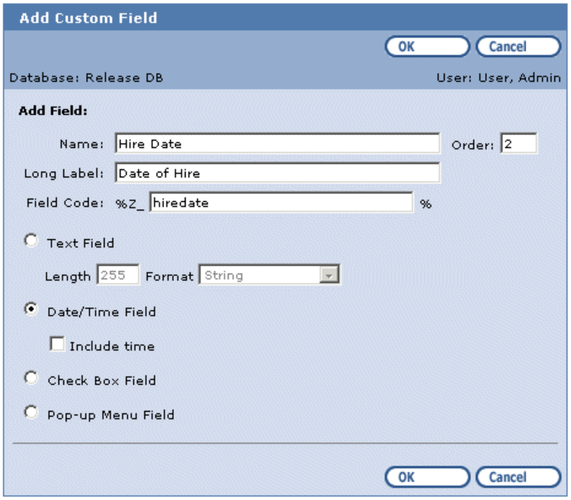


2 Click **Add**.

The Add Custom Field dialog opens.

Note: If you add a field that will be used in a field relationship, make sure you choose **Pop-Up Menu**. You need to restrict the information users can enter.

3 Enter the **Name**.



4 Enter an **Order** number.

By default, the value is added to the end of the list. Enter a different number to change the order.

5 Enter the **Long Label**.

Long labels are displayed in dropdown lists and help users distinguish between the same fields in different events.

6 Enter the **Field Code**.

The field code automatically generates data and lets you use the custom field with email templates, reports, or SoloSubmit.

7 Select **Text Field** to create a text field. Enter the field **Length** and select string, integer, or decimal number from the **Format** menu.

8 Select **Date/Time Field** to create a date/time field. When users select this type of custom field, the current date and time is set. Users can change the date and time.

9 Select **Check Box Field** to create a check box field. The check box custom fields works the same as other check boxes, users select or clear the check box.

10 Select **Pop-up Menu Field** to create a pop-up menu field.

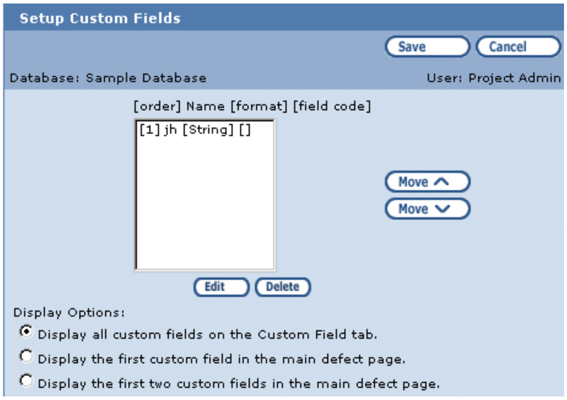
The Setup Custom Pop-up Menu dialog opens. To add values to the popup menu, in the Add area, enter a value and select the order. Click **Add** to add the custom pop-up menu items. Continue this process until all values are added to the custom popup menu.

11 Click **OK**.

You return to the Setup Custom Fields dialog.

12 Select the **Display Options**.

You can display all the custom fields on the Custom Field tab or display up to two custom fields in the main area of the Add, Edit, and View Defect dialogs.



13 Click **Save**.

The custom field is saved.

Editing custom fields

1 Click the **Configure** tab then click **Custom Fields**.

The Setup Custom Fields dialog opens.

2 Select the custom field and click **Edit**.

The Edit Custom Field dialog opens.

3 Make any changes and click **OK**.

You return to the Setup Custom Fields dialog.

4 Click **Save** to save the changes.

Deleting custom fields

Note: You are not prompted to confirm the deletion. If you delete a custom field by mistake, click **Cancel** on the Setup Custom Fields dialog.

1 Click the **Configure** tab then click **Custom Fields**.

The Configure Custom Fields dialog opens.

2 Select the custom field and click **Delete**.

3 Click **Save** to save the changes.

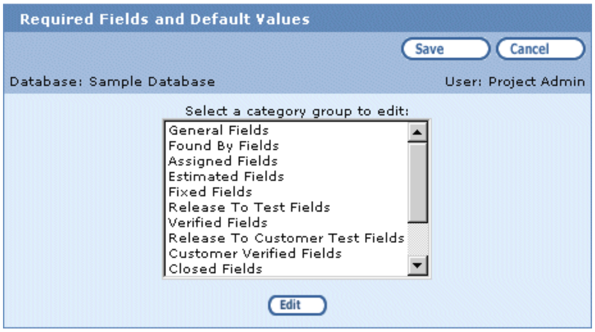
Defining default values

You can define **default field values** for most add defect or defect action fields. The default values and required fields you set are database specific.

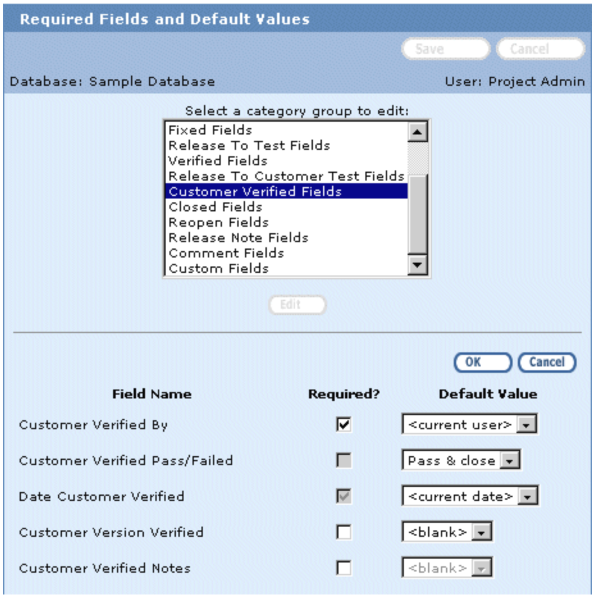
1 Click the **Configure** tab.

2 Click **Required Fields/Default Values.**

The Required Fields and Default Values dialog opens.



3 Select the group from the menu and click **Edit.**



4 To set a default value, select a value from the corresponding **Default Value** menu.

How do default values affect field relationships?

A child field's default value may be invalid, depending on the parent field's default value. If a default value is selected, and it does not follow the defined field relationships, the default value can still be used but the child field's value will no longer follow field relationship rules.

How do hidden fields affect field relationships?

A child field that is hidden can cause unintended changes. If you change a parent field, you may cause a child field's value to no longer follow field relationship rules. Additionally, if the child field is required, any changes that are made cannot be saved.

5 Click **OK** to save your selections.

Defining required fields

TestTrack Pro lets you select any defect or defect action input field, including custom fields, and make it a **required field**. When a field is required, it means a user **must** enter data in that field before TestTrack Pro will add the defect or defect action to the database or save any edit changes.

Required fields are set for all users. Field level security is set for User Groups. For example: A database is set up and the Priority field is required but does not have a default value. A Customer User Group is created and the Priority Field is hidden for both Add and Edit privileges. The Customer User Group can add defects. A customer who belongs to the Customer User Group cannot add a defect. This is because the Priority field is required but the customer cannot set this field. To work around this problem, grant access to the Priority field when adding defects and hide the Priority field when editing defects.

The required field must be populated for all instances of actions. For example: the Found By field is required and does not have a default value. When multiple detail records are created for a single defect, the Found By field must be populated for all of the detail records.

1 Click the **Configure** tab.

2 Click **Required Fields/Default Values**.

The Required Fields and Default Values dialog opens.

3 Select the group from the menu and click **Edit.**

4 To set a required field, select the corresponding **Required?** check box. A field that is set using check boxes and/or radio buttons cannot be set as a required field.

Note: If a field is **always required,** the check box is selected and inactive. If a field **cannot be set** as a **required field,** the check box is not selected and it is inactive.

5 Click **OK** to save your selections.

Configuring field relationships

You can define parent-child field relationships that let you create dependent items in the database. This give you a way to configure the pop-up menus so users can only select values based on the parent-child field relationship. Before you begin configuring field relationships, you should think about how to best utilize this powerful feature.

Configuring field relationships lets you limit menu choices. This helps users input better data and make more logical choices. This also cuts down on having data that does not make sense in the database. When a field is chosen from a list, TestTrack Pro determines if the field has any child relationships. If there is a parent-child relationship, the child field is populated with the values based on the parent's field value.

- The following fields can be set as **parent fields**: type, product, disposition, priority, component, severity, custom fields.
- The following fields can be set as **child fields**: type, product, disposition, priority, component, severity, version found, reproduced, computer config, custom fields.
- The following fields cannot be set as parent or child fields: entered by, found by, fixed by.

Note: A **parent field** can have **one or more** child field relationships. A **child field** can only have **one** parent. A child field can also be the parent of another field.

If a field is chosen as a child field, it is excluded from the child field list. For example, Priority is the child field of Severity. When you set up a new field relationship, you cannot select Priority as the child field.

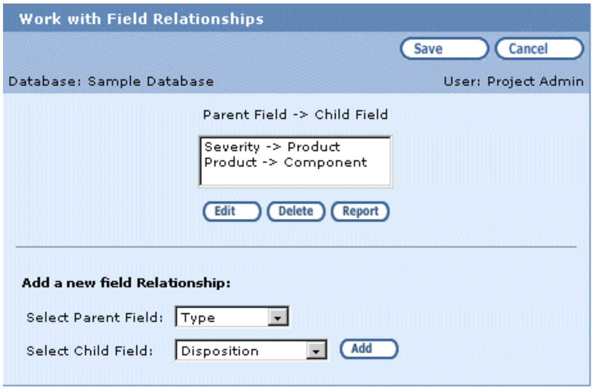
To prevent a circular reference, fields that are a parent or grandparent of the selected parent field are also excluded. For example, Product is the parent field of Component. Component is the parent field of Version. You cannot set Version as the parent field of Product because this creates a circular reference.

Adding field relationships

1 Click the **Configure** tab.

2 Click **Field Relationships**.

The Work with Field Relationships dialog opens.



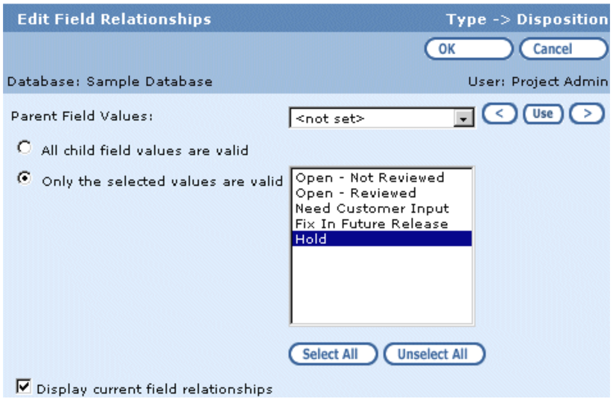
3 Select a **Parent Field** in the Add a Field Relationship area.

4 Select a **Child Field** in the Add a Field Relationship area.

5 Click **Add**.

The Edit Field Relationships dialog opens.

The field relationship you are adding is listed in the top-right of the dialog.



6 Select child field values for each parent field value.

To select specific values select **Only the selected values are valid** then **Ctrl+click** each field.

Note: If your browser does not support JavaScript, click **Use** to refresh the screen.

7 Select the next parent field value from the list or click an arrow to move to the next value.

Repeat **steps 5 - 7** until child field values are set for all parent fields.

8 Click **OK**.

You return to the Work with Field Relationships page.

9 Click **Save**.

What if a database uses default values?
The child field's default value may be invalid, depending on the parent field's default value. If a default value is selected, and it does not follow the defined field relationships, the default value can still be used.

What if a database uses hidden fields?
Hidden fields can cause unintended changes. If a parent field is changed, causing the child field value to be, the child field may be changed to **<not set>**, depending on database options. Additionally, if the child field is required, any changes that are made cannot be saved.

Editing field relationships

1 Click the **Configure** tab then click **Field Relationships**.

The Work with Field Relationships dialog opens.

2 Select a field relationship you want to change and click **Edit**.

The Edit Field Relationships dialog opens.

3 Make any changes and click **OK**.

You return to the Work with Field Relationships page.

4 Click **Save**.

Generating field relationships report

You can generate an HTML report to view all parent fields values and valid child values.

1 Click the **Configure** tab then click **Field Relationships**.

The Work with Field Relationships dialog opens.

2 Select a field relationship and click **Report**.

The report opens in a browser window.

Print

Field Relationships Report: Type -> Product

'Type' Field Value	Valid 'Product' Field Value
<not set>	All Fields
Crash - Data Loss	All Fields
Crash - No Data Loss	All Fields
Incorrect Functionality	All Fields
Cosmetic	All Fields
Feature Request	All Fields
Type	All Fields

3 Click **Print** to print the report.

4 Close the browser window to close the report.

Deleting field relationships

Note: You are not prompted to confirm the deletion. If you make a mistake, click **Cancel**. The changes you made are not saved.

1 Click the **Configure** tab.

2 Click **Field Relationships**.

3 Select a field relationship and click **Delete**.

You return to the Work with Field Relationships page.

4 Click **Save**.

Renaming field labels

You can rename defect field labels to match your company's terminology. This can help you customize your tracking system and decrease user confusion. Renaming a field does not change the functionality or format of the field. It only changes the label displayed in TestTrack Pro.

For example, your company might use case numbers. By renaming reference to case number, your users will know exactly where to enter the information. Maybe your company refers to issue instead of defects? You can rename all instances of defect (Defect, defects, defect(s), etc.) to issue. If you are a service-oriented organization, and use the Custom Fields tab to track service issues, rename the tab to Service.

- The following field labels can be renamed: Summary, Type, Disposition, Priority, Product, Component, Reference, Severity, Entered By, Date Entered, Status, Found By, Date Found, Date, Version Found, Version, Description, Reproduced, Steps to Reproduce, Computer Config, and Other Hardware and Software. The Custom Fields tab label can also be renamed.
- The following words can also be renamed: Defect / defect, Defects / defects, Defect(s) / defect(s).
- The following field labels **cannot** be renamed: Attachments, Workaround, Notify tab, History tab, and SCC fields.

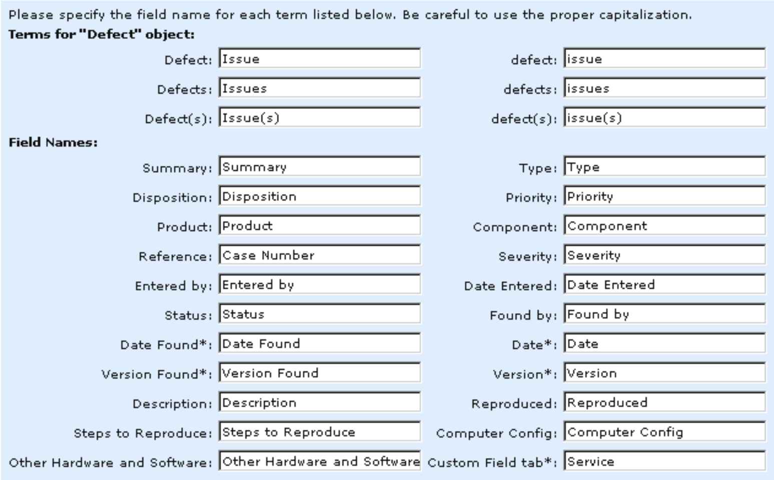
Date is the short form of Date Found and Version is the short form of Version Found. If you rename these field labels, use the same terminology. The short and long field names are both used. The short name is used to allow fields to fit in the user interface. For example, the Version field is on the Detail tab of the Add Defect window. This field corresponds to Version Found but Version fits in the user interface.

1 Click the **Configure** tab.

2 Click **Rename Field Labels**.

The Rename Field Labels dialog opens.

3 Enter new field names for the labels you want to rename.



Note: Field labels cannot be resized in TestTrack Pro Client and must be 32 characters or shorter. Field labels that do not fit are truncated.

4 When you finish, click **OK**.

Your changes are saved and the database is updated with the new field labels. When you rename fields labels, it is possible that changes will only be visible in the Windows client. To ensure customized field labels are used by both the Windows and Web clients, do one of the following:

- TestTrack Pro can automatically update the corresponding Web graphics with the new field names. To enable this option, click the **Configure** tab, then click **Database Options**. Select **Replace graphics if Field Names are customized** on the **General** tab selected. Do not select this option if you use custom graphics for renamed fields.
- You can provide custom graphics. Image files are located in the following directory: **Inetpub/wwwroot/ttweb/images**. Most graphics include two images, one for a selected tab and one for a non-selected tab.

Restoring original labels

You can restore the field labels to their original values at any time.

1 Click the **Configure** tab.

2 Click **Rename Field Labels**.

3 Click **Restore to Original Values**.

The field labels revert to the original values.

4 Click **OK** to save the changes. If you do not want to save the changes, click Cancel.

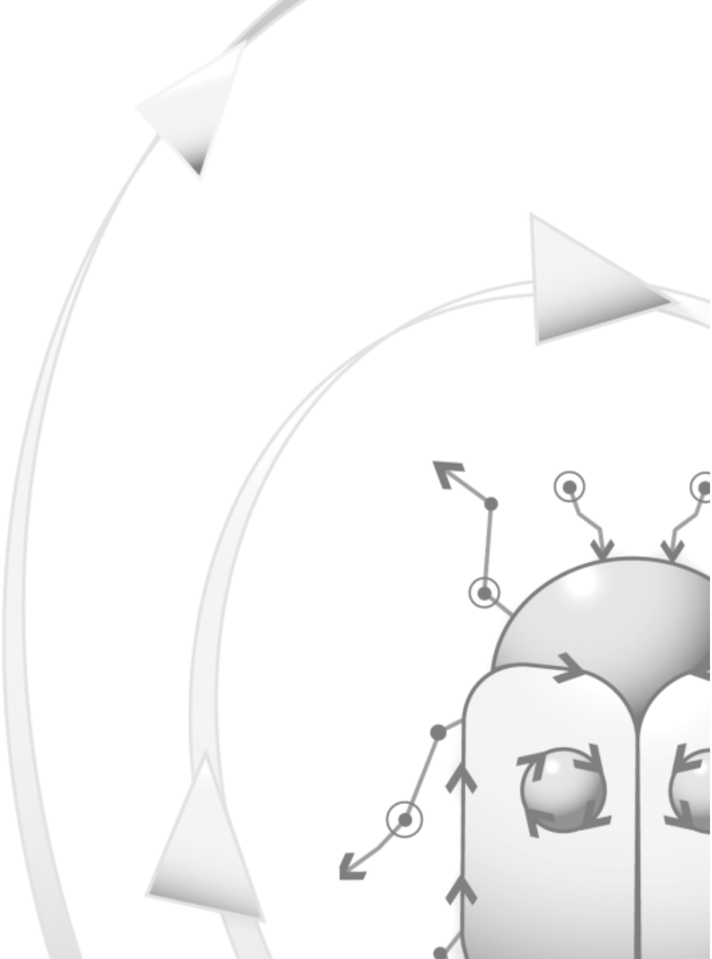
Field label exceptions

- Changes you make to field labels do not show up in SoloBug. Because it is a stand-alone product, SoloBug is not necessarily associated with one database. Field names can be changed when you customize the SoloBug executable.
- Field codes do not change. For example, Disposition (%DISP) is renamed to Substatus. To include the Substatus data in an email template, use %DISP%. For more information, see **Label field codes,** page 179.
- Database columns are not renamed. When you use the ODBC driver, you need to use the original field name in your queries.

Chapter 13
Managing User Groups

Safe and Secure!

User groups are your key to security. You can create different user groups to handle all of your company's security needs.



About user groups

A user group is a collection of users who share responsibilities and perform similar tasks. In order to access a database, each user must be assigned to a user group.

When you set up a database, create the user groups **first**. This lets you create a **security structure** for the users. You may find it helpful to create a table that lists the type of users accessing the database and what their needs are. You can add as many or as few user groups as you need, and make their security levels as general or as specific as you need.

You can create the following structure and name the user groups according to security level:

User Group Name	Security Level	Commands Granted
Level 1	Low	View
Level 2	Medium	View, Add
Level 3	High	View, Add, Edit
Level 4	Highest	View, Add, Edit, Delete

Or you can use the same structure and name the user groups according to job description:

User Group Name	Security Level	Commands Granted
Tech Writer	Low	View
Engineer	Medium	View, Add
QA Tester	High	View, Add, Edit
Manager	Highest	View, Add, Edit, Delete

Note: If you want **all** users to have access to **all** commands, you do not have to create user groups! TestTrack Pro adds an Administration user group when a database is created. This user group has access to every command. Simply add the users to this default user group.

User groups and security

TestTrack Pro security is assigned at the user group level. Each user group can be assigned different levels of security. You can create an unlimited number of security groups and levels. Security determines what databases users can access, what their view and edit rights are for authorized projects (on a per-field level), and what they can do at each stage of the workflow process. For example, deleting defects, or attaching files are all privileges that can be assigned to a user group.

Command security

Command security limits the commands a group of users can execute. Command security includes the following categories: General, Administration, Defects, Customers, Users, User Groups, Test Configurations, Filters, Reports, and Workbook.

It is obvious how most of the command-level security options work. For example, the Add Customer command determines if a user can access the Add Customer dialog. There are other command-level security options that require more explanation.

- Edit User security lets a user edit user information for every TestTrack Pro user. The Edit Own General User Settings and Edit Own Notifications options let users set their own options only.
- Edit Own General User Settings security determines if a user can view the General tab on the User Options dialog box. This tab lets the user set their own TestTrack user options.
- Edit Own Notifications security determines if a user can view the Email tab on the User Options dialog box. This tab lets the user set their own email notification options.
- Configure SCC DB Options security determines if a user can view the Database Options tab and the Project Paths tab on the Configure SCC Integration dialog box. Any changes made to the options on these two tabs affect all users in the TestTrack database.
- See SCC Tab security determines if a user can view the Source Code tab on the Add/Edit Defect window. This option only lets the user view the SCC actions that have already been performed; it does not provide security access to perform SCC actions. If a user does not have See SCC Tab security or Configure SCC DB Options security, then the Configure SCC Integration menu option is also disabled because these options do not apply.
- Perform SCC Actions security determines if a user can perform SCC actions such as check in and check out. Because these actions can only be performed from the Source Code tab of the Add/Edit Defect window, the user also needs the See SCC Tab security.

Defect security

Defect security restricts the defects visible to the user group based on an existing filter and/or whether the user reported the defect. Defects that do not pass the filter are not displayed in the defect list or included in reports.

For example, you have a group of managers who only need information about feature requests. Select the **Open Feature Requests** filter for this group. The managers can only view defects that meet the filter criteria.

Field security

Affects defects and defect actions and restricts a user's ability to enter, or edit, field data. For example, Can a user enter a resolution in the fix defect action?

Three types of field security can be assigned: **Read/Write**, **Read Only**, and **Hidden**. In addition, **Add** and **Edit** privileges are set separately. For example, assign a restricted user group read/write add privileges for the Type field. Assign the same user group read only edit privileges for the Type field. When adding a new defect, users can enter information for the type field. When editing a defect, users can view the Type field but will not be able to make any changes.

Security can be assigned to the following fields: General, Found By, Assigned, Estimated, Fixed, Release to Test, Verified, Release to Customer Test, Customer Verified, Closed, Reopen, Release Notes, Comment, and Custom fields.

Field security **cannot** be applied to the following areas: email templates, SoloSubmit, SoloBug, and import/export.

System-generated fields **cannot** be assigned field security. This includes the following fields: defect number, defect status, has attachments?, has workaround?, date created, created by, creation method, date last modified, last modified by, found by group, found by company, how many?, and has release notes?

This example shows how to use Add privileges to set up field security:

Assign the Department Manager group Read/Write access to the Priority field. Users in the Department Manager group can set the priority level.

Assign the Programmer group Read Only access to the Priority field. Users in the Programmer group can view, and not edit, the priority level.

Assign the Customer group Hidden access to the Priority field. Users in the Customer group cannot view the priority level assigned to defects.

Adding user groups

1 Click the **User Groups** tab.

The Work with User Groups page opens.

2 Click **Add**.

The Add User Group dialog opens.

3 Enter a **Name** and **Description**.

This information is required.

4 Click the **Users** tab to add users to the group.

5 Select **Include users in pop-up menus** to list users in pop-up menus.

Clear the check box if the user group is intended for users who only report defects and do not need to be assigned any defect actions.

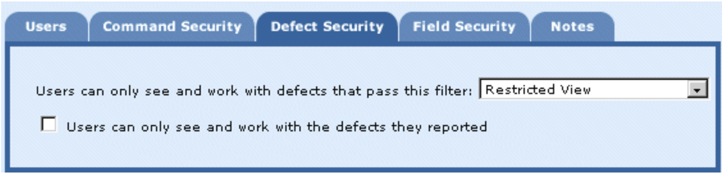
6 Select **Include customers in pop-up menus** to list the customers in pop-up menus.

Clear the check box if the user group is intended for customers who only report defects and do not need to be assigned any defect actions.

7 Click the **Command Security** tab and set the security for each category.

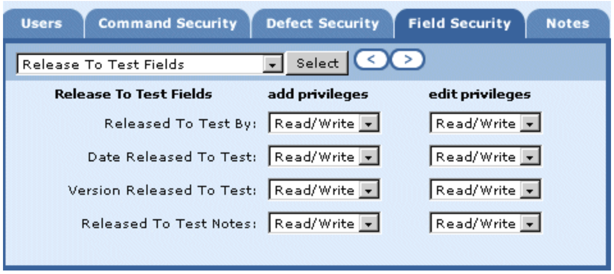
Select a check box to enable access to a command. Clear the check box to restrict access.

8 Click the **Defect Security** tab and set the defect security for this group.



9 Click the **Field Security** tab and set field security for this group.

- Use the page arrows to move through the field categories or select a field category from the list and click **Select**.
- Be sure to set **Add** and **Edit** privileges for each field.



Note: A field can be represented by an edit box, check box, radio button, or a list box. Remember, setting field security affects **all** field types.

10 Click the **Notes** tab and enter any information about the user group.

11 Click **Save**.

The user group is added to the database.

Viewing user groups

1 Click the **User Groups** tab.

2 Select the user group and click **View**.

The View User Group dialog opens. All fields are read-only.

Editing user groups

1 Click the **User Groups** tab.

2 Select the user group and click **Edit**.

3 Make any changes and click **Save**.

Your changes are saved and you return to the Work with User Groups page.

Duplicating user groups

If you are adding users groups with similar functions, you can save time by duplicating and modifying a user group.

1. Click the **User Groups** tab.
2. Select the user group and click **Duplicate**.

   The user group is duplicated.
3. Modify the user group and save your changes.

Deleting user groups

1. Click the **User Groups** tab.
2. Select the user group and click **Delete**.

   You are prompted to confirm the deletion.
3. Click **Delete**.

   The user group is deleted.

Chapter 14
Managing Users

Defect, defect, who has the defect?

Users, the people who find, fix and verify defects—who found it, who fixed it, who should be verifying it? By tracking users, TestTrack Pro improves your internal communications and accountability.

About users

TestTrack Pro includes global and local users. Users can be created using the license server admin utility or TestTrack Pro. Global users have access to all databases and can be created using the license server admin utility or in TestTrack Pro. Local users cannot log in to TestTrack Pro and can only be created in TestTrack Pro. The Users list window provides an overview of the users and includes a Type column that shows which users are local and which users are global.

What is a local users?

Local users cannot access databases and cannot login to TestTrack Pro. Local users are created when bugs are submitted via SoloBug or SoloSubmit. You can also create local users for tracking purposes. For example, if there is an issue that you need to communicate with a user about, you can add the customer as a local user.

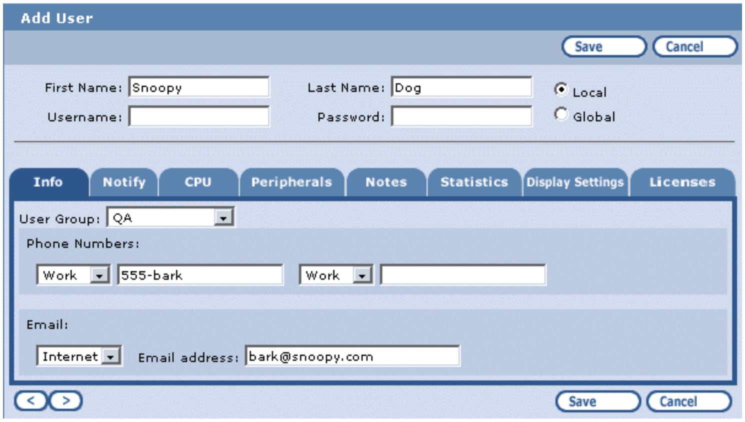
Adding users

1 Click the **Users** tab.

The Work with Users page opens.

2 Click **Add**.

The Add User dialog opens with the Info tab selected.



3 Select **Local** to add the user to the current database. This option creates a local user.

4 Select **Global** to add the user to all databases. This option creates a global user, whose demographic information is stored on the license server.

5 Enter the user information.

You must enter a **First Name**, **Last Name**, and **Username**.

6 Enter the information on the **Info** tab.

You **must** select a user group. All other information is optional.

Note: Make sure you accurately enter the user's email address. Email notifications are sent to this address.

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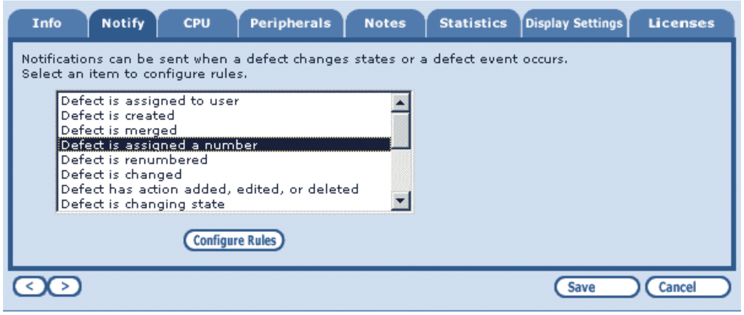
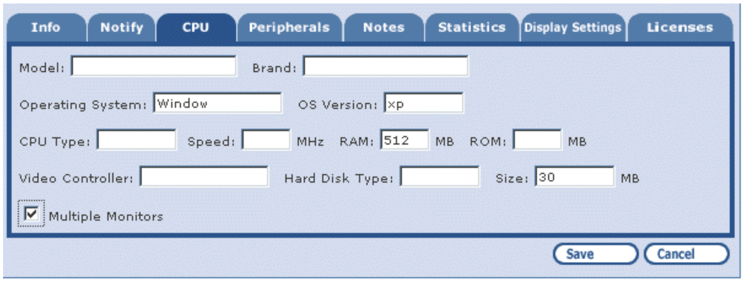
7 Click the **Notify** tab to select email notification options.

Click **Configure Rules** to configure the user notification rules for each state a defect moves into. See **Configuring user notification rules,** page 149 for more information.



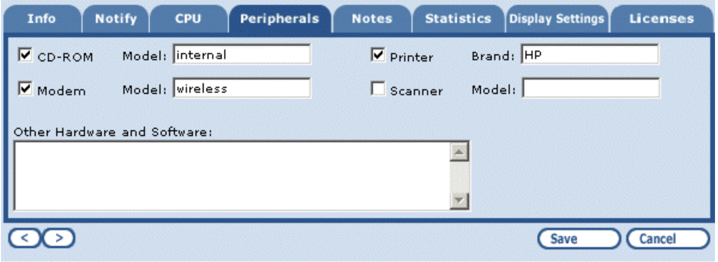
8 Click the **CPU** tab and enter the CPU information.

These fields are optional but you should enter as much information as possible.



9 Click the **Peripherals** tab and enter the peripherals information.

These fields are optional but you should enter as much information as possible.



10 Click the **Notes** tab and enter any notes about the user.

11 Skip the **Statistics** tab.

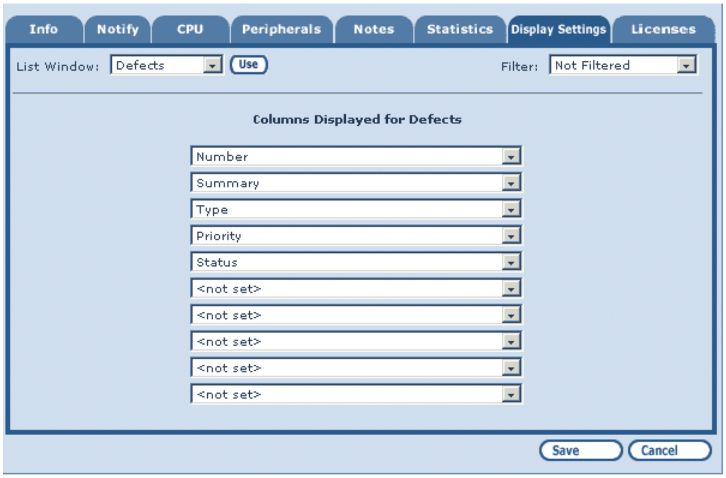
This read-only tab contains user statistical information.

12 Click the **Display Settings** tab.

You can control the amount of data displayed by limiting the columns on the list windows. In addition, you can specify a filter for the Defects list window. TestTrack Pro performance can be negatively affected when databases contain a large number of records because it can take a long time for TestTrack Pro to populate the Defects list window. Users cannot change the settings.

- To filter the Defects list window, select a filter from the **Filter** menu.
- Select the columns you want to display from the **Columns Displayed for Defects** menu.

Note: If your browser does not support JavaScript, click **Use** to refresh the screen.



13 When you finish entering the user information, click **Save**.

The user is added to the database.

Adding global users

Global users, which reside on the license server, can be associated with the current database. After a global user is added to the current database, they are displayed in the Users list window. If the user is assigned a named or floating license, they can also login and work with TestTrack Pro.

1 Click the **Users** tab.

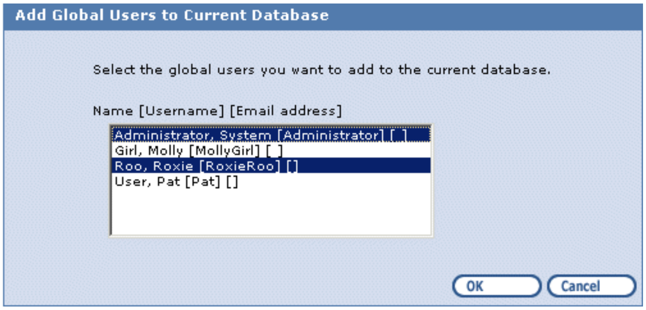
The Work with Users page opens.

2 Click **Add Global**.

The Add Global Users to Current Database dialog opens.

3 Select the user you want to add to the current database.

You can select more than one user.



4 Click **OK**.

The global user is added.

Configuring user notification rules

Email notifications can be configured for each state defined for defects. Notifications, which are not the same as assignments, simply inform a user of the event change. Notification rules are based on actions and administrator-defined state changes. The notification rules are run to determine if an email should be sent when a defect moves into a corresponding state.

Adding notification rules

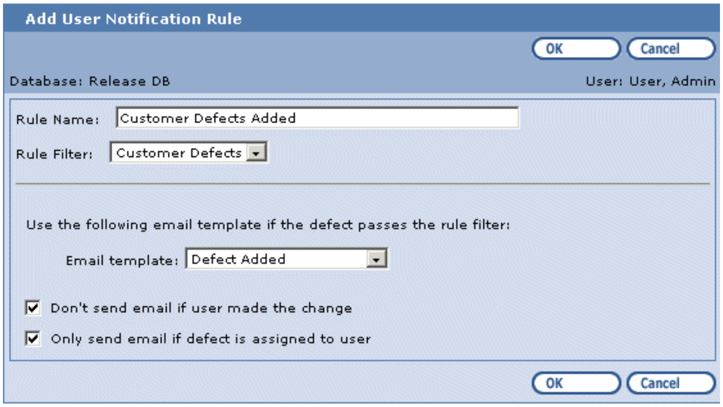
1 Click the **Notify** tab when you are adding or editing a user.

2 Click **Configure Rules**.

The Configure User Notifications Rules dialog box opens.

3 Click **Add**.

The Add Notification Rule dialog box opens.



4 Enter a **Rule Name**.

5 Optionally select a **Rule Filter**.

If a database contains a large number of defects, you may want to filter the defects the rule is applied to. If you need to add filters, see **Creating filters,** page 56.

6 Select an **Email Template**.

7 Select **Don't send email if user made the change** if you do not want the user who made the change to receive an email.

8 Select **Only send email if defect is assigned to user** if you only want an email sent to the assigned user.

9 Click **OK**.

You return to the Configure User Notification Rules dialog. Click **Add** to add another rule or click **OK** to return to the User dialog.

Editing user notification rules

After rules are added, you can easily tell how many rules are setup and enabled for an email notification. Edit a user and click the **Notify** tab. If rules are configured for a notification, the number of rules and the number of enabled rules are listed after the notification.

1 Click the **Users** tab.

2 Select the user and click **Edit**.

3 Click the **Notify** tab.

4 Click **Configure Rules**.

5 Select the rule and click **Edit**.

The Edit Notification Rule dialog box opens.

6 Make any changes and click **OK**.

Your changes are saved.

Inactivating user notification rules

Instead of deleting a user notification rule, inactivate it. You can then activate the rule to use it again.

1 Click the **Users** tab.

2 Select the user and click **Edit**.

3 Click the **Notify** tab.

4 Click **Configure Rules**.

5 Select the rule and click **Activate/Inactivate**.

The rule is inactivated.

6 Click **OK**.

Note: To activate an inactive rule, select the rule and click **Activate/Inactivate.**

Deleting user notification rules

Make sure you want to delete the rule. You are not prompted to confirm the deletion and this action cannot be undone.

1 Click the **Users** tab.

2 Select the user and click **Edit**.

3 Click the **Notify** tab.

4 Click **Configure Rules**.

5 Select the rule and click **Delete**.

The rule is deleted.

Viewing users

1. Click the **Users** tab.

2. Select the user and click **View**.

   The read-only View User dialog box opens. Click the tabs to view the user information.

3. Click **Done** when you are finished.

Editing users

1. Click the **Users** tab.

2. Select the user and click **Edit**.

   The Edit User dialog opens.

3. Make any changes and click **Save**.

   Your changes are saved.

Duplicating users

If you are adding users with the same basic information, you can save time by duplicating and modifying a user.

1. Click the **Users** tab.

2. Select the user and click **Duplicate**.

   The user is duplicated.

3. Modify the user information and save your changes.

Promoting users

Local users can be promoted to global users and made available to all databases. Promoting users moves the shared demographic information from the TestTrack Pro server to the license server. When a user is promoted, you can either create an entirely new global user or you can use an existing user record on the license server. For example, a global user named Joseph User is created. A local user named Joe User is also created. These are the same user, with a difference in the first name. Joe User can be promoted as Joseph User. The local user information is discarded and replaced with the global user information.

1. Click the Users tab.

2 Select a local user and click **Promote**.

The Promote User dialog box opens.

3 Enter a **Username**.

4 Select a **Promote As** user.

If the local user's first and last name matches an existing global user, that matching user is automatically selected as the **Promote As** user. The user can also be promoted as a new global user.

5 Click **OK**.

The user is promoted.

Making a customer a user

Use this command if you made a mistake and entered a user as a customer.

1 Click the **Customers** tab.

The Work with Customers page opens.

2 Select the customer and click **Make User**.

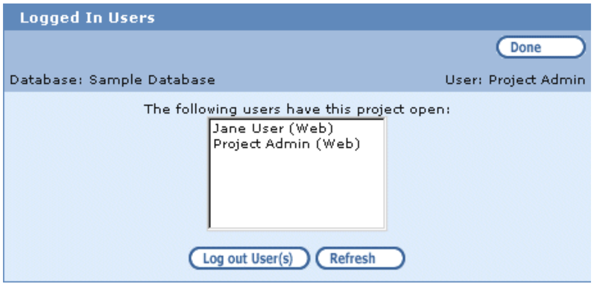
The customer is converted to a user and added to the Users list. Give the user a username and password and add the user to a user group.

Viewing logged in users

To view the users who are currently logged in to the database you are using:

1 Click the **Configure** tab then click **Logged In Users**.

The Logged In Users dialog opens.



Logging out users

Users require licenses to run TestTrack Pro. If a user does not exit TestTrack Pro correctly, the license is not released. When this happens, you can free the license by logging out the user.

You can also log out users if you need to perform maintenance or make changes that require all users to be logged out.

1 Click the **Configure** tab then click **Logged In Users**.

The Logged In Users dialog opens.

2 Select the user(s) you want to log out and click **Log out User(s)**.

The user(s) is logged out.

Deleting users

Deleting a user can result in loss of historic information, such as reported by and defect action information.

1 Click the **Users** tab.

2 Select the user and click **Delete**.

You are prompted to confirm the deletion.

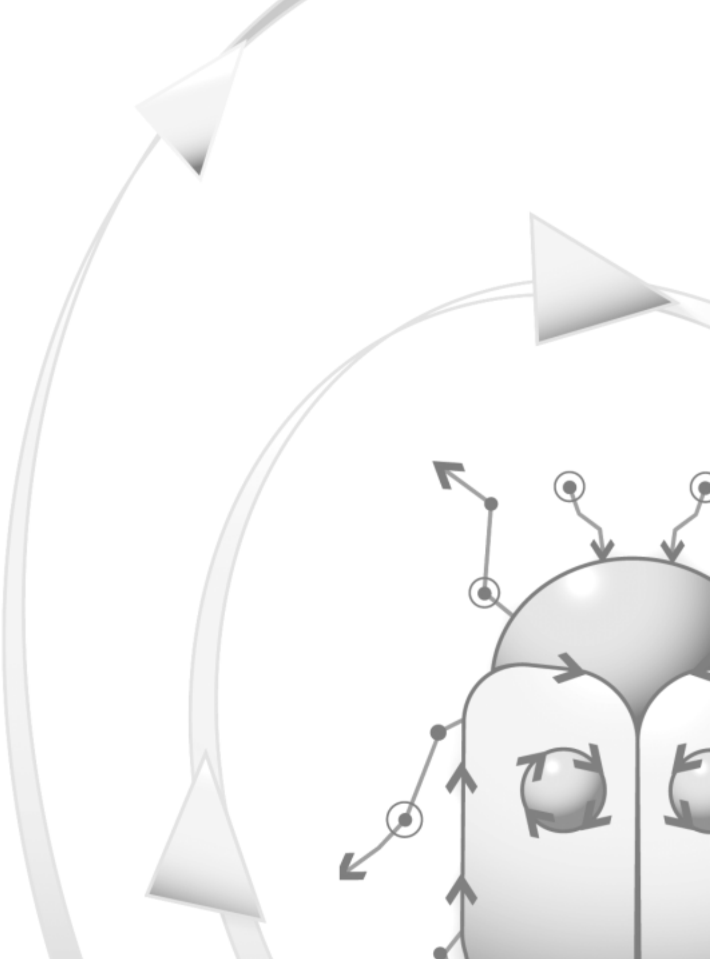
3 Click **Delete**.

The user is deleted.

Chapter 15
Managing Customers

Customers—your most valuable asset!

Customers provide valuable feedback in the form of bug reports, feature requests, and questions. TestTrack Pro makes it easy to track customers and the issues they report.



About customers

Customers are generally the end-users of your products or services. Unlike users, customers usually do not have access to the database. TestTrack Pro includes global and local customers. Customers can be created using the license server admin utility or TestTrack Pro. Global customers have access to all databases and can be created using the license server admin utility or in TestTrack Pro. Local customers cannot log in to TestTrack Pro and can only be created in TestTrack Pro. The Customers list window provides an overview of the users and includes a Type column that shows which customers are local and which customers are global.

Adding customers

1 Click the **Customers** tab.

The Work with Customers page opens.

2 Click **Add**.

The Add Customer dialog opens.

3 Select **Local** to add the customer to the current database. This option creates a local customer.

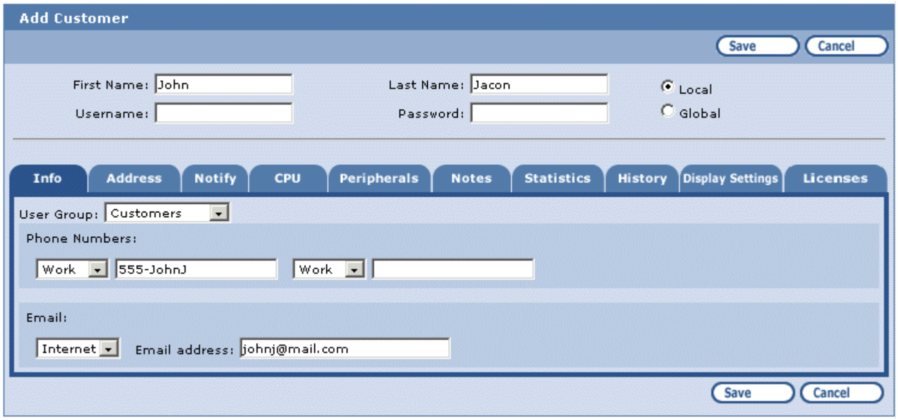
4 Select **Global** to add the customer to all databases. This option creates a global customer, whose demographic information is stored on the license server.

5 Enter the customer information.

You must enter a **First Name** and **Last Name**. To enable database access, enter a **Username** and **Password**.

6 Enter the information on the **Info** tab.

You must select a user group if you want the customer to have database access for this customer.



7 Click the **Address** tab and enter the address information.

Enter the company name and address. Select **Beta Test Site** if the customer is going to be a beta site.

8 Click the **Notify** tab to select email notification options.

Click **Configure Rules** to configure the notification rules for each state a defect moves into. See **Configuring user notification rules,** page 149 for more information.

9 Click the **CPU** tab and enter the CPU information.

10 Click the **Peripherals** tab and enter the peripherals information.

11 Click the **Notes** tab and enter any notes.

12 Skip the **Statistics** tab. This read-only tab contains customer statistical information.

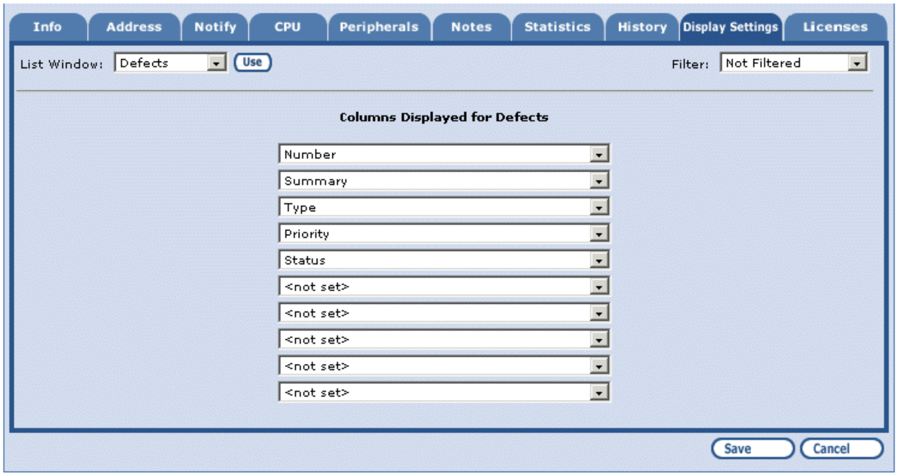
13 Skip the **History** tab. This read-only tab contains information about defects the customer reported.

14 Click the **Display Settings** tab.

You can control the amount of data displayed by limiting the columns on the list windows. In addition, you can specify a filter for the Defects list window. TestTrack Pro performance can be negatively affected when databases contain a large number of records because it can take a long time for TestTrack Pro to populate the Defects list window.

- To filter the Defects list window, select a filter from the **Filter** menu.
- Select the columns you want to display from the **Columns Displayed for Defects** menu.

Note: If your browser does not support JavaScript, click **Use** to refresh the screen.



15 When you finish entering the customer information, click **Save**.

The customer is added to the database.

Adding global customers

Global users, which reside on the license server, can be associated with the current database. After a global user is added to the current database, they are displayed in the Users list window. If the user is assigned a named or floating license, they can also login and work with TestTrack Pro.

1 Click the **Customers** tab.

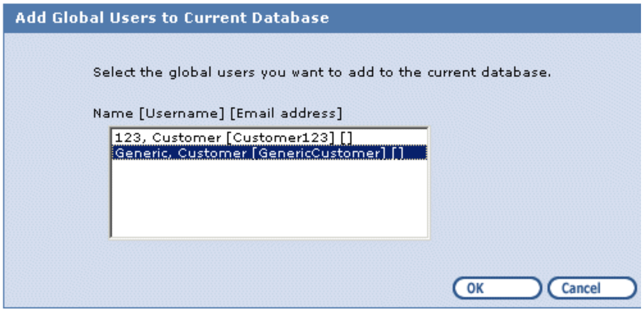
The Work with Customers page opens.

2 Click **Add Global**.

The Add Global Users to Current Database dialog opens.

3 Select the customer you want to add to the current database.

You can select more than one customer.



4 Click **OK**.

The global customer is added.

Viewing customers

1 Click the **Customers** tab.

2 Select the customer and click **View**.

The read-only View Customer dialog opens. Click the tabs to view the customer information.

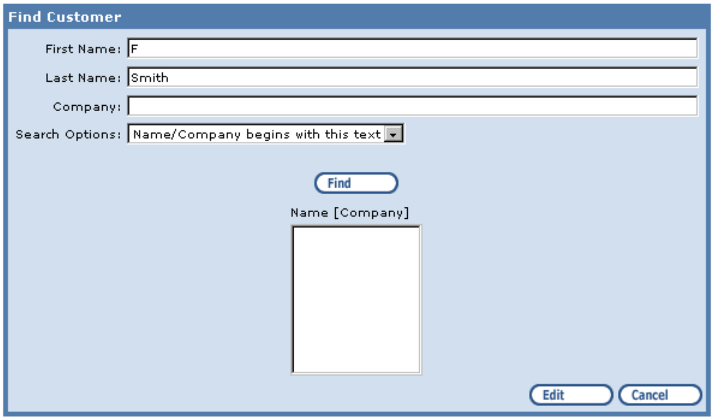
3 Click **Done** when you are finished.

Searching for customers

Most databases include a large number of customers. Searching provides an easy way to find a customer and edit their information.

1 Click the **Search** command button on the Customers list window.

The Find Customer dialog opens.



2 Enter the search criteria.

- Enter full, or partial, first name, last name, and company information.
- Leave a field blank if you do not want to include it in the search.

3 Select an option from the **Search Options** menu.

- **Name/Company begins with this text** looks for values beginning with the entered text.
- **Name/Company contains this text** looks for values containing the entered text.

4 Click **Find**.

Customers that match the search criteria are displayed in alphabetical order.

5 Select a customer and click **Edit** to modify their information.

For more information, see **Editing customers,** page 160.

For example, you are looking for a customer whose last name is Smith. You think his first name is either Frank or Fred. Enter an **F** in the **First Name** field and **Smith** in the **Last Name** field. Leave the **Company** field blank. Select **Name/Company begins with this text.** Click **Find.** All customers whose first name begins with F, and whose last name is Smith, are displayed.

Editing customers

1 Click the **Customers** tab.

2 Select the customer and click **Edit**.

The Edit Customer dialog opens.

3 Make any changes and click **Save**.

Your changes are saved.

Duplicating customers

If you are adding customers with the same basic information, you can save time by duplicating and modifying a customer.

1 Click the **Customers** tab.

2 Select the customer and click **Duplicate**.

The customer(s) is duplicated.

Modify the customer information and save your changes.

Promoting customers

Local customers can be promoted to global customers and made available to all databases. Promoting customers moves the shared demographic information from the TestTrack Pro server to the license server. When a customer is promoted, you can either create a new global customer or you can use an existing customer record on the license server.

1 Click the **Customers** tab.

2 Select the customer and click **Promote**.

The Promote Customer dialog box opens.

3 Enter a **Username**.

4 Select a **Promote As** user.

If the local customer's first and last name matches an existing global customer, that matching customer is automatically selected as the **Promote As** customer. The customer can also be promoted as a new global customer.

5 Click **OK**.

The customer is promoted.

Making a user a customer

Use this command if you made a mistake and entered a customer as a user.

1 Click the **Users** tab.

2 Select the user and click **Make Customer**.

The user is converted to a customer and added to the customers list.

Deleting customers

Deleting a customer can result in loss of historic information, such as reported by and defect action information.

1 Click the **Customers** tab.

2 Select the customer and click **Delete**.

You are prompted to confirm the deletion.

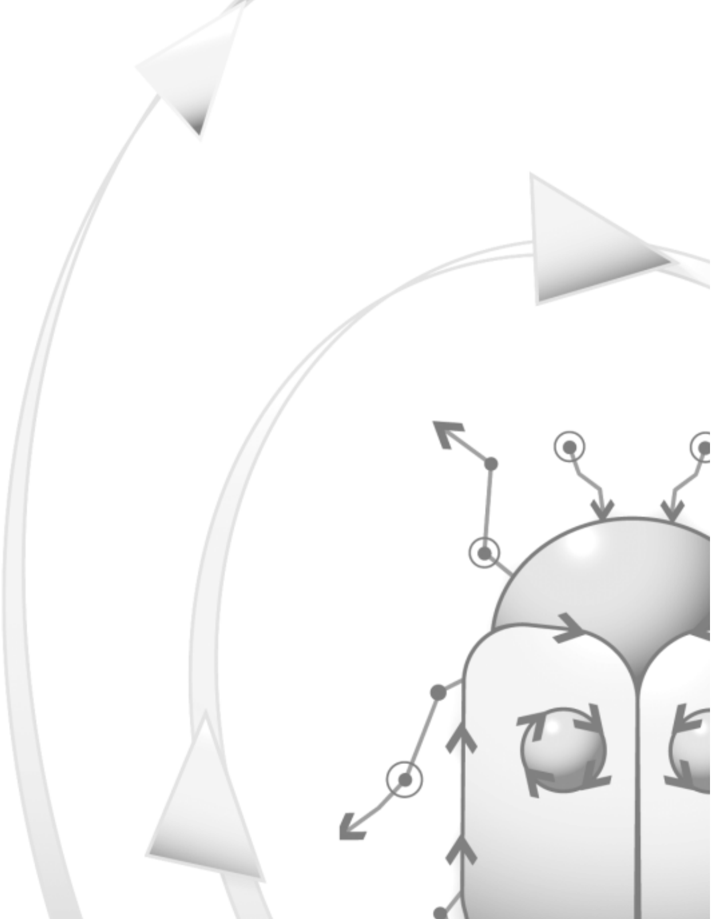
3 Click **Delete**.

The customer is deleted.

Chapter 16
Importing and Exporting Files

Save time...

…and learn how to import or export record information. TestTrack Pro lets you easily import or export data using XML or text files.



About XML import/export

XML import/export includes the following advantages:

- You do not need to match fields when importing or exporting records.
- You can import and/or export multiple **Reported By** records.
- You can import and/or export multiples of the same defect actions.
- You can import and/or export more than one record type. For example, you can import/export defects and users in a single file.

Importing XML files

Note: Import security access should be limited to administrative user groups. The misuse of this feature can result in a significant number of unwanted records in your database. The system administrator grants access to import/export commands.

1 Click **XML Import** on the Defects, Customers, User Groups, or Test Configs tab.

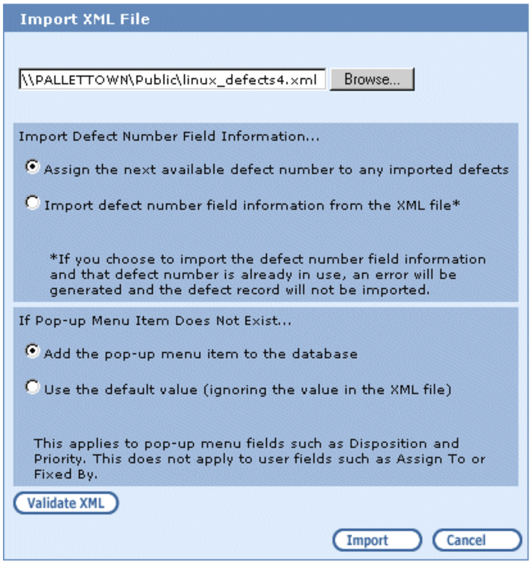
The Import XML dialog opens.

2 Click **Browse** to select an XML file to import.

The Choose File dialog box opens.

3 Select the file and click **Open**.

You return to the Import XML dialog.



4 Select the **Defect Number Import** options.

- **Assign the next available defect number** automatically assigns the next available defect number for each defect being imported.
- **Import defect number field information** imports defect number information from the XML file. If the defect number already exists, an error will be generated and the defect record will not be imported.

Note: These options may be disabled depending on your database options.

5 Select the **Pop-up Menu Item** options.

These options apply to pop-up menu fields such as **Disposition** and **Priority** and do not apply to user fields.

- **Add the pop-up menu item to the database** automatically adds the pop-up menu item to the database.
- **Use the default value** uses the default value and ignores any value in the imported XML file.

6 Click **Validate XML File** to validate the file.

If you import a file that has problems, some data will be imported and some will not be imported. It is easier to resolve the problem(s) in the XML file before importing than to clean up data in the TestTrack Pro database.

7 The XML Import Validation Message dialog opens, showing the results of the validation. If the XML format is **invalid** an error will be reported.

8 Click **OK** to return to the Import XML dialog.

9 Click **Import**.

The XML file is imported.

When a user field (such as **Found By** or **Fixed By**) is imported, TestTrack Pro tries to match the first name and last name with an existing user or customer. If an exact match is not found, the user/customer is created.

A defect's historical data is not imported. The historical data fields are system-generated. The **created by** and **modified by** fields are populated with the currently logged in user's name. The **date created** and **date last modified** fields are populated with the current date and time. The **creation method** field is populated with XML file import.

When importing, the password field can be either encrypted or in plain text. If TestTrack Pro generated the XML file, the password is encrypted. If a third-party XML file is imported, the password is in plain text.

Exporting XML files

Defects, users, customers, and test configs can be exported to an XML file.

1 Click the tab that corresponds to the types of records you want to export.

   For example, click the **Defects** tab to export defect records.

2 Select the records you want to export.

3 Click **XML Export**.

   The Export to XML File dialog opens.

4 Select the XML Export options.

5 Click **Export**.

   The File Download box opens.

6 Click **Save**.

   The Save As dialog box opens.

7 Enter a filename and choose the location where you want to save the file.

8 Click **Save**.

   The XML file is saved.

All calculated fields for a defect will be exported, but they will not be imported. Calculated fields are exported in case you want to import the XML file into a third-party application. Calculated fields that will be exported for a defect include **status** and **assigned to.**

User statistical data will be exported, but it will not be imported. User statistical data includes the following information: **defects found** and **defects assigned.**

Usernames and passwords are both exported. Usernames are exported in plain text; passwords are always exported as encrypted text.

XML import/export notes

- If you manually generate XML files or use a third-party application, you can import these XML files into TestTrack Pro. Refer to the **TestTrackData.dtd** file for proper formatting of your XML file.
- Do not modify the TestTrackData.dtd file. Modifying this file may result in validation errors or errors importing XML data.

- TestTrack Pro does not support namespaces in XML files that are being imported.
- Elements that you need to set to **<"not set">** should be left empty.
- If you receive a warning message, the record was imported but some of the information could not be imported. Following are examples of warning messages: Could not find match for custom field (applies only to defects); Could not find match for pop-up menu item value; Could not generate custom field value; A default value will be used instead of the specified value.
- If you receive an error message, the record was not imported. Following are examples of error messages: Defect number already exists (applies only to defects and only if using the import defect number field information option); Name already exists (applies only to users, customers, or test configs); Username already exists (applies only to users or customers); Two defects with same defect number in XML file (applies only to defects and only if using the import defect number field information); Two entries with same name in XML file (applies only to users, customers, or test configs); Two entries with same username in XML file (applies only to users or customers).
- Control characters cannot be imported into TestTrack Pro and will be removed when exporting text fields. This includes the following:

Hex Value	Explanation
0x01	Start of Heading
0x02	Start of Text
0x03	End of Text
0x04	End of Transmission
0x05	Enquiry
0x06	Acknowledge
0x07	Bell
0x08	Backspace
0x0B	Vertical Tabulation
0x0C	Form Feed
0x0E	Shift Out
0x0F	Shift In
0x10	Data Link Escape
0x11	Device Control One
0x12	Device Control Two
0x13	Device Control Three

Hex Value	Explanation
0x14	Device Control Four
0x15	Negative Acknowledge
0x16	Synchronous Idle
0x17	End of Transmission Block
0x18	Cancel
0x19	End of Medium

Note: Due to XML specifications, you cannot export an item with a string field that contains control character. There is no way to escape this type of character data.

Sample XML document

The first three lines of every file TestTrack Pro generates when exporting to XML is the same. If you are generating your own XML files to import into TestTrack Pro, the first three lines must be the same, with the following exception; the value for the encoding attribute does not need to be specified.

Following is a sample from a TestTrack Pro XML document:

```
<?xml version=”1.0” encoding=”iso-8859-1” 8 standalone=”no”?>
<!DOCTYPE TestTrackData SYSTEM 8 “TestTrackData.dtd”>
<TestTrackData>
<! - -elements - - >
</TestTrackData>
```

The document begins with a processing instruction: `<?xml ...?>.` This is the **XML declaration**. It identifies the document as an XML document and indicates the version of XML to which it was authored. This declaration indicates that this document conforms to Version 1.0 of the XML standard. The `encoding=”iso-8859-1”` indicates the character set used in encoding the XML document. The `standalone=”no”` attribute informs the program that an outside DTD (document type definition) is needed to correctly interpret the document. The DTD will reside in a separate file called **TestTrackData.dtd**.

The second line points out the root element of the document, as well as the DTD that validates each of the document elements that appear inside the root element. The root element is the outermost element in the document that the DTD applies to. It typically denotes the document’s starting and ending points. In this example, the `<TestTrackData>` element serves as the root element of the document. The system keyword indicates that the DTD of the document resides in a separate local file named **TestTrackData.dtd**.

About SoloBug

SoloBug is a stand-alone bug reporter that simplifies the way you receive bug reports and feature requests from customers and users. SoloBug, which eliminates data entry of bug reports and feature requests, includes the following features: ensures your bug reporting terminology is used, captures personal information and computer information, and lets customers and users include file attachments with their bug reports or feature requests.

What are SoloBug files?

A SoloBug file contains a single bug report, or feature request, created by customers and users. The SoloBug file is emailed to an address you specify. You can import the file into any TestTrack Pro database. A SoloBug file contains:

- The customer's or user's personal information and computer setup.
- A description of the problem or feature request.
- Any additional data or files attached to the SoloBug file.

How do I distribute SoloBug?

You can freely distribute SoloBug to customers, users, beta sites, etc. Refer to the SoloBug license included with TestTrack Pro for rules governing distribution of SoloBug applications. SoloBug is available for Windows, Macintosh, and the Palm OS.

SoloBug comes with a user guide you can edit and distribute. **Every topic** in the guide is included in the **online Help**, so you do not need to distribute the hard copy with SoloBug. You may want to customize the guide to include your company's name, email addresses, URLs, etc.

Importing SoloBug files

1 Click the **Defects** tab.

The Work with Defects page opens.

2 Click **SoloBug Import**.

The SoloBug Import dialog opens.

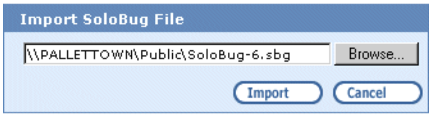
3 Click **Browse** to select the SoloBug file.

The Choose file dialog box opens.

4 Select the file and click **Open**.

SoloBug files are saved with the **.sbg** extension.

5 You return to the SoloBug Import dialog.



6 Click **Import**.

The file is imported.

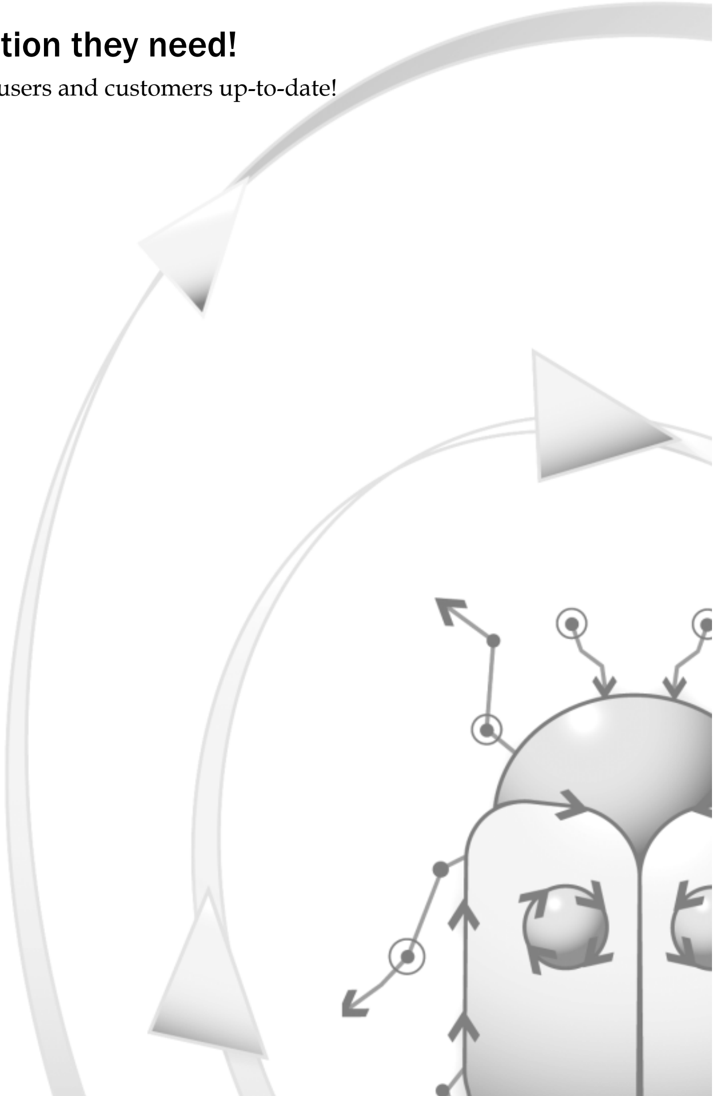
7 Click **Cancel** when you finish importing SoloBug files.

You return to the Work with Defects page. The SoloBug file is added to the end of the defect list. A new defect icon appears next to it.

Chapter 17
Customizing Email Templates

Give your users the information they need!

Customize email templates to keep your users and customers up-to-date!



About email templates

Email templates are used to standardize email messages sent to users and customers who request email notifications and for sending confirmations to users/customers who submit items via email.

TestTrack Pro email templates can be used as provided or the template contents can be customized. You can customize the templates by using field codes, entering text, or a little of both.

Email templates support **field codes**, sequences of characters and letters that TestTrack Pro replaces with corresponding data from the database. For example, **%CREL%** is replaced with the method used to create the defect (e.g., SoloBug import).

Note: **Appendix A, "Field Codes Reference" page 175** includes a complete list of TestTrack Pro field codes.

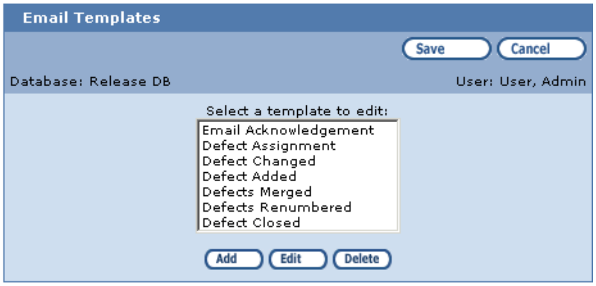
Adding email templates

Note: Any field added to an email template can be viewed by all email recipients, regardless of field level security settings.

1 Click the **Configure** tab.

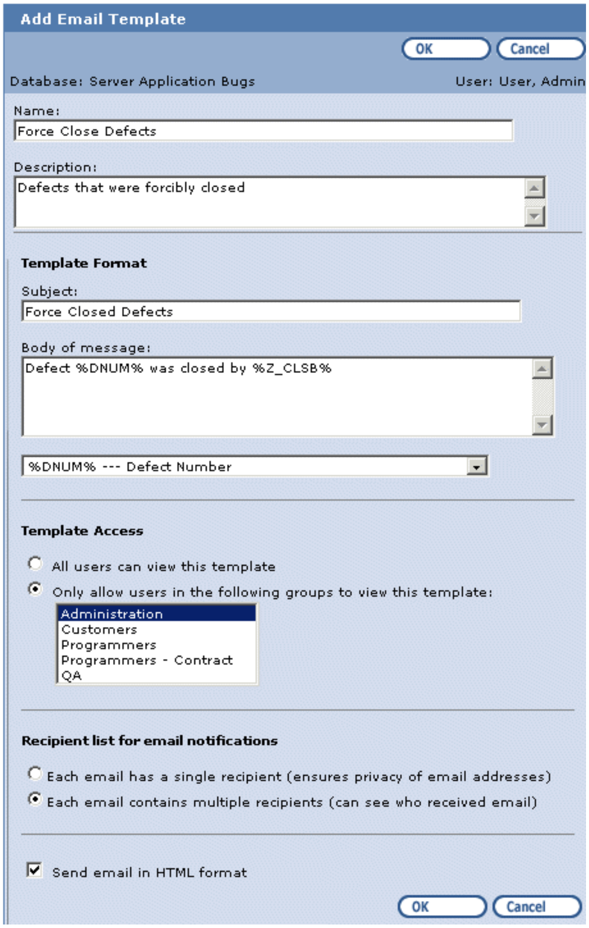
2 Click **Email Templates**.

The Email Templates dialog opens.



3 Click **Add**.

The Add Email Template dialog opens.



4 Enter a **Name** and **Description**.

5 Enter a **Subject**.

You can enter text and use field codes to customize the subject line. For example, to use the defect number in the subject field, enter **%DNUM%**.

6 Enter the **message body**.

You can enter text and use field codes to customize the template. When you customize a template, any spaces and lines that you add are saved with the template. As you type, text is automatically wrapped to the next line. When an email message notification is sent, all field codes are automatically replaced with the corresponding data from the TestTrack Pro database.

7 Select a **Template Access** option.

- Select All **users can view this template** if you do not want to restrict users from receiving the template.
- Select **Only allow users in the following groups to view this template** then choose user groups to restrict the template. This option provides template security because the email is only sent to users in the selected groups.

8 Select a **Recipient List** option.

9 Click **OK**.

The email template is added.

Editing email templates

1 Click the **Configure** tab.

2 Click **Email Templates**.

3 Select an email template and click **Edit**.

The Edit Email Templates dialog opens.

4 Make any changes.

5 Click **OK**.

The changes are saved.

Deleting email templates

1 Click the **Configure** tab.

2 Click **Email Templates**.

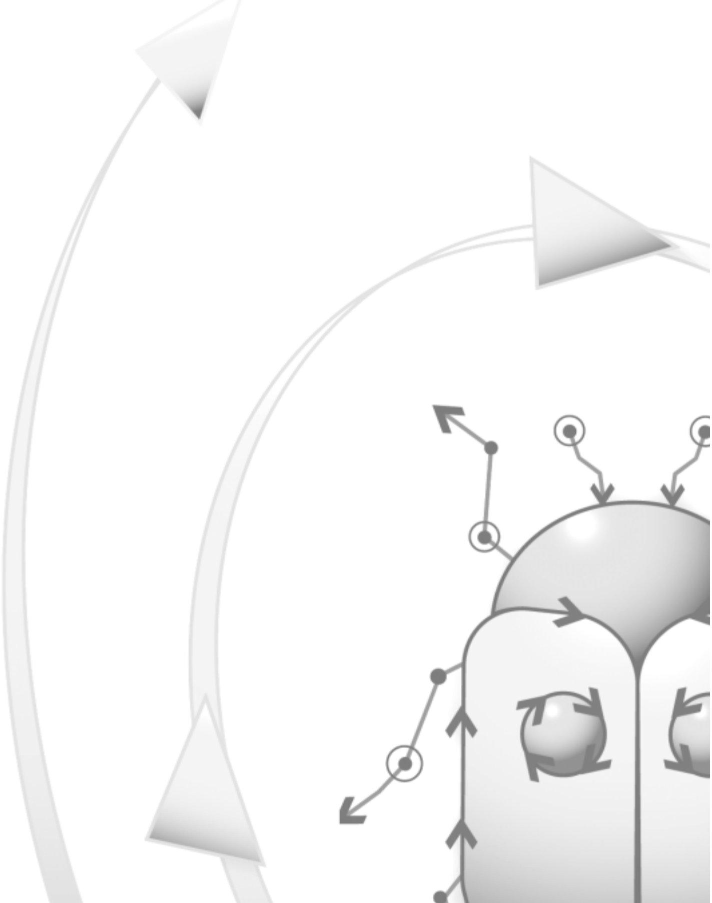
3 Select an email template and click **Delete**.

The template is deleted.

Appendix A
Field Codes Reference

Use field codes to automatically generate data!

This appendix includes a list of field codes that can be used with email notification templates and ad hoc reporting. Field codes return the corresponding information from the database. For example, the sequence **%DATS%** is replaced with the current date format. The sequence **%DNUM%** is replaced with the defect number.



About field codes

Field codes are used to build customized email messages that provide information specific to the defect that triggered the notification or, in the case of an email acknowledgment, was imported via email. If you are creating an ad hoc report, you can use field codes to include specific database information for the report. You can also use field codes to build personalized SoloSubmit Web pages that provide information specific to your company and your customers' use of SoloSubmit.

Field codes

Field Code	Description
%ASSB%	The user who made the defect assignment.
%ASSD%	The date the defect was most recently assigned.
%ASST%	The user to which the defect is assigned.
%ASSN%	The most recent defect assignment notes.
%CLSB%	The user who closed the defect.
%CLSD%	The date the defect was closed.
%CLSN%	The notes about closing the defect.
%CLSR%	The close resolution.
%CHNG%	The changes to the defect (only applies to **Defect Changed** notification).
%CMTA%	All of the defect's comments.
%CMTL%	The most recent defect comment.
%COMP%	The component containing the defect.
%CREB%	The user who was logged in when the defect was created.
%CRED%	The date the defect was created.
%CREL%	The method used to create the defect (e.g., SoloBug import).
%CUEM%	The currently logged in user's email address (does not apply to **Email Acknowledgement** notification).
%CUSR%	The currently logged in user's first and last name (does not apply to **Email Acknowledgement** notification).
%DATL%	The current date in long date format (mmmm, dd yyyy).
%DATS%	The current date in short date format (mm/dd/yy).
%DESC%	The first defect description.

Field Code	Description
%DISP%	The defect's disposition.
%DNUM%	The defect’s number.
%DOCA%	Whether the most recent defect fix affects documentation.
%ENTB%	The user who entered the defect.
%ENTD%	The date the defect was entered.
%ESTB%	The user who most recently estimated the defect fix.
%ESTD%	The date of the most recent defect estimate.
%ESTE%	The most recent estimated effort to fix the defect.
%ESTN%	The notes of the most recent defect estimate.
%ESTV%	The defect's most recent estimated fix version.
%ESTW%	The defect’s most recent estimated fix date.
%FILE%	The database’s file name.
%FIXB%	The user who most recently fixed the defect.
%FIXD%	The date the defect was most recently fixed.
%FIXN%	The most recent notes about fixing the defect.
%FIXS%	The Fix Verify/Close value from the most recent fixed action.
%FIXT%	The total time required to fix the defect.
%FIXV%	The version in which the defect was fixed.
%FNDB%	The person who found the defect.
%FNDD%	The date the defect was found.
%FNDV%	The version in which the defect was found.
%MODB%	The user who last modified the defect.
%MODD%	The date the defect was last modified.
%NUMR%	The number of users and customers reporting the defect.
%PRIO%	The defect’s priority.
%PRNM%	The Project Name field in the Project Info dialog.
%PROD%	The product containing the defect.

Field Code	Description
%REFR%	The defect's reference field.
%RELB%	The person who created the release notes.
%RELD%	The date the release notes were created.
%RELH%	Whether the defect has release notes.
%RELN%	The defect's most recent release notes.
%RELV%	The version in which the defect fix was released.
%REPR%	The defect's reproducible status.
%RESO%	The defect's fix resolution.
%SEQN%	The sequence number associated with the defect.
%SEVR%	The defect's severity.
%STAT%	The defect's status.
%STEP%	The steps to reproduce the defect.
%SUMM%	The defect's summary.
%TCFG%	The defect's test configuration name.
%TPLA%	Whether the most recent defect fix affects the test plan.
%TYPE%	The defect's type.
%VERB%	The user who most recently verified the defect.
%VERD%	The date the defect was most recently verified.
%VERN%	The most recent notes about verifying the defect.
%VERV%	The version in which the defect was verified.
%VPAS%	The Verify Pass/Close value from the most recent verify action.
%WORK%	The defect's workaround.
%WRKH%	Whether the defect has a workaround.
%_Z...%	Custom field code.

Label field codes

TestTrack Pro lets you rename defect field labels. The renamed field labels have corresponding field codes. These field codes return the field label, not the field data.

Field Code	Field Name
%DFUS_L%	Defect - upper case, singular
%DFUP_L%	Defects - upper case, plural
%DFUM_L%	Defect(s) - upper case, singular/plural
%DFLS_L%	defect - lower case, singular
%DFLP_L%	defects - lower case, plural
%DFLM_L%	defect(s) - lower case, singular/plural
%SUMM_L%	Summary Type
%TYPE_L%	Type
%DISP_L%	Disposition
%PRIO_L%	Priority
%PROD_L%	Product
%COMP_L%	Component
%REFR_L%	Reference
%SEVR_L%	Severity
%ENTB_L%	Entered by
%ENTD_L%	Date Entered
%STAT_L%	Status
%FNDB_L%	Found by
%FNDD_L%	Date Found
%DATE_L%	Date (short form of Date Found)
%FNDV_L%	Version Found
%VERS_L%	Version (short form of Version Found)
%DESC_L%	Description
%REPR_L%	Reproduced

Field Code	Field Name
%STEP_L%	Steps to Reproduce
%TCFG_L%	Computer Config
%HWSW_L%	Other Hardware and Software
%CFTB_L%	Custom Field tab

Remember, renamed label field codes only return the label name and not the field data. For example, you rename Reference to Case Number. You customize an email template to notify managers of a problem, including the case number in the subject line. In the subject line of the template, enter **%REFR_L%: %REFR%**. When a manager is sent an email, the subject line includes: Case Number (label): case number (data).

Field code notes

- All dates use system-defined date formats. TestTrack Pro uses the short-date style of the Regional Settings Properties defined in the Windows Operating System.
- To include a percent sign (%) in the body of a message, include two percent signs in a row (e.g., "%%").
- Email notifications support field codes in the email subject line. Therefore, you can include personalized subjects such as "Re:%SUMM%" which expand to include the defect's summary field in the email's subject.

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