

Administration Guide

Defect Manager Release 4.6

Table of Contents

Administration Guide	1
Table of Contents	1
Table of Figures	2
About the Administration Guide	4
What is Defect Manager Administrator?	5
Initial System Setup	5
Defect Manager Administrator Main Window	6
Defect Manager Administrator Tool Bar and Menu	6
Creating the Repository	8
Opening the Repository	9
Configure Repository Settings	11
General Settings Tab.....	12
Low Security Level.....	14
Medium Security Level.....	15
High Security Level	18
Date And Time Format Codes	19
User-Defined Fields	21
E-mail Settings	23
E-mail Alerts.....	25
E-mail Form Letters.....	26
E-mail Message Builder.....	27
Broadcasting E-Mails.....	28
POP Server Support	30
Configuring POP Servers.....	31
E-Tech Support Administration	32
E-Tech Support Settings	32
E-Tech Support Options	34
Customize Display	35
Configuring Clients	37
Company	38
Company Products	39
Locations and Sites	42
Contacts.....	44
Configuring Users	45
Configuring Work Queues	49

Configuring Severity Codes	49
Configuring Priority Codes.....	50
Configuring Status Codes	51
Configuring Components	52
Configuring Products	53
Adding A New Product.....	54
Adding a New Product Release	57
Removing a Product.....	58
Removing a Product Release	59
Reminders Overview	60
Setting Up Reminders	61
Reminder Lists	62
Generating Reminders	63
Troubleshooting Reminders.....	66
System Event Log.....	67
Running SQL Scripts.....	68
Upgrading The System	71

Table of Figures

Figure: Defect Manager Administrator – Main Window	6
Figure: Defect Manager Tool Bar.....	7
Figure: Logon Prompt Window	9
Figure: The Administrator Main Window	10
Figure: Administrator System Settings Window	11
Figure: The General Settings Tab	13
Figure: Defect Manager Login Screen.....	15
Figure: IIS Virtual Directory Properties Screen	16
Figure: IIS Authentication Methods Screen	17
Figure: IIS Authentication Screen	18
Figure: Defect Manager Web Login Screen	18
Figure: IIS Authentication Screen	19
Figure: First Four User-Defined Fields – Base Tab.....	21
Figure: Second Four User-Defined Fields – Continuation Tab.....	22
Figure: E-Mail Administrator Settings Tab	24
Figure: E-Mail Alert Settings – Maintenance Window	25
Figure: Define Form Letter Window – Reply to Submitter of Defect.....	26
Figure: The Message Editor for E-mail Subject and Message Elements.....	27
Figure: Notify Clients (via E-Mail) Window.....	29
Figure: Configuring POP Servers	31
Figure: System Settings Window – E-Tech Support Tab.....	33
Figure: Customize Field and Detail Section Names Section –	36
Figure: Modify Company Settings Information	38

Figure: The Products Tab – Products for the “Current” Company.....	41
Figure: Client Location Site – Maintenance Window	42
Figure: Modify Client Contact Window	44
Figure: User/Owner Configuration and Modification Window.....	46
Defect Manager Administrator – Main Window –Add Product.....	54
Figure: Add Product Window	55
Defect Manager Administrator – Main Window –Add Product Release	57
Figure: New Product Release Window.....	58
Figure: Defect Manager Administrator – Main Window Remove Product.....	59
Figure: Defect Manager Administrator – Main Window Remove Product Release	60
Figure: Defect Manager Reminder Return Codes	67
Figure: Defect Manager Event Viewer.....	68
Figure: Selecting an ODBC Data Source Driver	69
Figure: Select SQL Script to Execute from Disk Directory	69

About the Administration Guide

This guide explains how to administer and configure Defect Manager to meet your organization's issue reporting, tracking and resolution needs. The purpose of this guide is to provide a reference for systems administrators of the Defect Manager system.

This Guide provides information on the following topics:

- **What is Defect Manager Administrator?**
An introduction to the Defect Manager Administrator application and its purpose
- **Configuring Repository Settings**
Explanations of how to tailor your Defect Manager configuration for code-values, client contacts, users, work queues, products and components you support, email, alert and reminder notices, etc.
- **Customizing the User Environment**
A description of different ways to configure your PC and network environment to support Defect Manager for Windows and for Web, E-Tech Support, source-code control, and different types of databases.
- **Running SQL Scripts**
Describes how to run provided scripts plus how to tailor and develop your own scripts to initially configure the Defect Manager Repository database to meet your organization's needs
- **Advanced Reporting & Metrics**
A description of how you can create additional custom reports and configure metrics

Other Defect Manager Guides

This *Administrator Guide* has the following companion guides that provide additional detail on specific topics for Defect Manager:

- **Getting Started Guide**
 - **Installation Guide**
 - **User Guide – Defect Manager for Windows**
 - **User Guide – Defect Manager for Web**
 - **User Guide – E-Tech Support**
 - **Programmer API Guide**
 - **Glossary**
-

What is Defect Manager Administrator?

The Defect Manager Administrator application is used to manage all aspects of the Defect Manager configuration and options.

Using the *Defect Manager Admin* application program the system administrator can:

- Set system-wide configuration parameters
- Add individual's contacts (your clients) who can report issues
- Add companies and company locations for each contact
- Define priority codes that are valid for reported issues
- Define status codes that can be set for reported issues
- Define users that can work on issues and be assigned work
- Define work queues that allow issues to be processed as a workflow of one or more work-step processes of different types employing different skills.
- Define products/projects that issues can be reported against.
- Define components that allow you to identify the specific module or aspect of the product, project, process or service involved with a reported issue.
- Run SQL scripts to initialize administrative configurations or migrate issues into the Defect Manager Repository database.

Initial System Setup

Before you can use Defect Manager, you must create and configure the repository that is used to track defects. Defect Manager ships with a sample configuration that you can use. Later when you become more familiar with Defect Manager, you can create your own configuration or customize the sample configuration.

Note: You can load some sample configuration data into your repository for demo purposes. In the scripts sub-directory of the install directory is a SQL script called demo. You can go to section: [Running SQL Scripts](#) to find out how to load this demo data.

To configure the system you will use the Defect Manager Administrator. We will now walk you through this process. You will use the Defect Manager Administrator to:

- 1. Create a repository**
- 2. Configure the repository settings**
- 3. Configure repository items such as clients, owners, work queues, etc.**

Before we walk you through these steps, let's discuss the Defect Manager Administrator main window and what you can do with it.

Defect Manager Administrator Main Window

To start the Defect Manager Administrator, you will need to use the following menus. From the **Windows Start Button**, you would select **Start→Tiera Defect Manager Release →Defect Manager Admin**. This launches the Administrator program that brings up the window shown in the figure below.

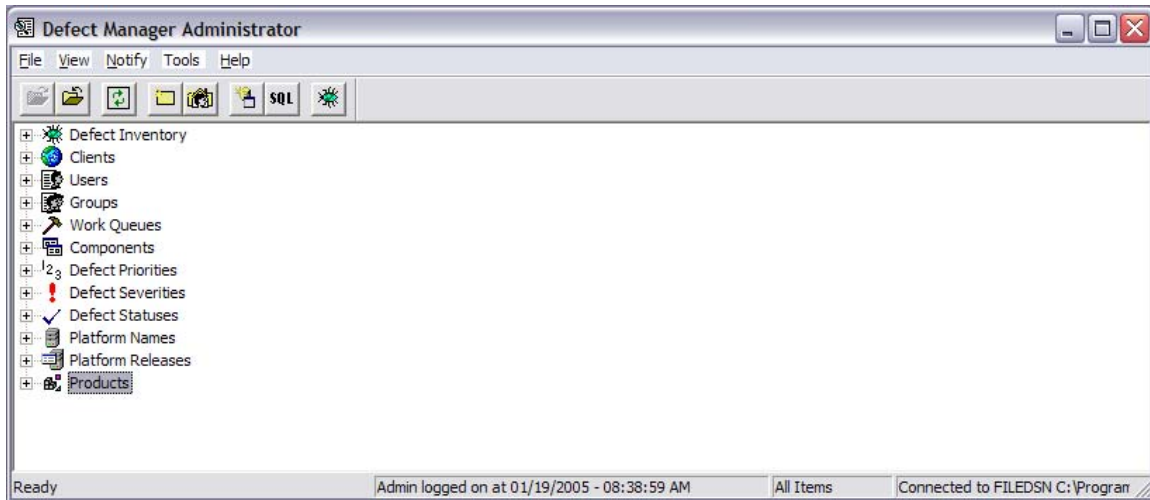


Figure: Defect Manager Administrator – Main Window

Once you have started the Defect Manager Administrator, you will be able to expand the plus sign (+) on the left to view the tree-structure under each item in the list. This allows you to select and maintain the following topics:

- **Defect Inventory**
- **Clients**
- **Users**
- **Groups**
- **Work Queues**
- **Components**
- **Defect Priorities**
- **Defect Severities**
- **Defect Statuses**
- **Platform Names**
- **Platform Releases**
- **Products**

Defect Manager Administrator Tool Bar and Menu

There are several ways to select and perform Administrative operations: the **Tool Bar**, **Menu Bar** and the **Popup Menu**.

The Defect Manager Administrator *Tool Bar* is shown in the figure below.

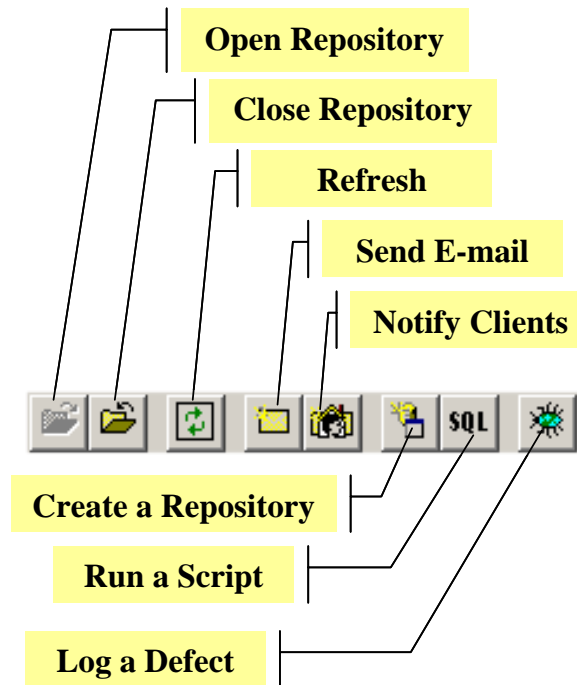


Figure: Defect Manager Tool Bar

Each of the buttons shown in the above figure (from right to left) are described below:

- **Open Repository** – Open an existing repository.
- **Close Repository** – Close the currently open repository.
- **Refresh** – Refresh the repository data from the database.
- **Send E-mail** – Send an e-mail to a contact or Defect Manger user.
- **Notify Clients** – E-mail important information to your clients
- **Create Repository** – Create a new repository.
- **Run SQL Script** – Run a SQL script.
- **Log a Defect** – Opens the Defect Manager Log so you can report a defect.

The *Menu Bar* on the Administrator Main Window is another way to perform these operations.

When an item is selected on the Administrator Main Window, a right-mouse button click will produce a *Popup Menu* of operations.

Creating the Repository

Before you can start logging and tracking issues and defects, you need to create and then configure the repository that will store them.

The repository is the database for the Defect Manager system and it is comprised of a group of relational database tables. The repository stores both *Configuration Data* and *Issue Tracking Information*:

1. *Configuration Data* – All system configuration information such as repository settings, users of the system, work queues, priorities, products, email options, client contacts along with their company and location information, etc.
2. *Issue Tracking Information* – All the issue data for each issue with their status and timestamps, attachments, notes, etc.

You use the *Defect Manager Administrator* as a tool to create and maintain the *Configuration Data*. Initially, you can use the Administrator tool to run scripts to load sets of configuration data and, optionally, issue/defect tracking information.

You use the *Defect Manager application* and its forms to interactively select, enter and maintain the *Issue/Defect Tracking Information* in the repository database using Defect Manager for Windows, Defect Manager for Web or the E-Tech Support applications.

Defect Manager supports Microsoft Access, Microsoft SQL Server, and Oracle databases that can be used to implement your repository.

Since a Defect Manager repository can be built your selection of one of these databases management systems, you will need to define an ODBC Data Source Name (DSN) to allow the selected type of repository database to be accessed where you decide to locate it on your network.

If you are not sure how to set up the ODBC DSN connection, please refer to the [Installation Guide, Configuring Repository ODBC Connections](#).

If you are using the demo version of Defect Manager, a demonstration repository already exists that is shipped with the product. When you install the demonstration for Defect Manager, the ODBC DSN is automatically set up for you on your PC workstation.

To create the repository, you will need to use the **File→Create Repository** menu item or push the **Create Repository** button on the toolbar. When you create a repository, the system will create a usercode name of “**Admin**” and a password of “**Admin**”.

You will need the user name and password (i.e., “Admin/Admin”) to open the repository initially. You may then change the password name to increase security and add other user names and passwords with appropriate security permissions..

Opening the Repository

Once the repository has been created, you need to open the repository to test and use it. Opening the repository will now connect you to the repository database and let you view and modify items in the repository.

To open the repository you will need to use the **File→Open Repository** menu item or push the **Open Repository** button on the toolbar. You will be presented with the Logon window as show below.

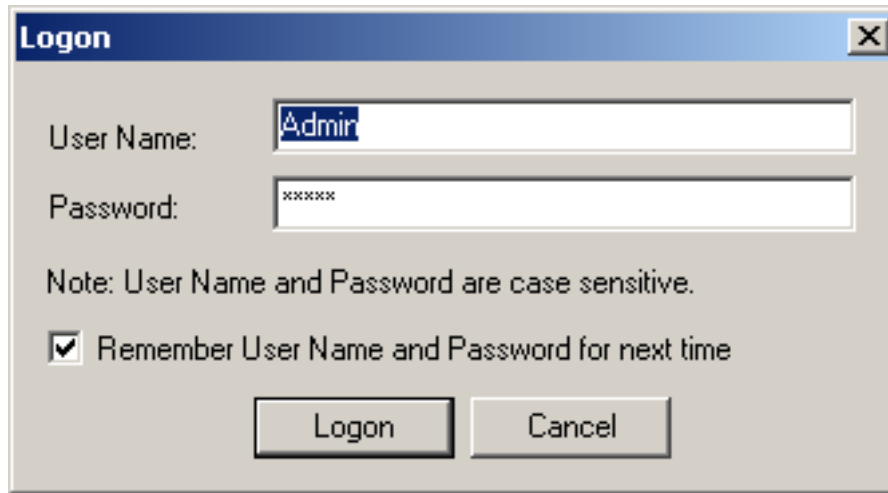


Figure: Logon Prompt Window

- **User Name** – You should enter your User Name. When the system is first created you can use “**Admin**”. The User Name is specified when an administrator adds a new user to the system. Often, the user name “Admin” is retained for exclusive use by the system administrator. Other types of users use different passwords. See the section: [Configuring Users](#).
- **Password** – You should enter your Password. When the system is created, the User Name of “**Admin**” has a password of “**Admin**”. Typically, the administrator will follow his organizations conventions for default password assignment as he/she enters new users and their default passwords. Individual users have the option of changing their password after they logon using their default password.

The only individuals that can open a repository and view/modify it are individuals that have the proper security settings. This is discussed more thoroughly in the section [Configuring Users](#).

Once you open the repository, the main window will be displayed as shown in the figure below.

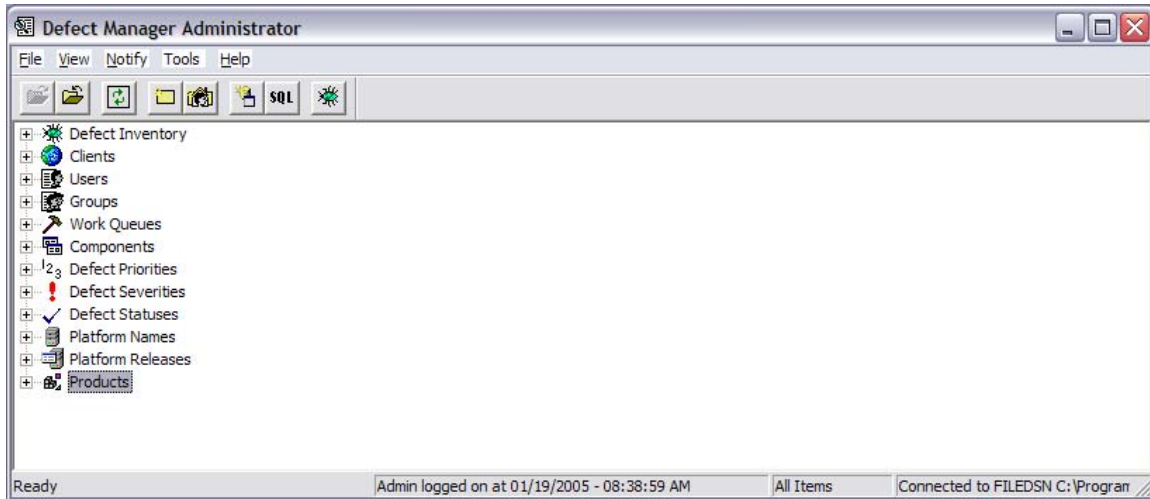


Figure: The Administrator Main Window

If you click on any of the items in the main window that has a plus-sign (+) to its left, you will expand it allowing you to drill down to a lower level.

Items at the lowest level (they do not have plus-sign (+) to the left of them) can be updated.

Items with a plus-sign (+) can have new items inserted underneath of them.

To insert an item you can use the **File→New** menu item, or you can depress the right mouse button on an expandable item (such as Clients or Problem Owners) and a pop-up menu will displayed.

To update an item you can use the **File→Modify** menu item, or you can depress the right mouse button on a non-expandable (lowest level) item and a pop-up menu will displayed.

To remove an item you can use the **File→Remove** menu item, or you can depress the right mouse button on a non-expandable (lowest level) item and a pop-up menu will displayed.

Configure Repository Settings

The repository settings are parameters that are valid for anyone using the repository. You can only review and modify repository settings after you have opened a repository. To view and modify the repository settings you would select **File→Repository Settings** menu item. After selecting the **File→Repository Settings** menu item, the following window will be displayed.

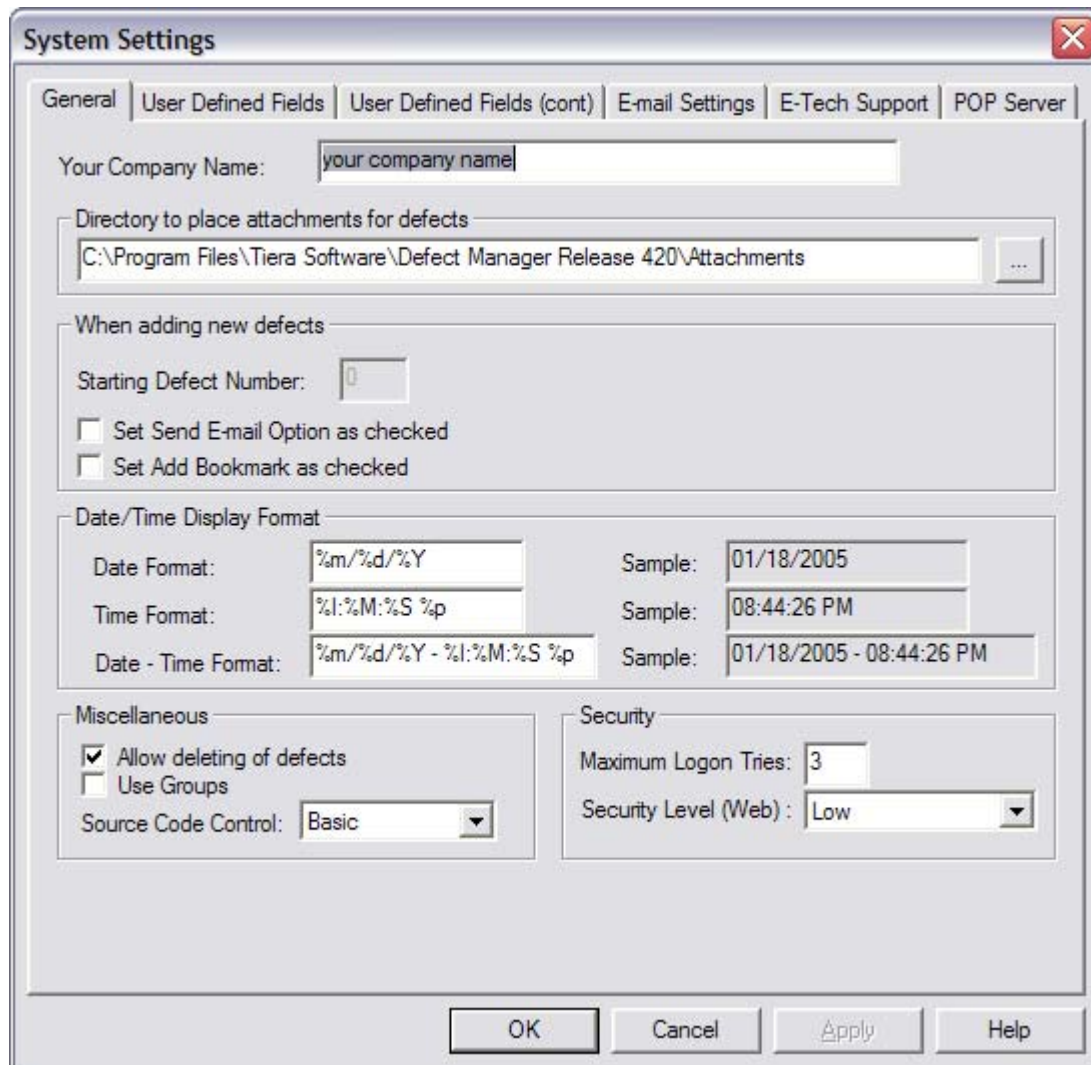


Figure: Administrator System Settings Window

This window has the following tabs. These tabs are:

- **General Settings Tab** – This tab allows you to set the general parameters for the system. See section [General Settings](#) for more information.

- **User-Defined Field Tab** – This tab allows you to set the first four of the eight user-defined fields. See section [User-Defined Fields](#).
- **User-Defined Fields (cont) Tab** – This tab allows you to set the second four of the eight user-defined fields. See section [User-Defined Fields](#).
- **E-mail Settings Tab** – This tab allows you to set the e-mail parameters for e-mail alerts and e-mail form letters. See section [E-mail Settings](#) for more information.
- **E-Tech Support Settings Tab** – This tab allows you to set the parameters for E-Tech Support. See section [E-Tech Support Settings](#) for more information.
- **Pop Server** – This tab allows you to set the parameters for the Defect Manager POP Server. The POP Server reads e-mail boxes and logs the e-mails as Defect Manager Issues. See section [POP Server Settings](#) for more information.

General Settings Tab

The General Settings are parameters that apply broadly to the complete repository.

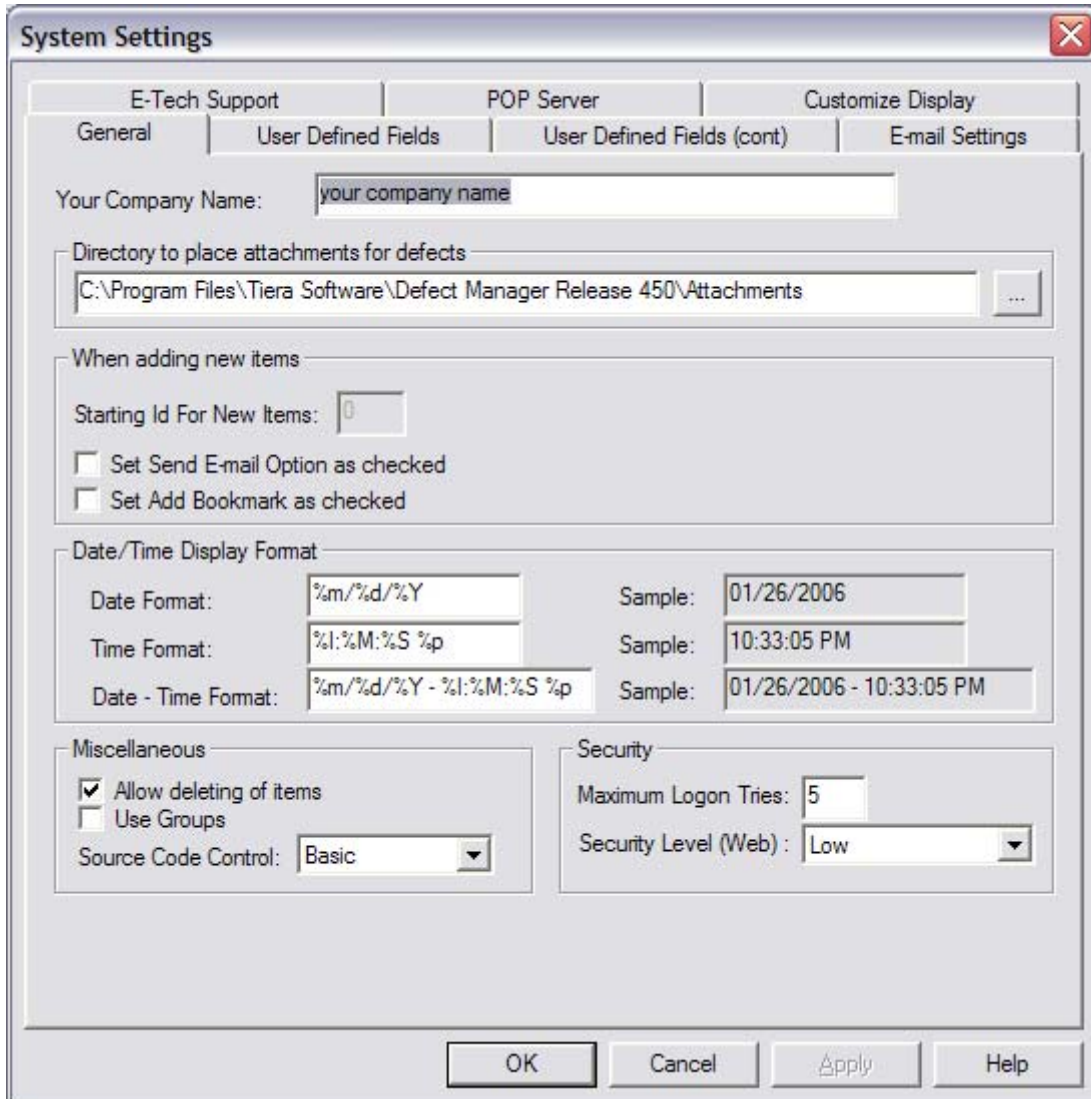


Figure: The General Settings Tab

Below are descriptions of the fields on this tab that allow you to enter data:

- **Your Company Name** – You should specify your company’s name. When logging new defects, Defect Manager will set the default company name to the value specified in this field.
- **Directory to place attachments** – Specify the directory that all attachments will be placed for each issue.
- **Starting Id For New Items** – Starting number for all new issues entered into system after a new repository has been created. The default is 0. This value is only valid when the repository has just been created and there have not been any issues reported. If you change this setting after issues have already been added, this setting is ignored. If you need to set a new starting Id after issues have already been added, please contact technical support and they can manually help you set this up

- **Set Send E-mail Option** – By default, after a new defect is created the send mail window will be displayed when this option is checked. This allows users who open the defect to notify any one who should be aware of this by e-mail.
- **Set Bookmark Option** – By default, after a new defect is created the enter bookmark window will be displayed when this option is checked. This allows users who open the defect to specify bookmarks that describe the newly opened defect.
- **Set Status to** – The default status code when users enter a new issue.
- **Assign it to** - The default user that will be assigned the issue when a new issue is entered.
- **Set Severity to** - The default severity code when entering a new issue.
- **Give it a Priority of** – The default priority when users enter a new issue.
- **Put it Work Queue** - The default work queue when users enter a new issue.
- **Date Format** – You specify the format codes that will be used to format the date fields in the system. See [Date and Time Format Codes](#).
- **Time Format** – You specify the format codes that will be used to format the time fields in the system. See [Date and Time Format Codes](#).
- **Date-Time Format** – You specify the format codes that will be used to format the date-time fields in the system. See [Date and Time Format Codes](#).
- **Allow deleting of items** – Check this box, if you want users with the delete privilege to have the power to delete issue-items from the system. If this item is not checked, deleting issues in the system is not permitted regardless of user having the delete privilege.
- **Source-Code Control** – Select Source Safe or Basic.
- **Use Groups** – Check this box, if you want to activate groups. The *Groups* capability provides the ability to associate individual users into designated and named groups.
- **Maximum Logon Tries** – The maximum number of times that a user can try to login to the system before their account will become disabled.
- **Security Level (Web)** – Defect Manager provides three distinct levels of security when user login to Defect Manager Web. These three levels are as **Low**, **Medium** and **High**. Each security level handles the authentication of users in a different way. The next section describes each of these security levels in detail.

Note: You can use https for Defect Manager Web. This will ensure that all the data that is viewed in the browser is encrypted.

Low Security Level

When users start Defect Manager Web, users get the normal Defect Manager login window as shown below.

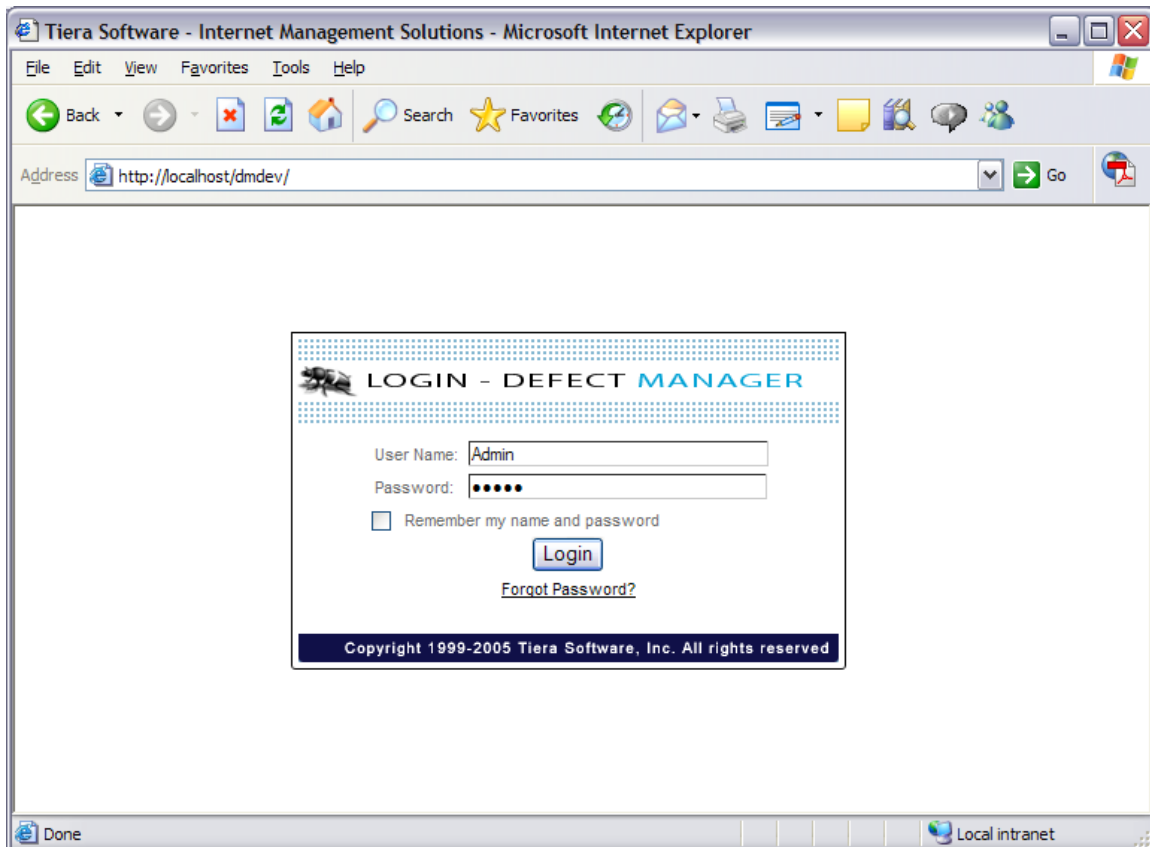


Figure: Defect Manager Login Screen

From this window, the user enters their **User Name** and **Password**. Defect Manager will authenticate the user by looking for the **User Name** in the repository and seeing if the entered password is correct for the user.

Medium Security Level

When using the Medium security level, users of Defect Manager Web will need to provide a domain **User Name** and **Password**, before they can login to Defect Manager. The medium security level uses Windows NT/2000/XP operating system authentication protocols. Before you can use the **Medium** security level, the Defect Manager virtual directory must be configured to use one of several authentication protocols. This can be done by right clicking on the Defect Manager virtual directory in the IIS Configuration Manager and selecting the **Properties** menu item. When you select the **Properties** menu item you will see the following window.

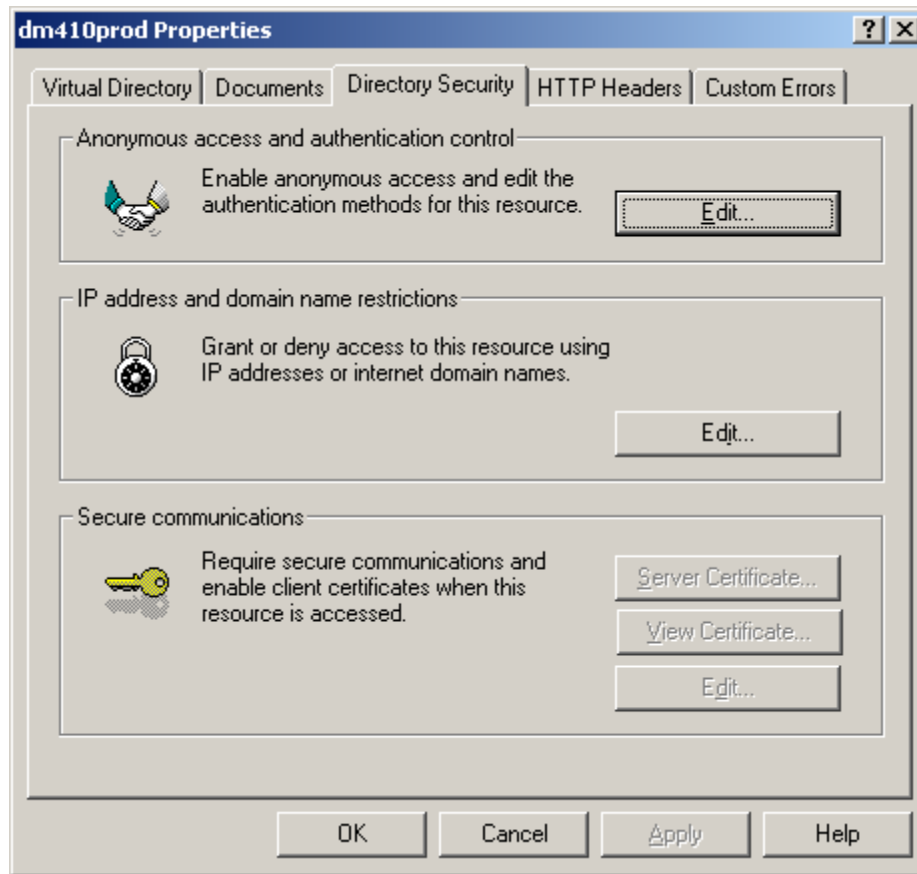


Figure: IIS Virtual Directory Properties Screen

Select the **Directory Security** folder and press the **Edit** button in the **Anonymous access and authentication control** section. You will see the following screen:

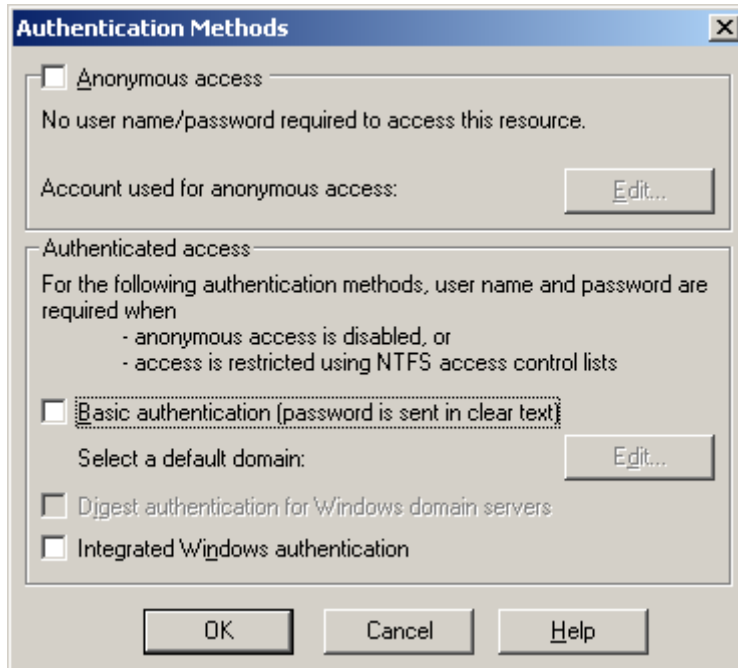


Figure: IIS Authentication Methods Screen

Uncheck the **Anonymous access** checkbox, and check the **Basic authentication** (password will be sent in the clear), or **Digest authentication for Windows domain servers** (password will be encrypted). Optionally, if Defect Manager is being deployed on your Intranet, you can check the **Integrate Windows authentication** checkbox. The checkbox that you select is dependent on your corporate security mandates. After making your selection and clicking the **OK** button, Defect Manager is ready to use the higher level of security. When users start Defect Manager they will be prompted with the following screen:



Figure: IIS Authentication Screen

The user needs to enter any valid user name and password for the domain. If the **User Name** and **Password** entered are valid for a user on the domain (and the user has the appropriate privileges), the user receives the following Defect Manager login screen:

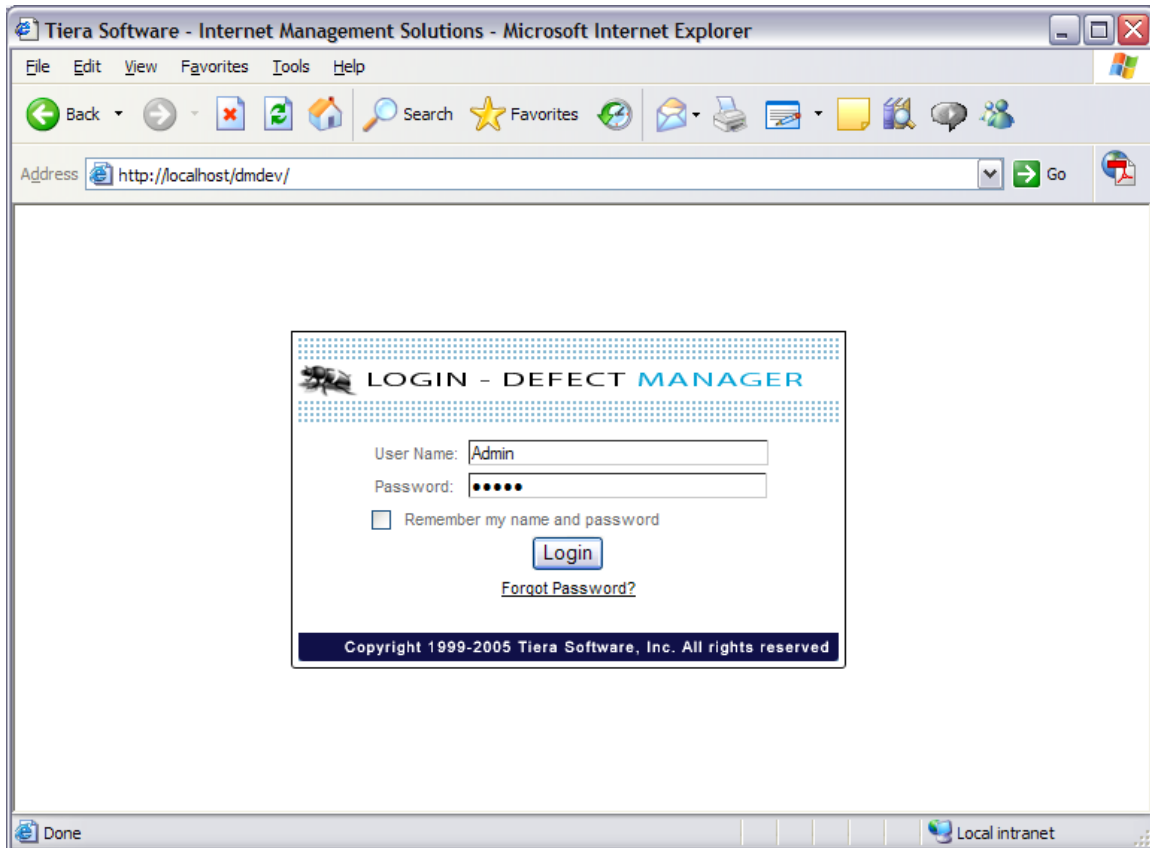


Figure: Defect Manager Web Login Screen

From this screen, the user enters their Defect Manager **User Name** and **Password**. Defect Manager will authenticate the user by looking for the user **User Name** in the repository and seeing if the password is correct for that user. If the user is defined to the system and the password is correct for that user, the user is granted access to the system.

High Security Level

The high security level is the same as the same as the medium security level with one major difference. Each Defect Manager user must be a unique domain user as well. When the user starts Defect Manager, they will be prompted with the following screen:




Figure: IIS Authentication Screen

In this situation, authuser1 must be defined to the domain (and the password entered in the **Password** field is correct for domain user authuser1) and authuser1 must be defined as a Defect Manager user to be granted access to the system. If access is granted, the user will be automatically logged into Defect Manager and the Defect Manager Web login screen will be bypassed.

Date And Time Format Codes

The rules for using the format codes are as follows:

Format Code	Description
%a	Abbreviated weekday name
%A	Full weekday name
%b	Abbreviated month name
%B	Full month name
%c	Date and time representation appropriate for locale
%d	Day of month as decimal number (01 – 31)
%H	Hour in 24-hour format (00 – 23)
%I	Hour in 12-hour format (01 – 12)
%j	Day of year as decimal number (001 – 366)
%m	Month as decimal number (01 – 12)
%M	Minute as decimal number (00 – 59)
%p	Current locale's A.M./P.M. indicator for 12-hour clock

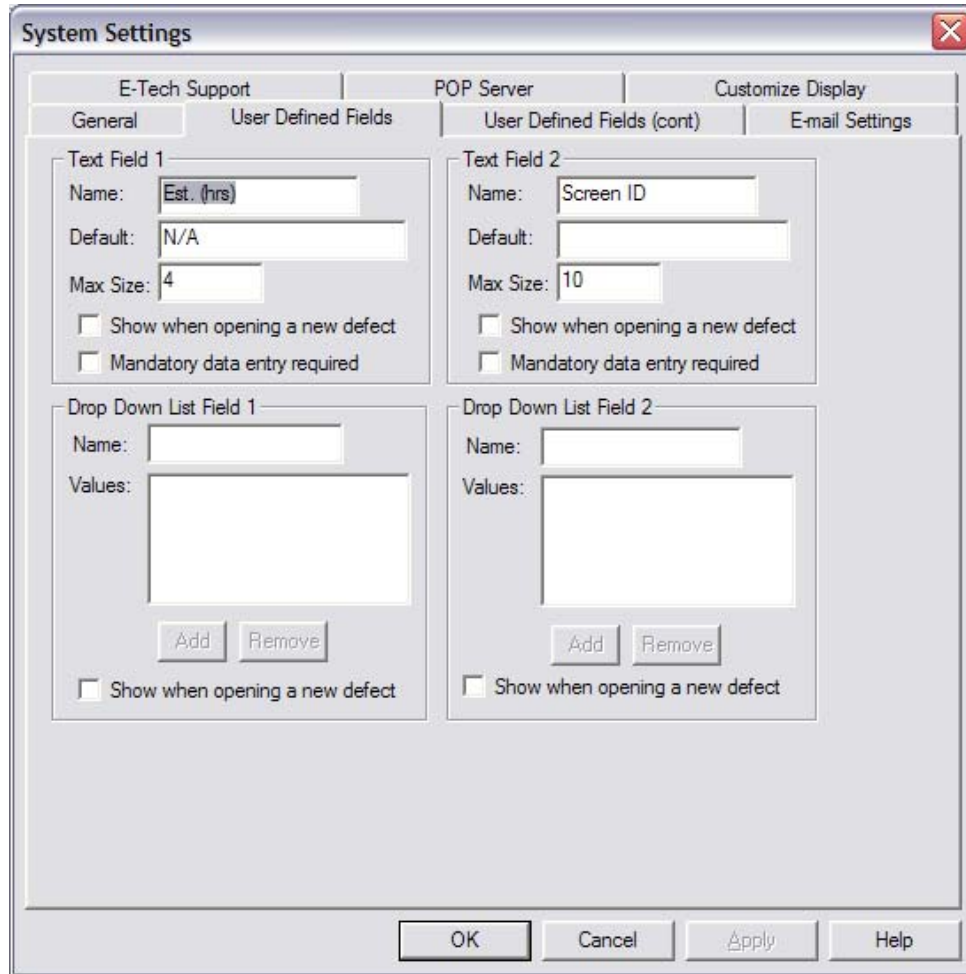
Format Code	Description
%S	Second as decimal number (00 – 59)
%U	Week of year as decimal number, with Sunday as first day of week (00 – 53)
%w	Weekday as decimal number (0 – 6; Sunday is 0)
%W	Week of year as decimal number, with Monday as first day of week (00 – 53)
%x	Date representation for current locale
%X	Time representation for current locale

The # flag may prefix any formatting code. In that case, the meaning of the format code is changed as follows.

Format Code	Meaning
##a, ##A, ##b, ##B, ##p, ##X, ##z, ##Z, ##%	# flag is ignored.
##c	Long date and time representation, appropriate for current locale. For example: “Tuesday, March 14, 1995, 12:41:29”.
##x	Long date representation, appropriate to current locale. For example: “Tuesday, March 14, 1995”.
##d, ##H, ##I, ##j, ##m, ##M, ##S, ##U, ##w, ##W, ##y, ##Y	Remove leading zeros (if any).

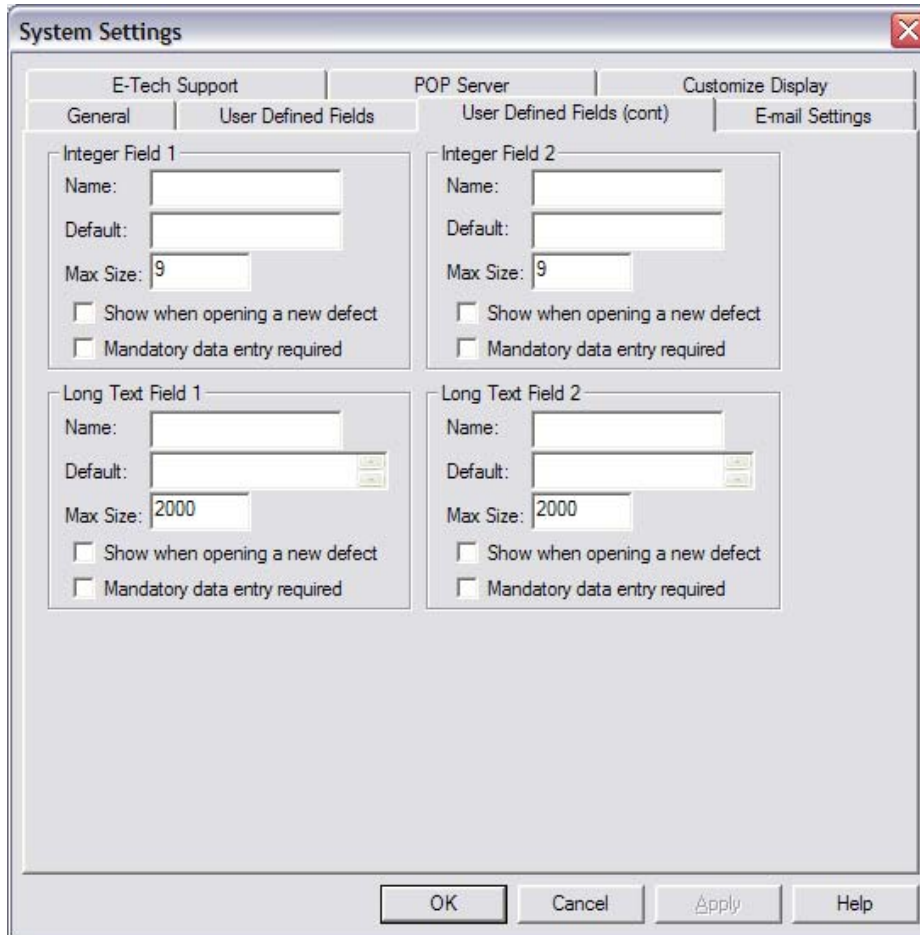
User-Defined Fields

User-Defined Fields are defined, four (4) fields at a time, on two separate tabs as shown below.



The screenshot shows the 'System Settings' dialog box with the 'User Defined Fields' tab selected. The dialog is divided into four main sections: 'E-Tech Support', 'POP Server', 'Customize Display', and 'E-mail Settings'. The 'User Defined Fields' section is further divided into two sub-sections: 'User Defined Fields' and 'User Defined Fields (cont)'. Each sub-section contains two text fields and two drop-down list fields. The 'Text Field 1' section has a name 'Est. (hrs)', a default value 'N/A', and a max size of '4'. The 'Text Field 2' section has a name 'Screen ID' and a max size of '10'. Both text field sections have checkboxes for 'Show when opening a new defect' and 'Mandatory data entry required'. The 'Drop Down List Field 1' and 'Drop Down List Field 2' sections have empty name and values fields, and 'Add' and 'Remove' buttons. Both drop-down list field sections have a checkbox for 'Show when opening a new defect'. At the bottom of the dialog are buttons for 'OK', 'Cancel', 'Apply', and 'Help'.

Figure: First Four User-Defined Fields – Base Tab



The image shows a screenshot of the 'System Settings' dialog box, specifically the 'User Defined Fields (cont)' tab. The dialog box is titled 'System Settings' and has a close button (X) in the top right corner. It is divided into several sections: 'E-Tech Support', 'POP Server', and 'Customize Display'. Under 'Customize Display', there are four sub-tabs: 'General', 'User Defined Fields', 'User Defined Fields (cont)', and 'E-mail Settings'. The 'User Defined Fields (cont)' tab is active, showing four user-defined fields arranged in a 2x2 grid. Each field has a title, a 'Name' text box, a 'Default' text box, a 'Max Size' text box, and two checkboxes: 'Show when opening a new defect' and 'Mandatory data entry required'. The fields are: 'Integer Field 1' (Max Size: 9), 'Integer Field 2' (Max Size: 9), 'Long Text Field 1' (Max Size: 2000), and 'Long Text Field 2' (Max Size: 2000). At the bottom of the dialog box are buttons for 'OK', 'Cancel', 'Apply', and 'Help'.

Figure: Second Four User-Defined Fields – Continuation Tab

In Defect Manager you can have up to eight (8) user-defined fields.

- The first two are **text fields limited to a text-length of 255 bytes**
- The second two are **drop-down selection lists**
- The third two are **integer fields**
- The last two are **long-text fields with a maximum text-length of 1500 bytes.**

User-defined fields show up on the **Specials Tab** when viewing details of issue/defect items.

Depending on the field type for each of these fields, you can specify certain of the following properties

- **Name** – A user-defined field is not activated unless you specify a name field. The name field is a caption displayed next to the enterable user defined field's value.
- **Default** – The default data value for the user defined field. This entry is not valid for the drop-down selection list fields since the default value for the each drop-down selection list is the first entry in a drop-down list.
- **Max Size** – The maximum number of bytes that can be entered for the user-defined field.
- **Show when opening a new defect** – Show the user-defined field on the New Defect Window.
- **Mandatory data entry required** – This user-defined field cannot be left blank.
- **Values** – A list of values for a drop-down selection list.

E-mail Settings

Defect Manager supports e-mail alerts and e-mail form letters. E-mail alerts notify Defect Manager users when certain conditions of an issue item change. E-mail form letters are used to send e-mail form letters to your clients when certain conditions of an issue-defect item change.

The *E-mail Settings Tab* is shown below.

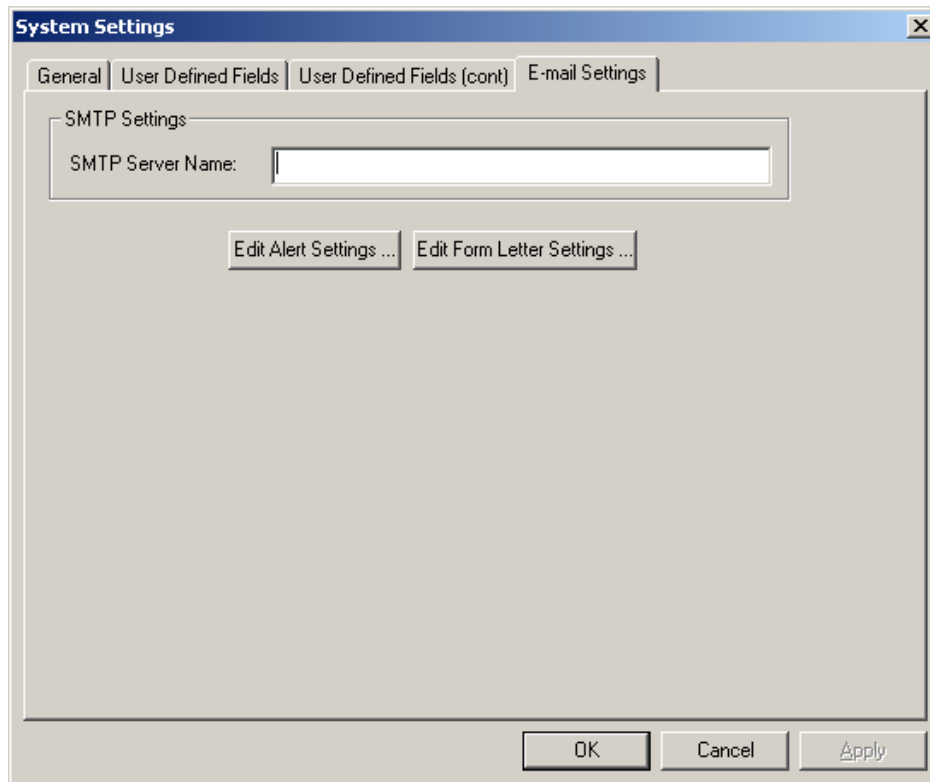


Figure: E-Mail Administrator Settings Tab

- **SMTP Server Name** – If you plan to use the automatic e-mail capabilities of the system you will need to set to your systems SMTP (Simple Mail Transport Protocol) Server Name. Your network administrator can help you with this, if you are not sure what it is.

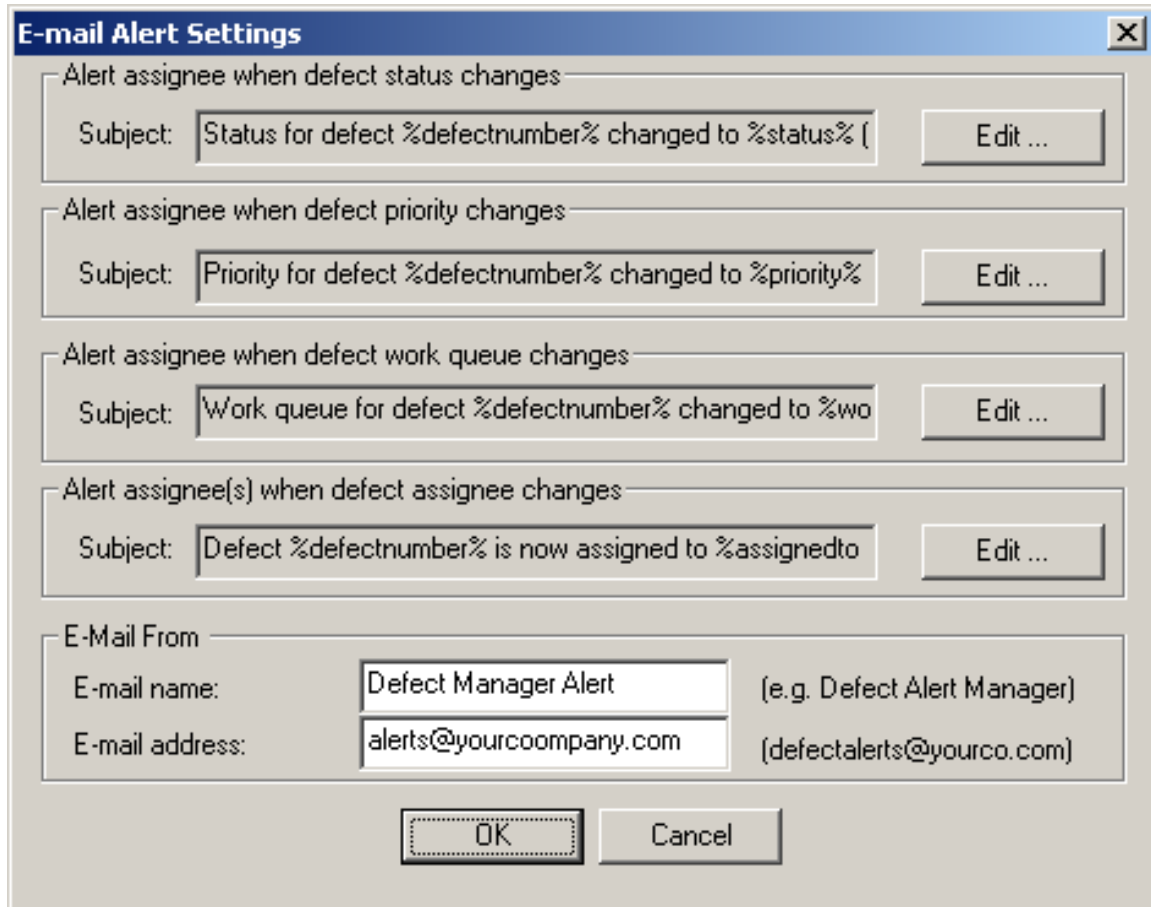
Note: If you will be using e-mail alerts or form letters, you need to set the *SMTP Server Name* field to the correct value. If you are not using e-mail alerts or form letters, set this field to blanks. Setting this field to an incorrect value can degrade the system.

Both e-mail alerts and e-mail form letters are completely customizable by your company. You can specify both the subject and the body of e-mails that will be sent out.

Using the *E-mail Message Builder* you can actually embed Defect Manager data-field place holders such as: defect number, open date, close date, defect description, due date, etc. **Place-Holder Fields**, get replaced with actual data values for the current issue item when the e-mail gets created.

- To configure and edit e-mail alerts, press the *Edit Alerts Settings* button. See [E-mail Alerts](#).
- To configure and edit e-mail form letters, press the *Edit Form Letter Settings* button. See [E-mail Form Letters](#).

E-mail Alerts



The image shows a screenshot of the 'E-mail Alert Settings' dialog box. It has a title bar with a close button. The dialog is divided into several sections, each with a 'Subject' field and an 'Edit ...' button. The sections are: 1. 'Alert assignee when defect status changes' with subject 'Status for defect %defectnumber% changed to %status% ('. 2. 'Alert assignee when defect priority changes' with subject 'Priority for defect %defectnumber% changed to %priority%'. 3. 'Alert assignee when defect work queue changes' with subject 'Work queue for defect %defectnumber% changed to %wo'. 4. 'Alert assignee(s) when defect assignee changes' with subject 'Defect %defectnumber% is now assigned to %assignedto'. Below these is the 'E-Mail From' section with 'E-mail name' (Defect Manager Alert) and 'E-mail address' (alerts@yourcoompany.com). At the bottom are 'OK' and 'Cancel' buttons.

Figure: E-Mail Alert Settings – Maintenance Window

E-mail alerts are messages that are sent to users when certain issue-item fields change (e.g., status, work queue, priority or assignee) as configured by the system administrator to receive these e-mail alerts. See section [Configuring Users](#) for more information on configuring e-mail communications with users.

You can configure the **Subject** and the **Message** of the automatic e-mail alerts by pressing the *Edit* button next to each alert on this window. When you press the *Edit* button, the *E-mail Message Editor* window will be displayed.

The *E-mail Message Editor* will let you modify both the subject and the message body of the e-mail message. You can learn more about the E-mail Message Builder by looking at the section [E-mail Message Builder](#).

When e-mails alerts are e-mailed, they need to be sent from somebody. To do this you have to specify the following fields.

- **E-mail name** – This is a friendly name that accompanies an e-mail address. For example, Defect Manager Alert Messenger.

- **E-mail address** -- This is the actual e-mail address. For example, dmal@yourcompany.com. This e-mail address must be a valid address and allowable for the **SMTP Server Name** that you specified in section [E-mail Settings](#).

E-mail Form Letters

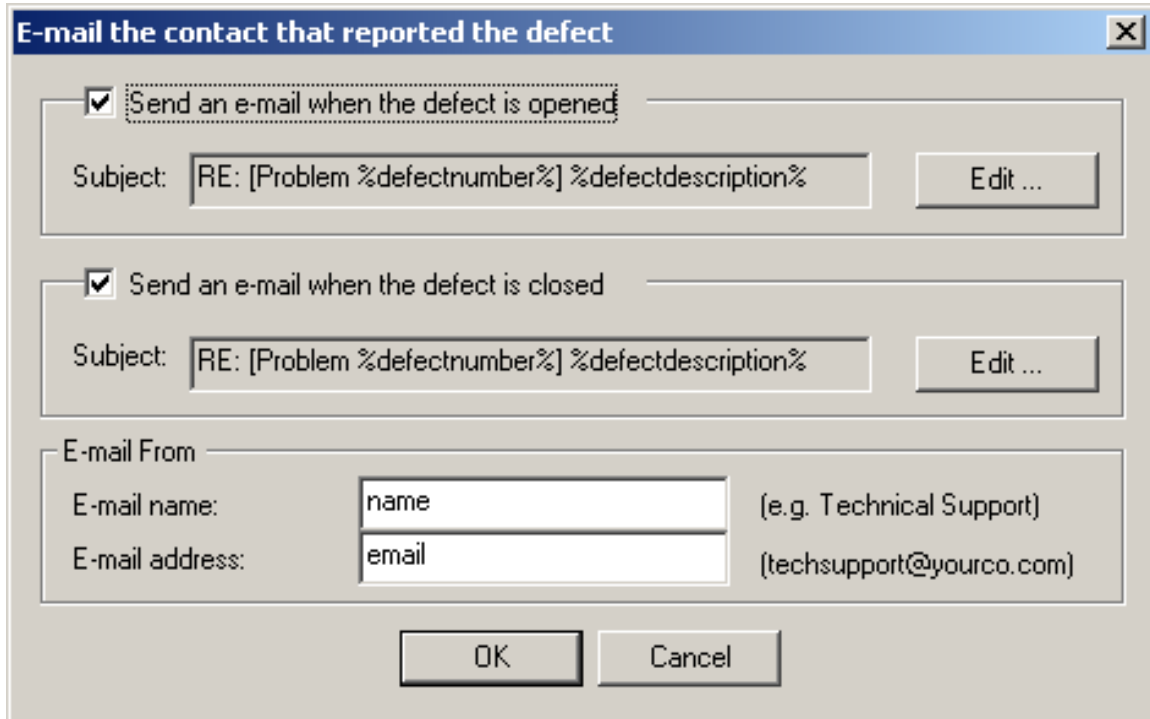


Figure: Define Form Letter Window – Reply to Submitter of Defect

E-mail form letters can be sent automatically to your clients when an issue or defect's primary status changes – such as when defect is opened or closed.

You can configure the **Subject** and the **Message** portions of the automatic form letters by pressing the *Edit* button next to each form letter.

When you press the *Edit* button, the e-mail message editor window will be displayed. The e-mail message editor will let you modify both the subject and the message body of the e-mail message. You can learn more about the E-mail Message Builder by looking at section [E-mail Message Builder](#).

When an e-mail form letter gets e-mailed, it needs to be sent from somebody. You must specify the following fields.

- **E-mail name** – This is a friendly name that accompanies an e-mail address. For example, “Defect Manager Letter Messenger”.
- **E-mail address** -- This is the actual e-mail address. For example, dmal@yourcompany.com. This e-mail address must be a valid address and allowable for the **SMTP Server Name** that you specified in section [E-mail Settings](#).

E-mail Message Builder

The E-mail Message Builder helps you create and maintain the subject and message lines for e-mails that are generated by Defect Manager. Defect Manager e-mails are always based around a particular issue-defect item.

When you compose your e-mail, you can use **Place-Holder Fields** for the actual defect data fields. When Defect Manager constructs the e-mail, the place-holders fields are replaced by the actual data values for Defect Manager data fields in the current issue-defect item.

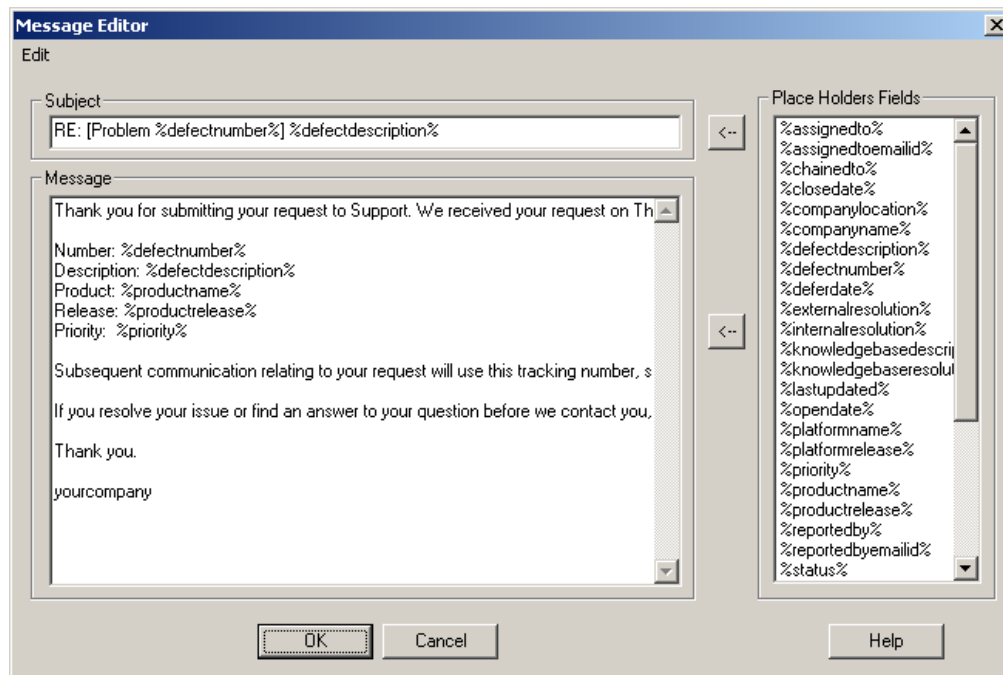


Figure: The Message Editor for E-mail Subject and Message Elements

The e-mail message builder lets you insert **Place-Holder Fields** into the message body and subject.

To create a new e-mail message, you would follow these steps:

- (1) Compose your subject and message body using any text editor tool you prefer. Use actual issue/defect data field values in the text as if you are creating a specific example message that contains Defect Manager field data: such as problem description, opened date, due date, etc. Save the file as an ASCII-text file.
- (2) After opening the E-mail Message Builder window, select the **File→Open** menu item to retrieve the text-message file that you composed in step (1).
- (3) Replace all example issue/defect field data values with the place-holder fields.
- (4) Click the **OK** button.

That's it – your message is ready to be automatically formatted for the current issue-defect item and sent to appropriate stakeholders as configured by the system administrator.

Broadcasting E-Mails

Communicating effectively and frequently with your clients is always a good idea. There will be times when you want to communicate important technical information to your clients such as:

- A serious problem has been detected in your product and you will want to warn them about the problem
- A fix to a serious problem in your product is now available
- A maintenance release is now available

There will be other times when you want to make them aware of:

- New products that you are offering
- New releases that you are offering
- Send them monthly product or company updates, or newsletter

Defect Manager makes this very easy. With Defect Manager, you can send e-mails to your clients based on several different filters. Defect Manager supports the following filter features:

- You can send e-mail to all your clients
- You can send e-mail to clients that have licensed a certain product from you
- You can send e-mail to specific clients based on your own criteria

Defect Manager will also allow you to customize each e-mail with client-specific information to give the e-mail a personalized look.

Defect Manager can also create e-mail distribution lists that can be imported into Microsoft Outlook.

To send e-mails to your clients select the **Notify→Clients** menu item. The following window will be displayed.

Important: This feature can only be accessed using the Administrator for Windows.

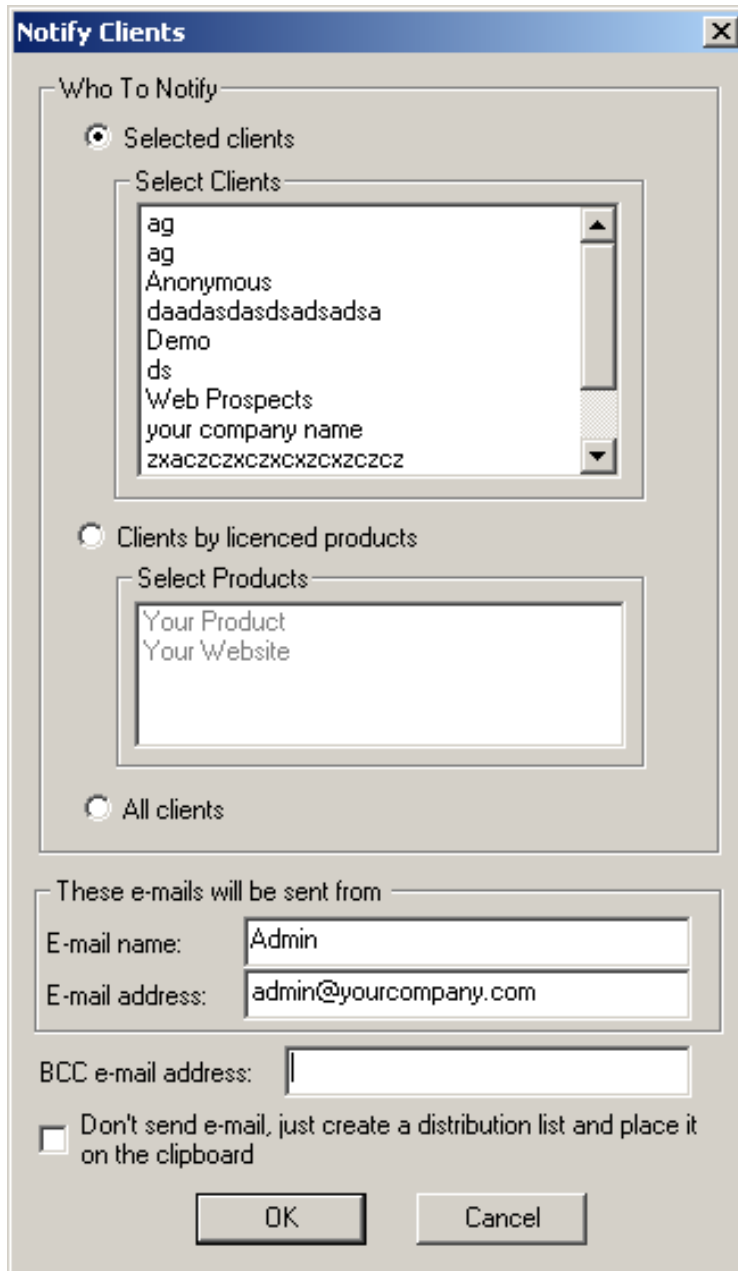


Figure: Notify Clients (via E-Mail) Window

You need to complete the following fields:

- **Who To Notify** – You can choose to notify all clients, clients by product, or selective clients and then select the appropriate subset of members to include.
- **FROM E-mail Name** – Name of e-mail originator

- **FROM E-mail Address** – Origination e-mail address

For an effective broadcast of your e-message to many recipients,

- **FROM E-mail Name** – Specify a valid **e-mail name** such as Support. The e-mail name you select will be in the name FROM field of every e-mail that is sent.
- **FROM E-mail Address** – Specify a valid **e-mail address** such as support@abc.com. This e-mail address will also be in the e-mail FROM field of the e-mail that is sent providing a means to receive replies from your broadcast.
- **BCC e-mail address** – Specify a valid **e-mail address** such as support@abc.com, that will be sent a “blind carbon copy” of the e-mail message.
- **Create distribution list** – If you check this option, a list of all the e-mail addresses that were generated for the **Who To Notify** list will be created and copied to the clipboard.

You can then paste this list into one of many e-mail applications such as Microsoft Outlook.

If you do not create a distribution list, the Message Builder window will be displayed where you can edit your e-mail subject and message. See the section: **Message Builder Section** for more information.

After you have composed your message, your e-mails will be sent. After all the e-mails were sent, the system will give you a list of all e-mails addresses that could not be sent.

***Note:** When the Administrator program reports that e-mails have been sent, it means the SMTP server was contacted and accepted the e-mail.*

If the SMTP server cannot subsequently deliver the e-mail (e.g., the e-mail address is invalid) then the e-mail will not be sent. In this situation, the SMTP server usually will send an e-mail to the address that was specified in the from E-mail address field indicating an error with the delivery.

It is important to check this e-mail account after sending e-mail notifications to see which e-mails could not be delivered. You will need to manually re-send these e-mails.

POP Server Support

Many e-mails are sent to your company from a variety of sources asking for information, or reporting certain issues. The Defect Manger POP Server allows Defect Manager to read e-mail (and their attachments) from any POP3 e-mail boxes and enter those issues into the Defect Manager repository. This allows your company to organize, monitor, manage and resolve e-mail questions and issues from a central location using a single tool.

Configuring POP Servers

To configure POP Server support, select the **File->Repository Settings** menu item and then select the **POP Server Tab**. It is shown below in the following figure.

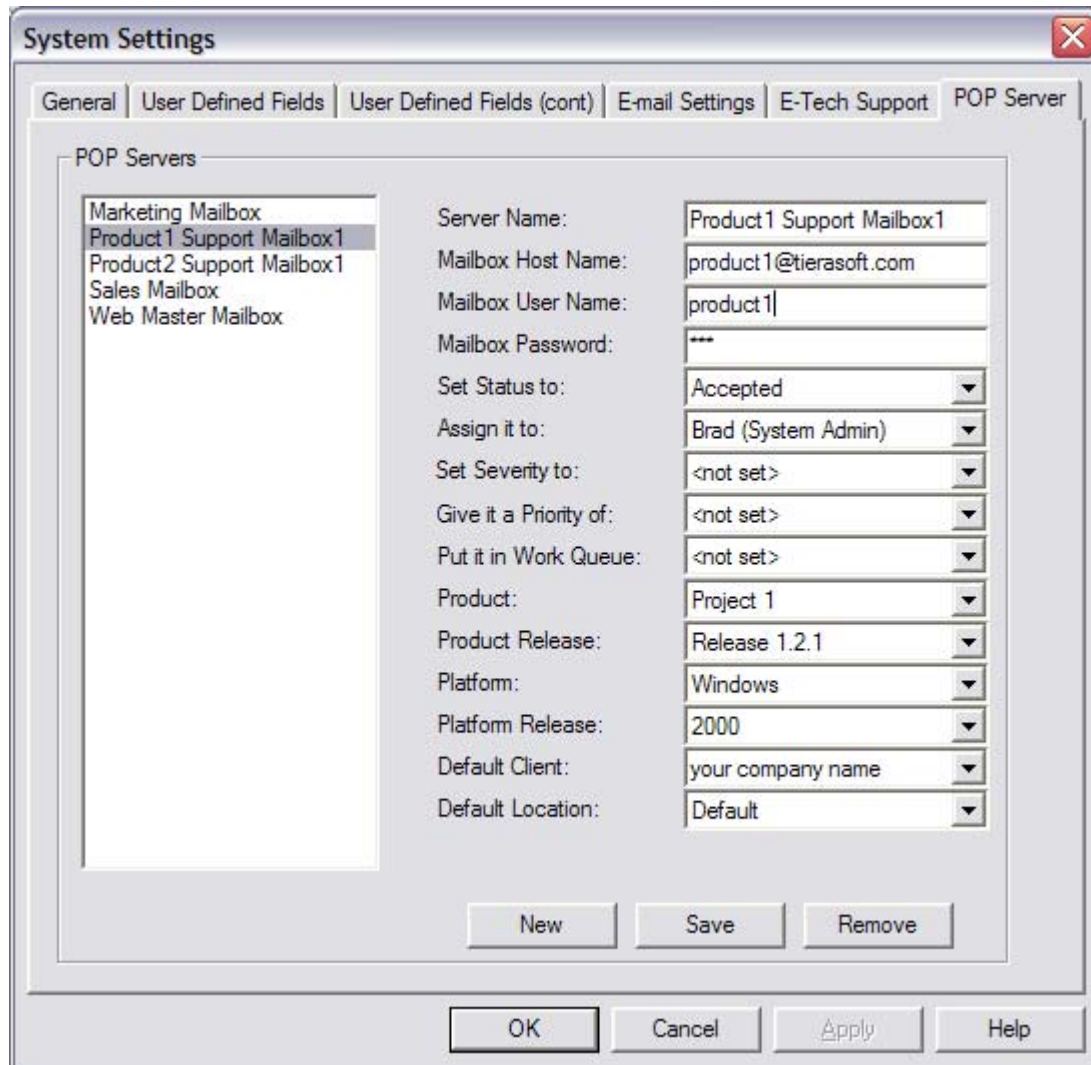


Figure: Configuring POP Servers

To add a POP Server, follow these instructions.

Click the **New** button.

Enter the following fields.

- **Server Name** – The descriptive name for this POP Server e-mail box.
- **Mailbox Host Name** – The hostname where the e-mail box exists. This is usually a domain name such as mail.domain.com for example.
- **Mailbox User Name** – The user name for the e-mail box.

- **Mailbox Password** – The password for the user name for the e-mail box.

Select the remaining default issue fields such **Status**, **Assignee**, etc.

Click the **Save** button.

To modify a POP Server, follow these instructions.

Select the POP Server from the POP Servers List.

Change the Settings.

Click the **Save** button.

To remove a POP Server, follow these instructions.

Select the POP Server from the POP Servers List.

Click the **Remove** button.

E-Tech Support Administration

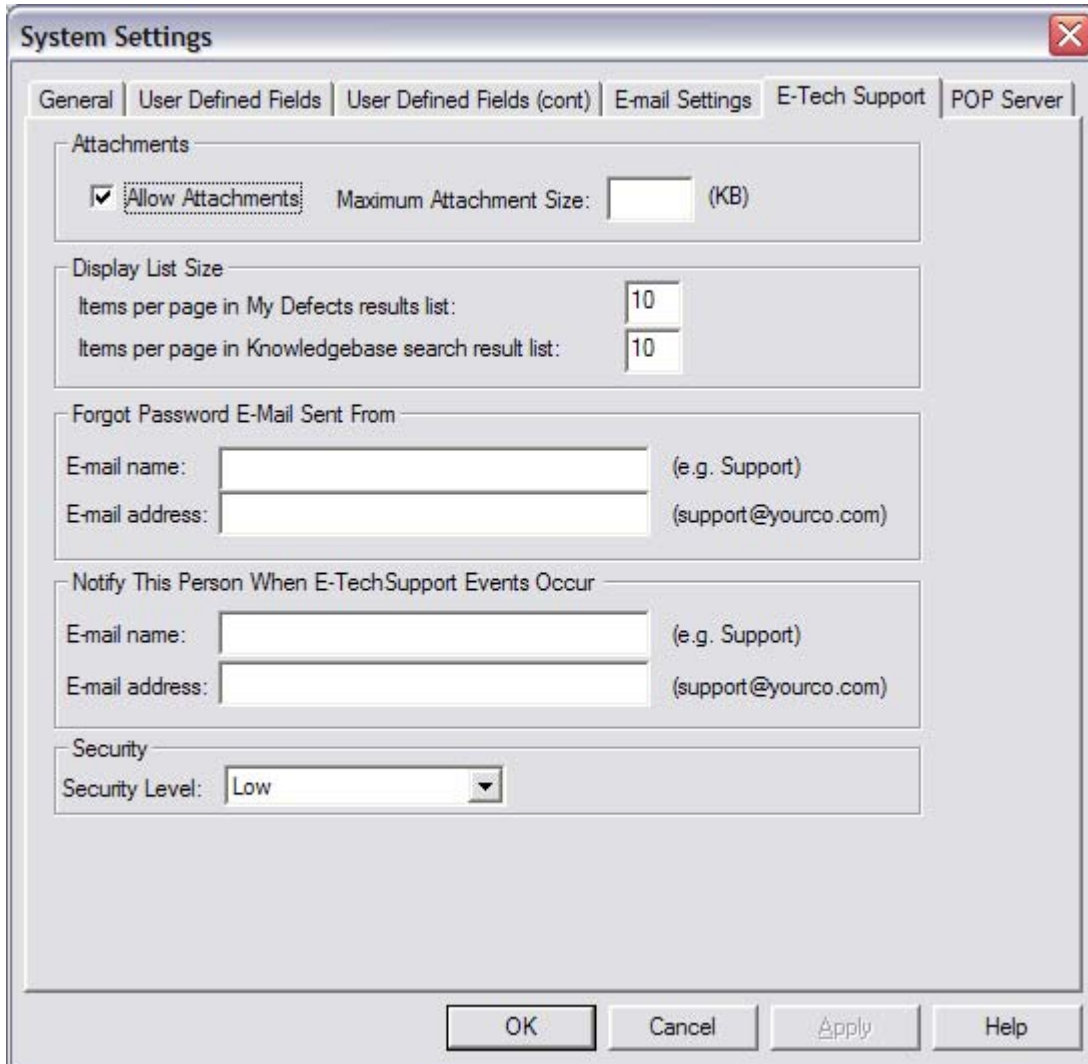
Defect Manager *E-Tech Support* is distributed as a set of Active Server Pages (ASP).

We actually give you an entire “Out of the Box” customer-support section for your company’s website. All you need to do is add your company’s header, footer and graphics and you are ready to better support your clients.

You may use these pages as they exist, or you can easily tailor them to match your website’s look and feel. If your company is not familiar with ASP, we can tailor our ASP to look just like your site.

E-Tech Support Settings

There are many ways you can customize E-Tech Support to suit the needs of your company. When you select the E-Tech Support tab you will see the following window:



The screenshot shows the 'System Settings' dialog box with the 'E-Tech Support' tab selected. The dialog has a title bar with a close button (X) and a tabbed interface with the following tabs: General, User Defined Fields, User Defined Fields (cont), E-mail Settings, E-Tech Support, and POP Server. The 'E-Tech Support' tab contains the following sections:

- Attachments:** A checked checkbox labeled 'Allow Attachments' is followed by a text field for 'Maximum Attachment Size' (currently empty) and '(KB)'.
- Display List Size:** Two text input fields. The first is 'Items per page in My Defects results list:' with the value '10'. The second is 'Items per page in Knowledgebase search result list:' with the value '10'.
- Forgot Password E-Mail Sent From:** Two text input fields. The first is 'E-mail name:' with '(e.g. Support)' as a hint. The second is 'E-mail address:' with '(support@yourco.com)' as a hint.
- Notify This Person When E-TechSupport Events Occur:** Two text input fields. The first is 'E-mail name:' with '(e.g. Support)' as a hint. The second is 'E-mail address:' with '(support@yourco.com)' as a hint.
- Security:** A dropdown menu for 'Security Level:' currently set to 'Low'.

At the bottom of the dialog are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

Figure: System Settings Window – E-Tech Support Tab

E-Tech Support Options

“Attachments” Panel

When your clients report new defects from E-Tech Support, you can specify how these defects are logged into Defect Manager. The available choices are as follows:

- **Allow Attachments** – Check this checkbox if you want your users to be able to attach documents to the defect when they open.

It is good practice to allow your users to attach screen shots of errors and other information that is pertinent to the defect they are reporting.

If you allow attachments, you can limit the largest attachment you are willing to allow someone to upload. If you want to specify a maximum size, enter a value into the **Maximum Attachment Size** field. When you specify this field, you specify the maximum attachment size in kilobytes (kb), not the actual number of bytes. By default this field is blank, which means you are not restricting the maximum attachment size.

“Display List Size” Panel

When your clients are reviewing their defects or searching for defects in the knowledgebase, Defect Manager will display a list of defects that meet the criteria. You can specify the number of defects that will be displayed on each page. For most users the defaults will be sufficient, but for some clients you might want to provide more or less information on each screen.

To change these options, you can set the parameters below.

- **Defects per page in My Defects results list** – This is the number of defect that will be displayed on a single page when reviewing my defects.
- **Defects per page in Knowledgebase search result list** – This is the number of knowledge base search items that will be displayed on a single page after querying the knowledgebase.

“Forgot Password E-mail Sent From” Panel

When users forget their password, they can request to have their password e-mailed to them. You need to specify the FROM user e-mail name and user e-mail address where these e-mail messages originate.

- **E-mail name** – Specify a friendly name for the source name such as Support.
- **E-mail address** – Specify a valid e-mail address for the source address such as support@abc.com

If you want to change the text of the “I forgot my password” e-mail, you will need to edit the **support_forgotpass.asp** file.

“Notify This Person When E-TechSupport Events Occur

When certain actions occur (such as one of your client registering for E-TechSupport) an e-mail can be sent to an individual in our organization. If you specify the e-mail name and e-mail address, this person will be notified when the event occurs.

- **E-mail name** – Specify a friendly name for the source name such as Support.
- **E-mail address** – Specify a valid e-mail address for the source address such as support@abc.com

Security Level (Web)

Defect Manager E-Tech Support provides three distinct levels of security when contacts login to Defect Manager E-Tech Support. These three levels are as **Low**, **Medium** and **High**. Each security level handles the authentication of contacts in a different way. These security levels are described in the [General Settings Tab](#).

Note: You can use https for Defect Manager E-Tech Support. This will ensure that all the data that is viewed in the browser is encrypted.

Customize Display

No all businesses refer to similar things with the same name. For instance, some companies use the name ‘defect’ other s use ‘bug’ to represent an problem or error in their systems. Some businesses sell products, other business, like consulting companies, may primarily do project based services. To accommodate this need, Defect Manager allows the changing of field names to meet your requirements.

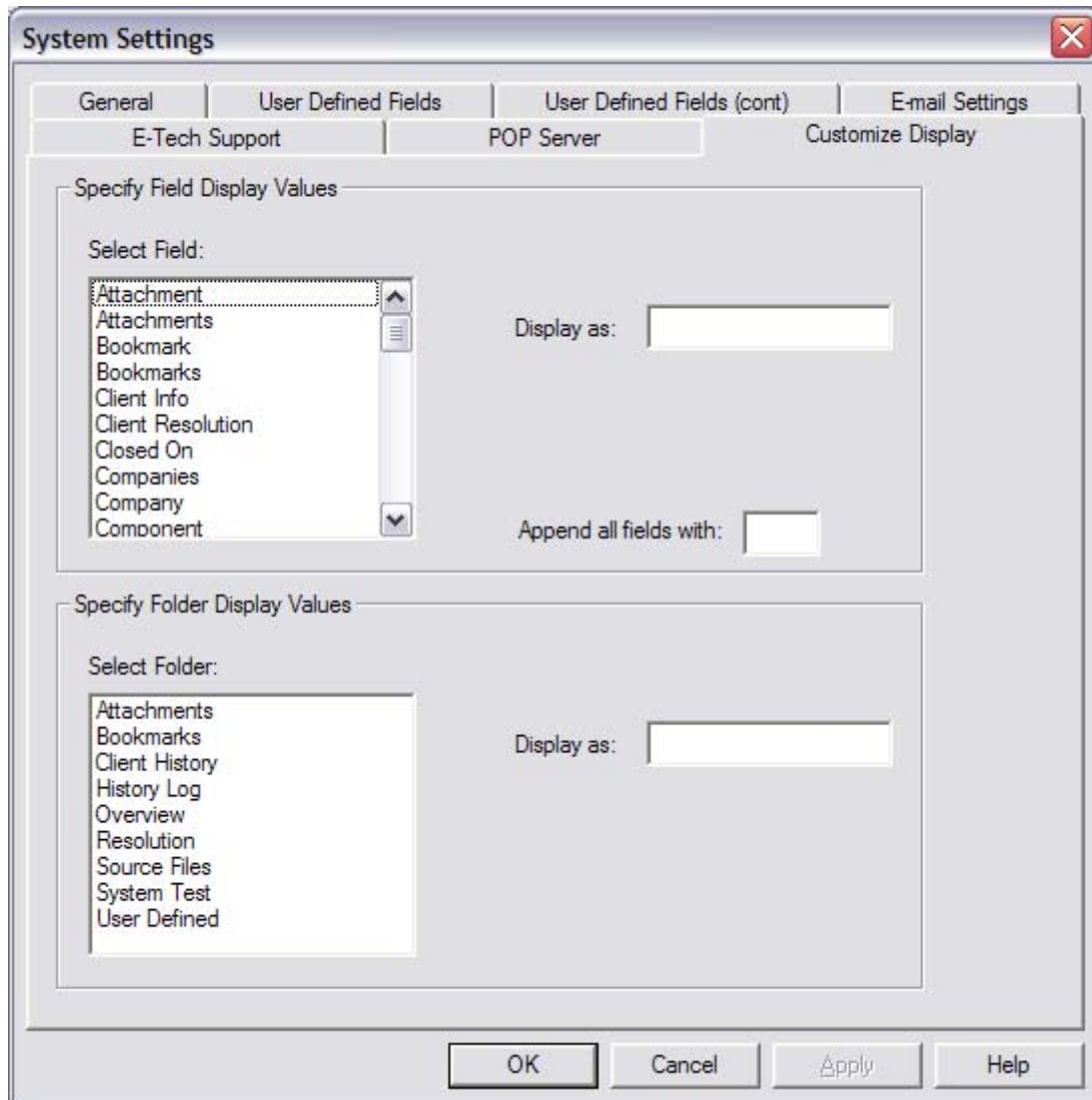
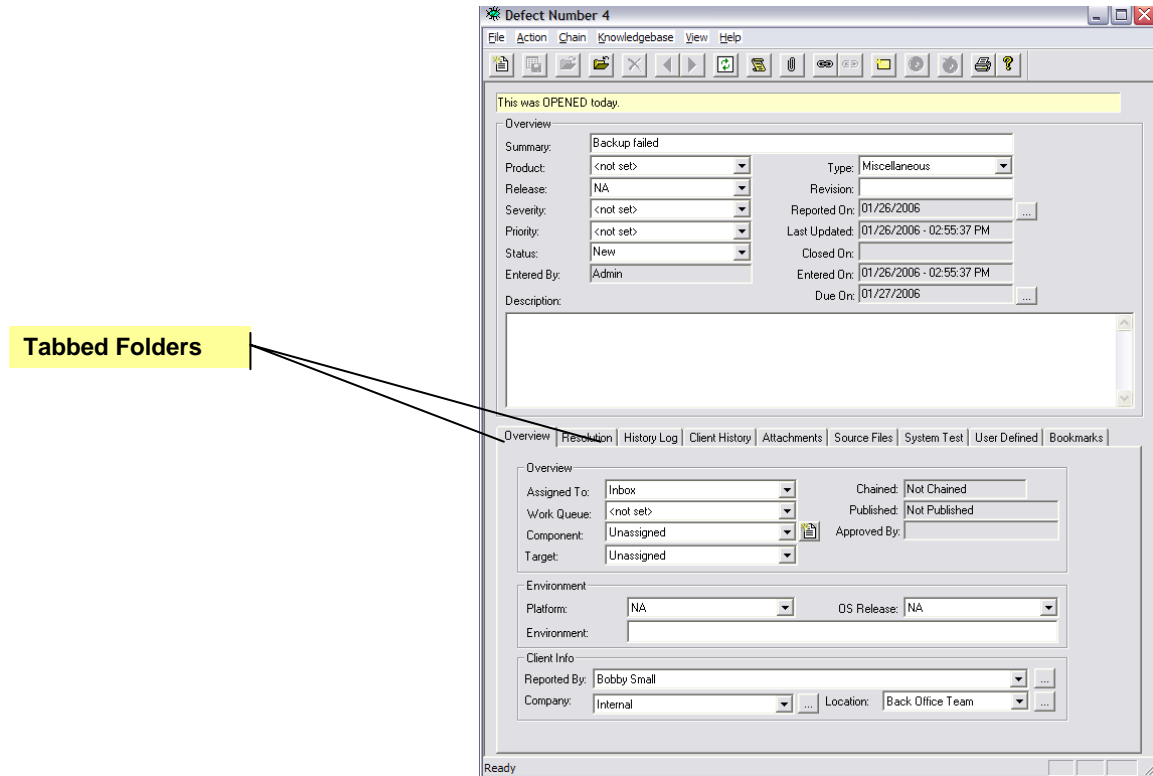


Figure: Customize Field and Detail Section Names Section –

To change a field name, just click on the standard Defect Manager name in field list. The **Display As** field will show the current display value for that field. Change this value to whatever you require.

The Defect Manager **Issue Detail** window is comprised of a series of tabbed folders such as **Overview**, **Resolution**, etc. as highlighted below.



You can change the folder names in the same way that you change the field names. Select the section you want to change, and modify its value in the **Display As** field.

Click the **Update** button when you have finished making your changes.

Configuring Clients

Your clients are the companies or other organizations in your company with which you do business.

Companies can have many locations in which they use your products. Some locations may be licensed for certain products and other locations for different products. Each location has a list of individuals, called [Contacts](#), which you support.

With Defect Manager, contacts from different locations within a company may report defects and issues, make suggestions, request enhancements, ask questions as well as request service or support.

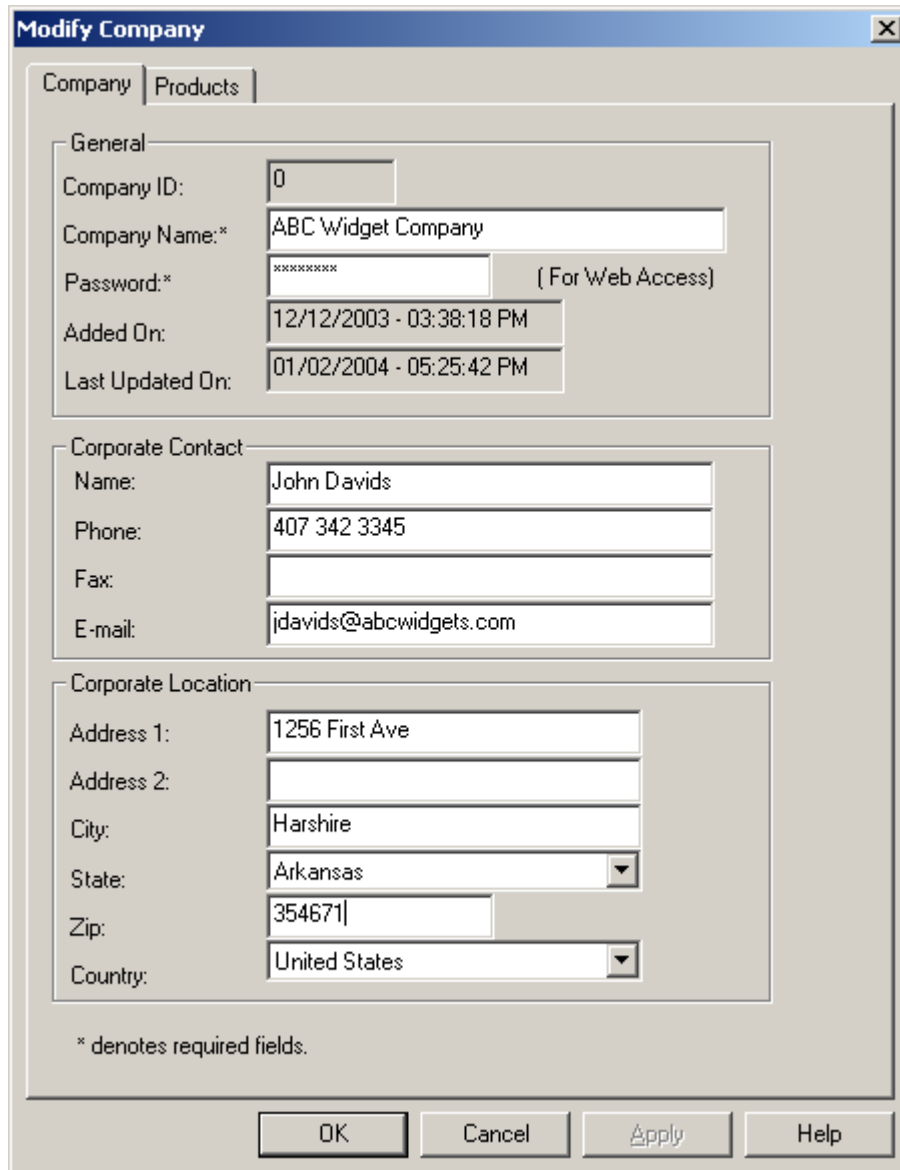
If your company does not want to break down your clients by location, just create a single location, and put all the contacts under a single location.

If you need to move a location from one company to another, you can drag the location from one company to the other company. When you do this, all the contacts for the selected location will be moved. All issues in the repository will be updated to reflect this change.

You can also drag contacts from one location to another to re-assign them to a new location.

Company

When you add or modify a company client, you will see the following window. This window has two tabs: **Company Tab** and **Products Tab**. The first tab, the **Company tab**, is for general company information that pertains to the selected company as shown below.



Modify Company

Company | Products

General

Company ID: 0

Company Name:* ABC Widget Company

Password:* ***** (For Web Access)

Added On: 12/12/2003 - 03:38:18 PM

Last Updated On: 01/02/2004 - 05:25:42 PM

Corporate Contact

Name: John Davids

Phone: 407 342 3345

Fax:

E-mail: jdavids@abcwidgets.com

Corporate Location

Address 1: 1256 First Ave

Address 2:

City: Harshire

State: Arkansas

Zip: 354671

Country: United States

* denotes required fields.

OK Cancel Apply Help

Figure: Modify Company Settings Information

Below are the descriptions of the fields on the Company tab that need to be entered when modifying an existing or adding a new client:

- **Company ID** – The unique database identification of this company. This field is automatically generated by the system when a new company is added.

- **Company Name** – The company name.

This field may be used to select the current company to view or change its properties on this tab. The current company on this tab also affects the **Products Tab** since it will display and allow changes to the products related to the current company).

- **Password** – Used to verify a user for a particular company when they register from the World Wide Web. When adding a new company, a randomly generated password will be created for you. You can change it if you like.
- **Add On** - The date this company was added to the repository.
- **Last Updated On** – The date this company information was last updated.
- **Name** – Corporate contact name.
- **Phone** – Corporate contact phone number.
- **Fax** – Corporate fax number.
- **E-mail** – E-mail of this contact.
- **Address 1** – Company address.
- **Address 2** – Additional address information. For example, this could be a suite number.
- **State** – Company state.
- **Zip** – Company zip code.
- **Country** – The country this company resides.

The second tab, the **Products tab**, lets you specify the type of things (such as products or projects) that you support for the company that is currently selected on the **Company Tab**.

Company Products

For many companies, hardware or software products are the things being supported. No matter whether they manufacture or sell the products, or if they support the products they have purchased and installed, Defect Manager can help them track and resolve issues as they are reported.

For other companies, the entries on the Products Tab may be projects and tasks, business process elements, or service offerings of the different types that they are tracking and managing with Defect Manager. Client users (contacts) can only report defects and search the knowledgebase for issues for products that are defined for them. In this way, you can limit certain contacts (by company) from seeing other products/projects that you are supporting with Defect Manager for other companies. This list of available products is derived from the products that you defined to the system. See the section:

[Configuring Products.](#)

For example:

- If you are a **software company**, the **Products tab** will contain the list of the software products that each of your clients has licensed.
- If you are an **information technology department**, the **Products tab** will contain the list of purchased and installed hardware and software products that you must support. This can be internal as well as external products and services.
- If you are a **consulting company**, this tab may contain a list of projects your company is working on for this client. Depending on the nature of your consulting engagement, your product list might contain a full range of products, projects, processes and services.
- If you are a **medical company** conducting product tests and pilot programs, you may use the **Products tab** to list medical products, medical tests identifiers or pilot program names since these are the “products” you are tracking and supporting.
- If you are **managing one or many projects**, your project plan and updates to project progress does not provide the whole solution to project tracking and effective management. An interactive system for reporting, tracking and resolving project issues and changes, such as Defect Manager provides, provides a powerful and complementary tool. Defect Manager can help make the project plan happen by collecting and reporting accurate and complete operational information needed to maintain and update your project plans.
- When a company uses the E-Tech Support interface to report defects, E-Tech Support users will only be able to see the products that are listed on the **Products tab for their company**.

As you can see, the nature of the “products” that you list can be adapted to fit your organization’s specific needs.

When you select the **Products** tab, you will see the following window displayed.

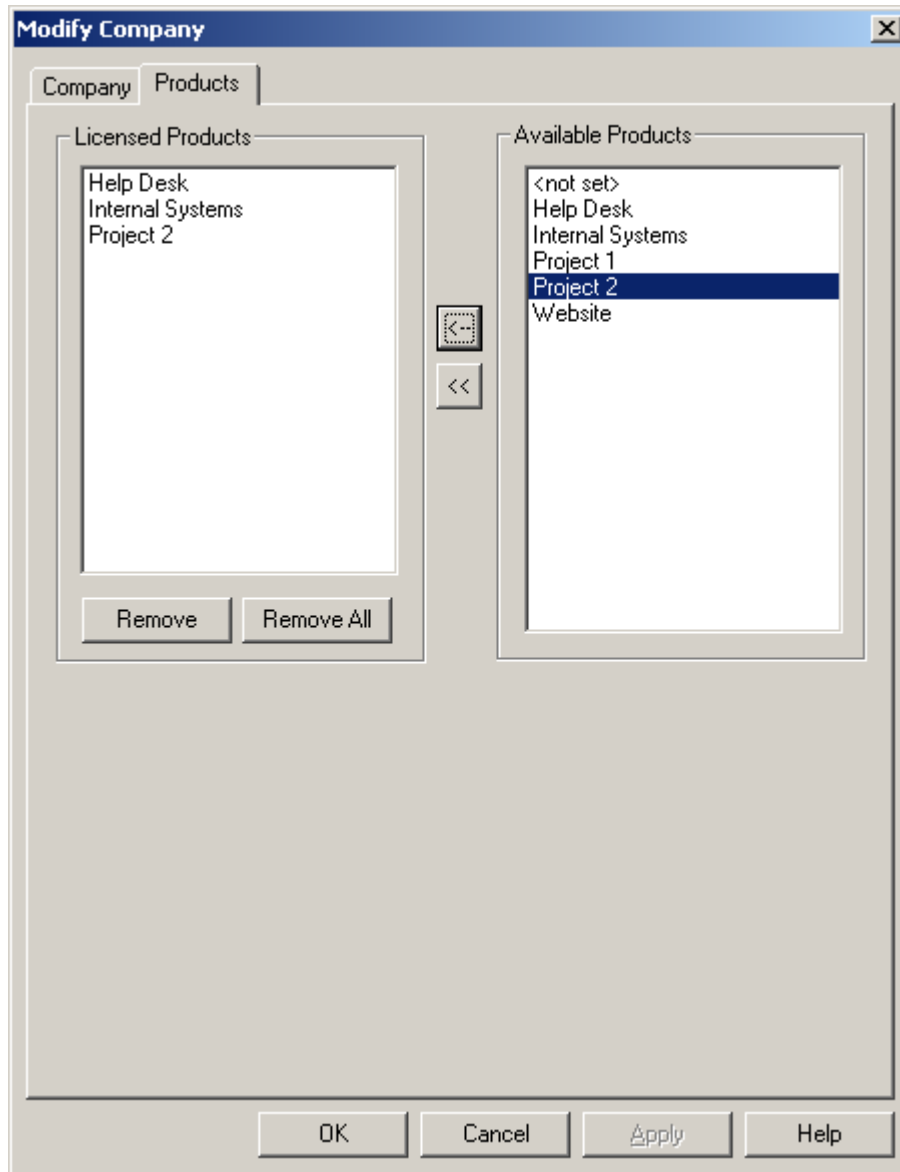


Figure: The Products Tab – Products for the “Current” Company

The products that are configured on the **Products Tab** are related to the current company selected on the **Company Tab** previously. This allows you to maintain separate lists of products for each of your client companies.

The **Products Tab** has two lists. They are described below:

- **Licensed Products** – This is the list of products that this company is licensed to use or “authorized” in whatever sense that is appropriate to your line of business. These are the products that you can associate with the current customer
- **Available Products** – This is the list of active product that are available in the system for you to select from as you establish the “licensed/authorized products” for each client company.

You can use the selection (←) button to add one or more selected products from the **Available Products** list to the **Licensed Products** list. You can also use the select-all (<<) button to add all of the products in the **Available Products** list to the **Licensed Products** list for this company.

To remove products from the Licensed Products list, select the product in the list and press the Remove button. To remove all products from the list, push the Remove All button.

Locations and Sites

When you add or modify a location or site, you will see the following window.

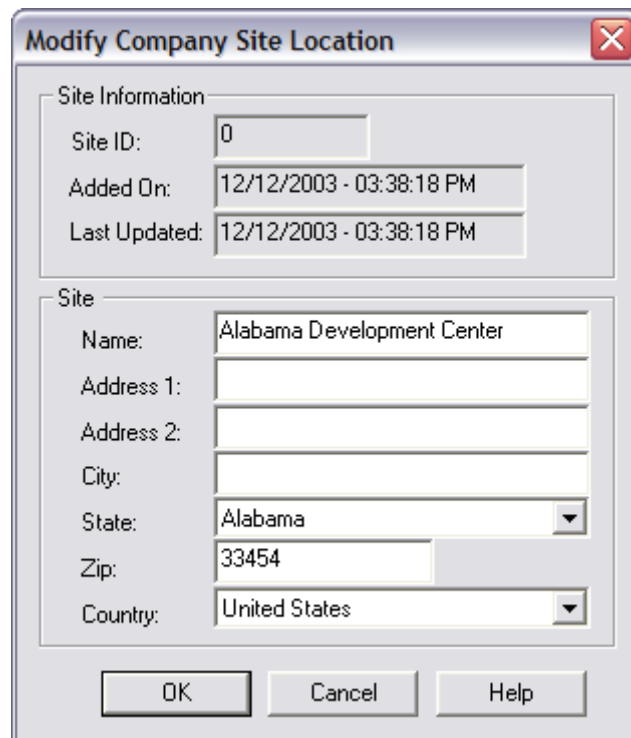


Figure: Client Location Site – Maintenance Window

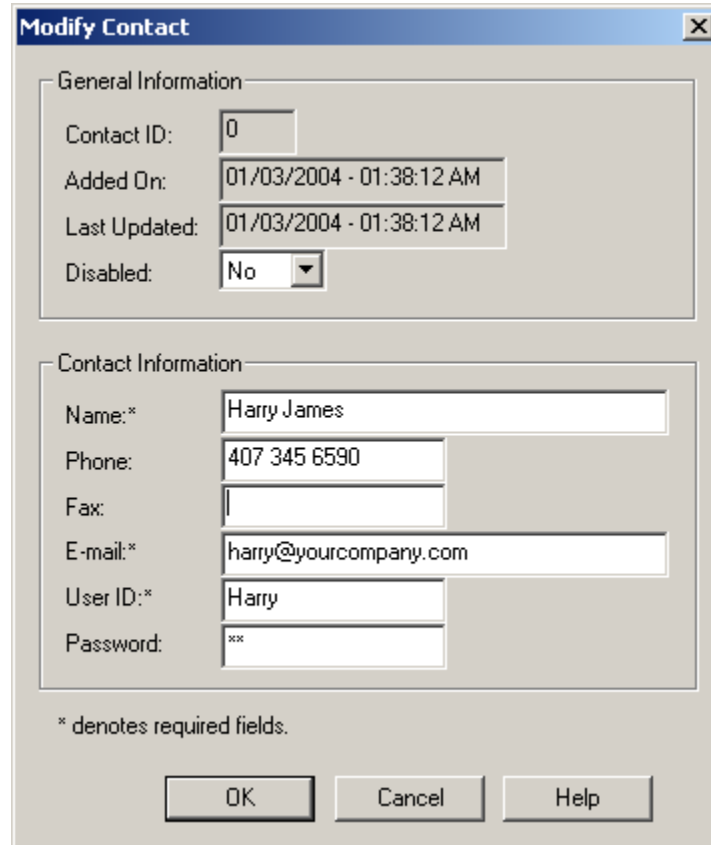
Keep in mind that a client site may a specific location of an organization within another company or it may be a location of an organization within your own company that you support. Your customers and the locations you support may be both external and internal.

The following are the fields that need to be entered when adding a location site for a client company.

- **Site ID** – The unique database identification of this location/site. This field is automatically generated by the system.
- **Added On** - The date this company was added to the repository.
- **Last Updated** – The date this company information was last updated.
- **Name** – The descriptive name for this location.
- **Address 1** – The address of this location. This field is used to identify the site location by name. It can be a street address, web site URL, department name, etc.
- **Address 2** – This field is used to add additional information about the address of the site.
- **State** – This locations state.
- **Zip** – The zip code for this location.
- **Country** --The country this location resides in.

Contacts

When you add or modify a client contact, you will see the following window.



Modify Contact

General Information

Contact ID: 0

Added On: 01/03/2004 - 01:38:12 AM

Last Updated: 01/03/2004 - 01:38:12 AM

Disabled: No

Contact Information

Name:* Harry James

Phone: 407 345 6590

Fax:

E-mail:* harry@yourcompany.com

User ID:* Harry

Password: **

* denotes required fields.

OK Cancel Help

Figure: Modify Client Contact Window

Below are the descriptions of the enterable fields that need to be entered when adding a contact site to a particular site location.

- **Contact ID** – The unique database identification of this contact. This field is automatically generated by the system.
- **Add On** - The date this company was added to the repository.
- **Last Updated** – The date this company information was last updated.
- **Disabled** - Select **Yes** or **No**. When a contact is disabled they are not permitted to use the E-Tech Support system. Users automatically get disabled when they have exceeded the maximum number of failed login attempts trying to login to E-Tech Support.
- **Name** – The name of this contact.
- **Phone** – Contact phone number.

- **Fax** – Contact fax number.
- **E-mail** – The e-mail of this contact. This contact will need this information to access his defects and search the knowledgebase from the World Wide Web.
- **User ID** – The user identification for this contact. This contact will need this information to access their defects and search the knowledgebase from the World Wide Web.
- **Password** – The password for this contact. This contact will need this information to access his defects and search the knowledgebase from the World Wide Web. When adding a new contact, a randomly generated password will be created for you. You can change it, if you like.

Configuring Users

Users of Defect Manager often have different skill sets and responsibilities for working on reported issues and defects. Users are also referred to as Owners since they may be assigned (i.e., “Own”) the responsibility to process an issue or defect.

Owners are individuals that work on issues and defects such as project managers, developers, technical support, QA, graphic artists, web designers, technical writers, etc. All owners have certain security rights as well. This allows you to only permit certain owners to do certain things within the Defect Manager system.

When you add or modify user information, the following window will be displayed for you to identify the user and his/her properties as well as the user’s security permissions.

Modify User [X]

User Info

Name:* Harry Chapin

User ID:* Harry

Password:* **

E-mail:* harry@abseco.com

Title: Test Engineer

Retired: No [v]

Disabled: No [v]

Security Settings

Administration

Read New
 Update Delete

Client Maintenance

New
 Update

Log Privileges

Read New Update Delete
 Can Close Assignable Publish
 Can Change Queue Can Change Assignee
 Can Change Due Date Can Change Severity
 Can Change Priority Can Approve
 Can Change Reported Date

Alert this user by e-mail when thier defect's

Status Changes Priority Changes
 Work Queue Changes Assigned User Changes
 A Note Is Added
 E-mail this user even if they aren't the assignee

* denotes required fields.

Specify Companies

OK Cancel Help

Figure: User/Owner Configuration and Modification Window

Below are the descriptions of each field in the *User/Owner Configuration and Modification* window.

User Info Panel

- **Name** – The name of this user.
- **User Name** -- The name that will be used by this user to login to the system.
- **Password** – The password for this user. When adding a new user, a randomly generated password will be created for you. You can change it if you like.
- **E-mail** – The e-mail for this user.
- **Title** – This users title. This is not currently used, but it will be in the future.
- **Retired** – Select Yes or No. A retired user is someone who no longer permitted to use the Defect Manager system.
- **Disabled** - Select **Yes** or **No**. When a user is disabled they are not permitted to use the Defect Manager system. Users automatically get disabled when they have exceeded the maximum number of failed login attempts.

Security Settings Panel

- **Administration Read** – Check this item, if this user is allowed to use the Defect Manager Administration Tool. This user can look at the entire repository, but cannot add and or modify anything.
- **Administration Create** – Check this item, if this user is allowed to add new items such as clients, queues, etc., when using the Defect Manager Administration Tool.
- **Administration Modify** – Check this item, if this user is allowed to make modifications to existing items such as clients, queues, etc., when using the Defect Manager Administration Tool.
- **Client Create** – Check this item, if this user is allowed to add new clients, locations or contacts to this system when logging new defects in the Defect Manager Log. This might be a person that takes defect reports over the phone, or reviews closed issue items, but this setting is not appropriate for a technical user.
- **Client Modify** – Check this item, if this user is allowed to change information related to companies, locations and contacts when using the Defect Manager Log.
- **Log Read** – Check this item, if this user is allowed to use the Defect Manager Log and view defect issues.
- **Log Publishable** – Check this item, if this user is allowed to publish defects to the knowledgebase.

- **Log Assignable** – Check this item, if this user can be assigned defects. For example, managers are not usually eligible to have defects assigned to them, and would not have this item checked.
- **Log New** – Check this item, if this user can open new issues.
- **Log Update** – Check this item, if the user can update issues.
- **Log Can Close** – Check this item, if the user can close issues.
- **Can Change Assignee** – Check this item, if the user can change the assignee for an issue.
- **Can Change Queue** – Check this item, if the user can assign an issue to another work queue.
- **Can Change Due Date** – Check this item, if the user can change the due date of an issue.
- **Can Change Severity** – Check this item, if the user can change the severity of an issue.
- **Can Change Priority** – Check this item, if the user can change the priority of an issue.
- **Can Change Reported Date** - Check this item, if the user can change the reported date of an issue.
- **Can Approve** - Check this item, if the user can approve items.

“Alert this user by e-mail when” Panel

- **When Status Changes** – Check this item, if you want the system to send an e-mail notification to this user when anyone has changed the *status* of this user’s –issue.
- **When Work Queue Changes** – Check this item, if you want the system to send this user an e-mail notification when anyone has changed the *work queue* assignment for this user’s issue.
- **When Priority Changes** – Check this item, if you want the system to send this user an e-mail notification when anyone has changed the *priority* of this user’s issue.
- **When Assigned User Changes** – Check this item, if you want the system to send this user an e-mail notification when anyone has *assigned* an issue to this user, or a when an issue is no longer *assigned* to this user.
- **When A Note Is Added** – Check this item if you want the system to send this user an e-mail notification when any one has added a note to this issue. The note could be added by a user of Defect Manager or by a client via the E-Tech Support interface.
- **Always E-mail this user, even if they are not the assignee** – Check this item, if you want the system to send an e-mail notification to this user even when they are

not the owner of this defect.

This option works in conjunction with the Status Changes, Work Queue Changes, Priority Changes, and Assigned User Changes Options. For instance, if this user wants to be notified every time a work queue is changed for a defect, even if they are not assigned to the defect, they would check the **Work Queue Changes** option and check this option.

Note: Checking this option alone has no effect without checking one of the other options.

Configuring Work Queues

Work queues are defined and named to identify different work steps in the issue-defect resolution process. Work queue names can also indicate organizational and technical specialties needed to process work in the queue.

For instance, you may have separate queues for development, testing, documentation, graphics, etc. Issues and defects should be passed to a particular work queue and then assigned to an individual who works on that queue. Individuals that service a particular queue can pick items from the queue, or they can have the issue-defect item assigned to them by management.

Essentially, each individual's workload is driven by his/her assigned work queues and items that may be assigned specifically to them. Defect Manager allows users to view: all queues, specific queues assigned to them as well as the issue items that are specifically assigned to them in work queues.

It is important for management to know what defects individuals are working on now, and what's on their schedule next.

It is also important for management to know the workload by departmental area. For instance, suppose there are twenty items in a development queue and there is only one worker available today to process these items. By reviewing the workload and staffing at each queue, management can recognize queue build-up situations as well as staffing deficiencies in order to re-distribute work assignments and staff allocations (as resources permit) to balance the workload.

Although this seems pretty straightforward, it can be very complex to manage when you have hundreds or even thousands of issues/defects reported for many different products by many clients with diverse needs.

Configuring Severity Codes

When defects are reported, you should establish a severity code for them. The severity code that you set is usually based on rules defined by your company and what your clients and your company have agreed upon. A severity code is an effective way to quickly communicate the urgency of a reported issue or defect.

Severity – Processing severity for an issue item is defined in terms of code names that indicate the severity of a defect or importance of an issue. Severity code definitions

consist of a severity name and a numerical severity sort value. The numeric severity sort value allows issue items to be ranked in the order of its severity with zero (0) being the highest severity with the greatest urgency for resolution.

Default severity definitions are shown below which can be customized by using the Defect Manager *Administrator* program to meet your organizations needs.

Severity Name	Severity Sort Value
System Down	0
System Crash	100
Loss of Functionality	200
Minor Issue	300

Note: By leaving gaps in the numerical severity values assigned, it is possible at a later time to create new levels of severity within the existing severity assignments.

Very often maintenance contracts for software products stipulate that certain defect classifications (system down, serious defect, etc.) have a certain severity and based on that severity there is timeframe in which these defects must be rectified. So it is important to keep an eye on the highest-severity issues and defects to make sure they are assigned and corrected within a timeframe that was contractually agreed upon.

Defect Manager lets you create as many severities as you want. However, there is an outer limit of 64,000. Typically, you probably will need less than a dozen, but every business is different. When you add a severity, you will assign a descriptive severity code and a severity-level number. This number denotes the relative severity of this code. Zero is the highest severity and most urgent numerical severity value.

Configuring Priority Codes

When defects are reported, you should establish a priority code for them. The priority that you set is usually based on rules defined by your company and what your clients and your company have agreed upon. A priority sort code is an effective way to quickly communicate the relative importance and urgency of a reported issue or defect for a given severity.

Priority – Processing priority for an issue is defined in terms of code names that indicate the priority of a defect or importance of an issue. Priority code definitions consist of a priority name and a numerical priority sort value. The numeric priority sort value allows issue to be ranked in the order of its priority with zero (0) being the highest priority with the greatest urgency for resolution.

Default priority definitions are shown below which can be customized by using the Defect Manager *Administrator* program to meet your organizations needs.

Priority Name	Priority SortValue
1	0

2	100
3	200
4	300

***Note:** By leaving gaps in the numerical priority values assigned, it is possible at a later time to create new levels of priority within the existing priority assignments.*

Defect Manager lets you create as many priorities as you want. However, there is an outer limit of 64,000. Typically, you probably will need less than a dozen, but every business is different. When you add a priority, you will assign a descriptive priority code and a priority-level number. This number denotes the relative priority of this code.. Zero is the highest priority and most urgent numerical priority value.

Configuring Status Codes

With Defect Manager, you can create many status codes to reflect the state of an issue or defect. Status codes give management the ability to quickly discern the root causes and nature of issues and defects, without having to manually review all the defects items that have been reported.

Also, different status codes can mean different things depending on the work queues an item is currently in. Likewise, certain status codes may only be valid while the issue item is in certain queues.

There are four (4) fixed primary-status codes that are listed below. You can define as many secondary status codes under each of these four (4) primary categories as you need..

- **Open Issues**, are issues or defects that have not been corrected yet. There is still more work that needs to be done to resolve them. You can create different open statuses to reflect the current state of an issue/defect being open, such as work in progress, or testing of a fix in-progress.
- **Deferred Issues** are issues or defects that still need to be resolved, but they will be worked on later. For example, you would defer a defect if you were waiting on some documentation or more information from a client. The issue/defect is open, but cannot be worked on at this time. Other types of deferred defects could be enhancement requests.
- **Closed Issues** are issues/defects that have been resolved. They do not require any further work. For example, you may want to have several status codes for closed issues/defects, such as: **Not a Defect, Verified, Tested, Resolved, Deployed.**

For example, you may want to have several status codes for enhancements such as: **Received, Review Completed, Approved, Rejected, Amended, Scheduled, Deployed.** Such status codes as these can effectively track the lifecycle that an enhancements request may go through until it is rejected; or approved and finally deployed.

These fields contain pre-defined code values to insure that consistent data is entered and to make it easy for a user to select the appropriate field value from a list of values.

The use of the system is made easier when the sets of code values chosen are familiar and appropriate for your organization.

Status – Defect Manager provides four (3) primary-status types for an issue that you control with certain built-in menu-bar operations (shown on the right, below) when using the Defect-Issue Window in Defect Manager:

- | | |
|--------------------|-------------------------------------|
| 1. Open Defect | File → New; Action → Re-Open |
| 2. Closed Defect | File → Close |
| 3. Deferred Defect | Action → Defer |

The primary-status type values are fixed and built-in. However within each primary-status value, the status codes you use can be tailored to provide four (3) sets of status-code values that meet the needs of your organization and your business process.

The status of an issue or defect is determined by a combination of its primary status and one of its secondary status values.

The table, shown below, lists the default sets of secondary status-code values for each primary-status code listed across the header row. The secondary status-code sets can be changed by adding and deleting values, from within each group, to meet your organization's needs.

Open Defect	Closed Defect	Deferred Defect
New	Bug	Need System Setup
Verified As Bug	Not A Bug	Waiting on Client
Fix Made	Documentation Error	
Fix Verified	How To	
Fix in Progress	Not Reproducible	
Packaged	Working As Designed	
On Hold		
Investigating		
Client Confirm Fix		

Configuring Components

A component is a member or element of a product you defined. These definitions can be physical or logical components that you decide to create to provide additional granularity in your tracking and management of products, projects, processes or services.

Software Components may be defined as a: specific executable program, dynamic link library (DLL), web HTML page, web site, software application module, etc.

For example, a problem identified in Oracle Financials (**OFIN**) can be located in the Vendor Records (**VenRec**) portion of its Accounts Payable (**AP**) module. Since Oracle Financials is a very large application with many application modules and component modules, the problem area can be closely identified as in a specific software component with a component code such as: **OFIN-AP-VenRec**.

The defect's *Description* field may further identify the specific form-window name in the application where the problem occurred since a windows screen might be too-low level of detail to be used as a *Component* in large applications with hundreds of screens.

You can specify *Component Codes* for meaningful areas where issues may occur. By carefully selecting your product and component code definitions you can create an effective way to identify and report where issues and defects are occurring. This will allow you to determine which areas of your product and its components are more prone to issues.

Component codes can be related to specific product, or they can be valid across all products.

It is important to establish an effective balance so that products and components do not result in too many codes to be manageable or have too few codes to be meaningful.

Having a balanced and uniform set of codes to describe the products and components you support will help you and your management track and understand how to take appropriate action to lessen the defects in more problematic areas of your products.

Configuring Products

When items are reported, they are related to a particular *Product*.

As we discussed earlier, the Defect Manager concept of a *Product* is adaptable to the needs of your particular organization. So a product may be a hardware and/or software product, a project, a process or a service. In Defect Manager, Products are the things you support that must have their issues, defects and enhancements tracked and managed..

A Defect Manager *Product* is identified by its *Product Name*. Under any given *Product*, there may be any number of versions/builds of that *Product*. In Defect Manager, each version/build is referred to as a *Product Release*.

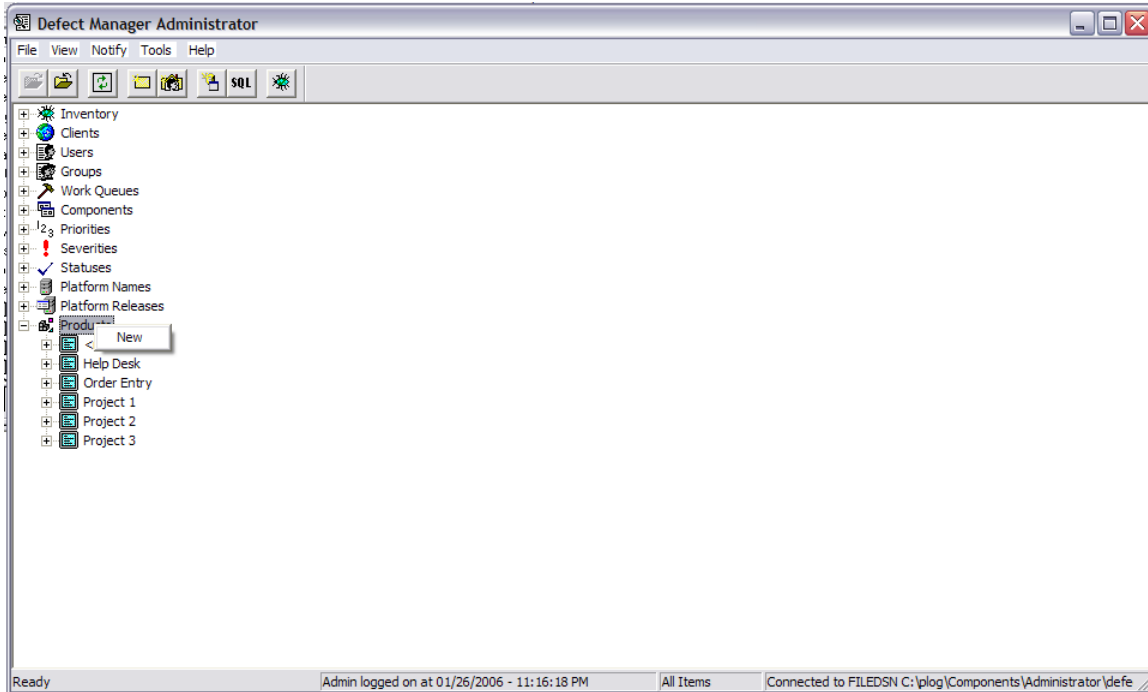
When you no longer support a product, you can also set the product to be inactive. This prevents anyone from opening a new issue or defect for a product that is no longer is valid.

It is important to de-activate products once you no longer support them, since it prevents invalid entries and it reduces the number of possible product selections when a new issue is being entered.

For each *Product Release*, default values for assignee, priority, severity, status and work queue can be specified. These default values will be set when users enter new issues using the Defect Manager Log.

Adding A New Product

To add a new product, right click on the Product and select the New menu item as show below.



Defect Manager Administrator – Main Window –Add Product

The following window will be displayed.

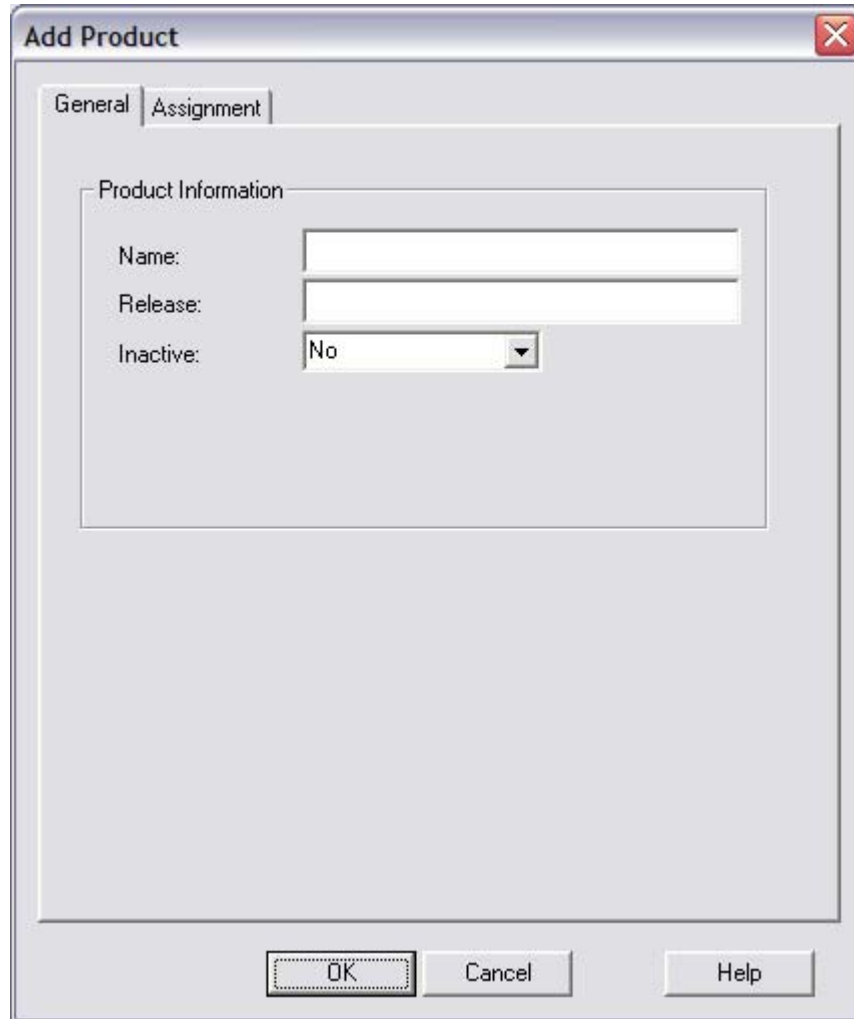


Figure: Add Product Window

Below are the descriptions of each field in the *New Product* window.

- **Product Name** – The name for the product
- **Product Release** – The initial version of the product.
- **Inactive** – Whether the product is still active. When a product is inactive, you can no longer log new issues against it.

Default Issue Assignment

- **Assign To** – New issues for this product release will be assigned to this user.
- **Priority** - New issues for this product release will have this priority.
- **Work Queue** - New issues for this product release will be assigned to this work queue.
- **Status** - New issues for this product release will be assigned this status.
- **Severity** - New issues for this product release will have this severity.

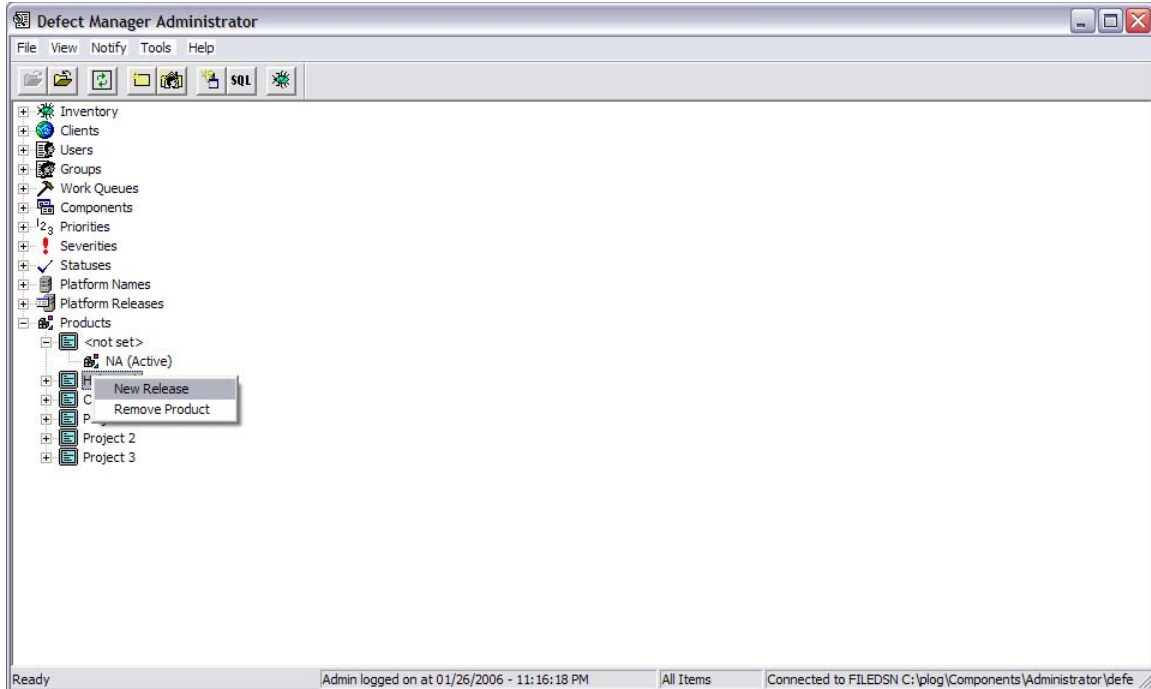
E-Tech Support Default Issue Assignment

- **Assign To** – New issues entered using the E-Tech Support interface will be assigned to this user.
- **Priority** - New issues entered using the E-Tech Support interface will have this priority.
- **Work Queue** - New issues entered using the E-Tech Support interface will be assigned to this work queue.
- **Status** - New issues entered using the E-Tech Support interface will be assigned this status.
- **Severity** - New issues entered using the E-Tech Support interface will have this severity.

After setting the default assignments, click the **Ok** button.

Adding a New Product Release

To add a new product, right click on the Product and select the New menu item as show below.



Defect Manager Administrator – Main Window –Add Product Release

The following window will be displayed.

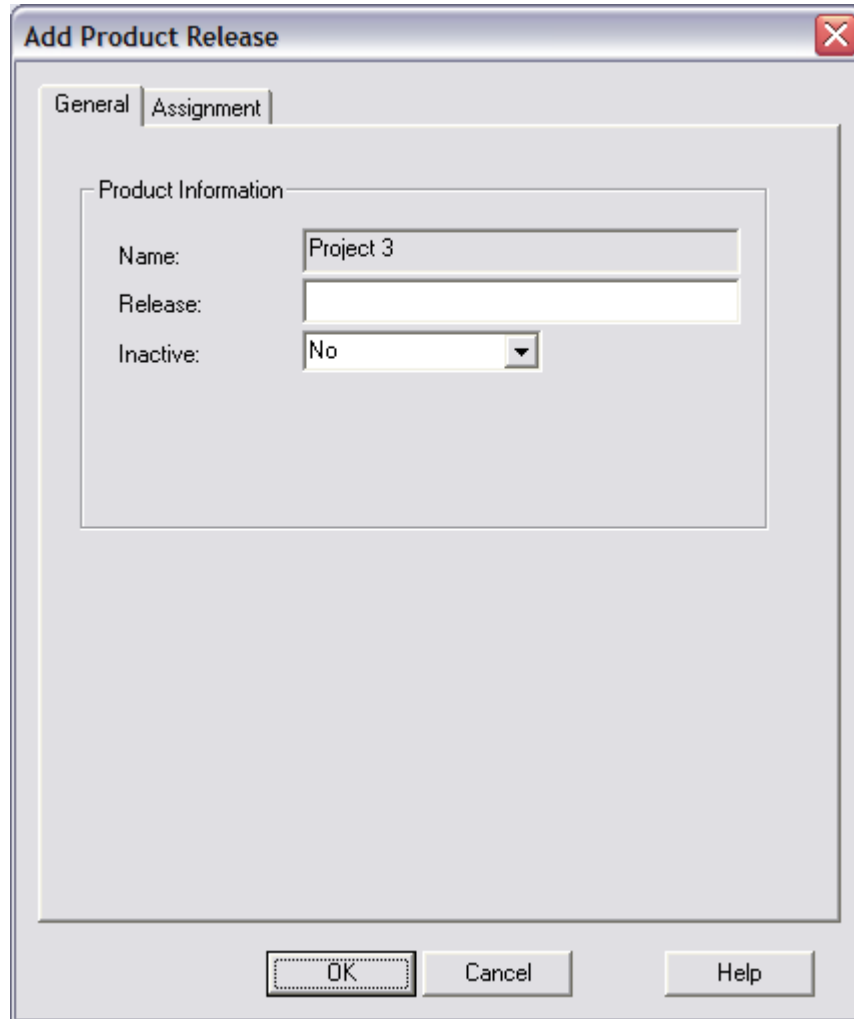


Figure: New Product Release Window

Follow the same direction you would for adding a new product in the [Add A New Product](#) section.

Removing a Product

When you remove a product from the system, the following occurs:

- The product is deleted
- All product releases for the product are deleted.
- All reported issues for the product are deleted.

Important: Products (and all the reported issues) that are removed cannot be recovered by Defect Manager. It is possible that you could recover them from a previous database back-up, but that depends on your system maintenance program.

To remove a product, select the product item under the **Product** that you want to delete as shown below.

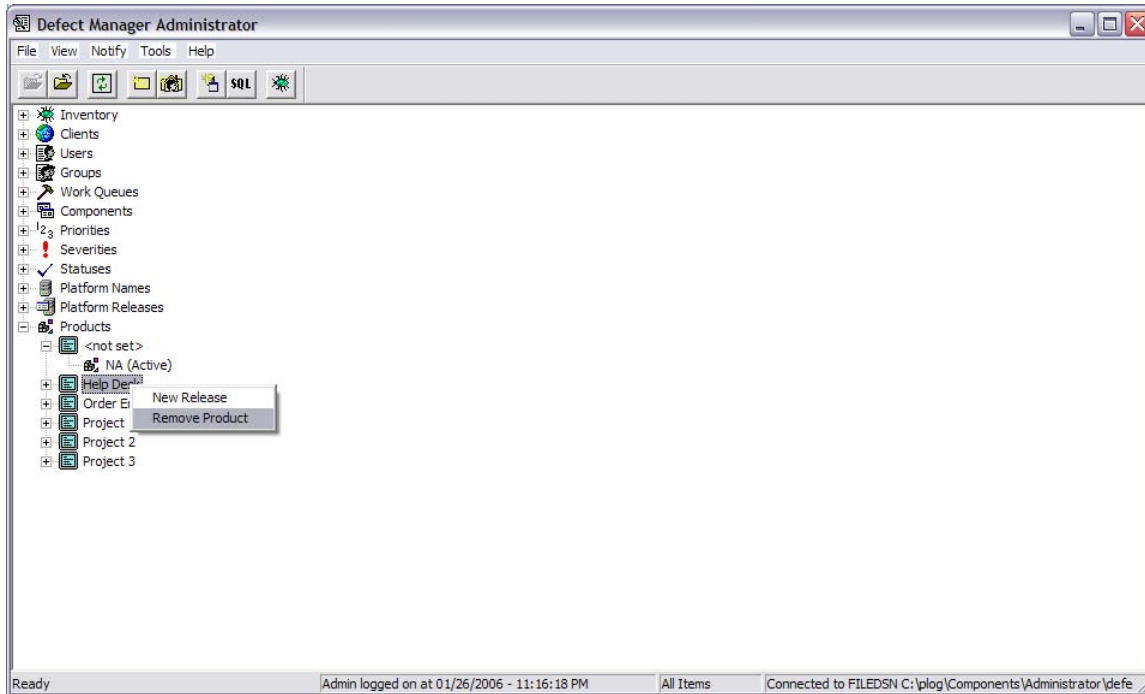


Figure: Defect Manager Administrator – Main Window Remove Product

Select the **Remove** menu item and the product, all product releases and all reported issues will be permanently deleted from the system.

Removing a Product Release

When you remove a product release from the system, the following occurs:

- The product release is deleted.
- All reported issues for the product release are deleted.

Important: Products Releases (and all the reported issues for that release) that are removed cannot be recovered by Defect Manager. It is possible that you could recover them from a previous database back-up, but that depends on your system maintenance program.

To remove a product release, select the **Product Release** item under the **Product** that you want to delete as shown below.

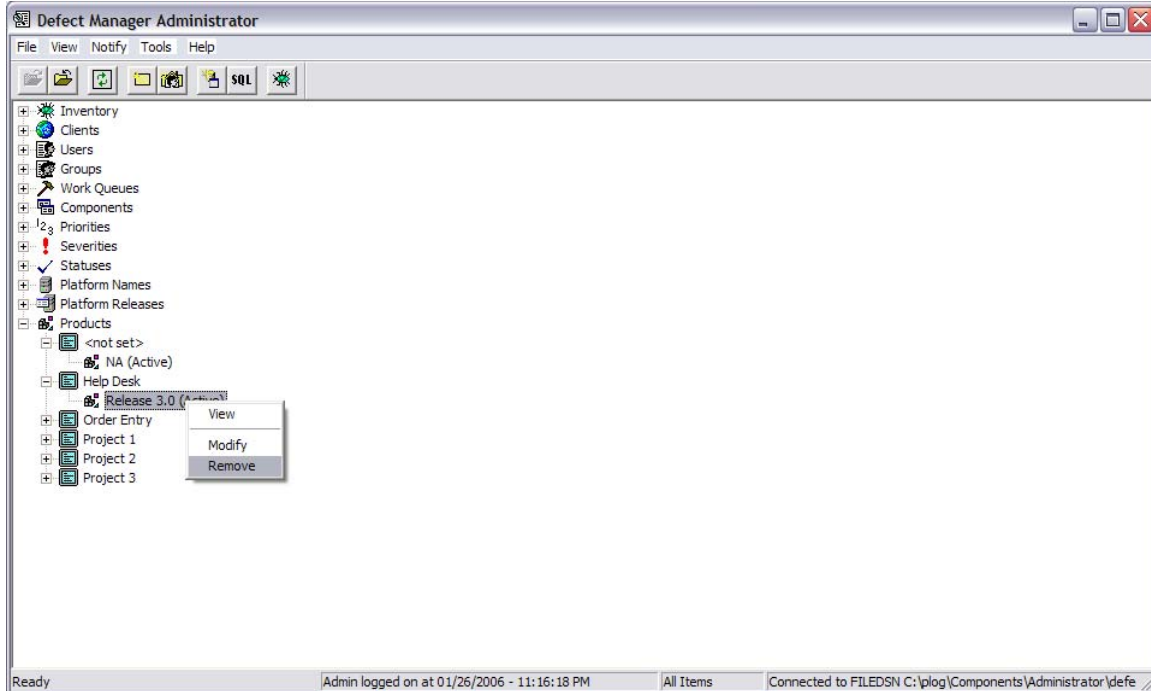


Figure: Defect Manager Administrator – Main Window Remove Product Release

Select the **Remove** menu item, and all reported issues for that release will be permanently deleted.

Reminders Overview

Everyone needs to be reminded of something. Defect Manager can remind you and your staff of all the outstanding issues and defects that need your attention with reminders sent via e-mail.

Reminders notify staff and management of the pending work that needs to be performed to resolve defects that are still outstanding. Reminders can be particularly useful for:

- Developers and managers who want a snapshot of all the pending items that are assigned to them and/or their staff via e-mail.

The snapshots can be created at any interval, such as hourly, daily, monthly, etc. and any hour, depending on the need of your company. For instance, Defect Manager reminders can be run every evening, so that when employees come to work their e-mail reminder will be waiting for them – alerting them to the existing and new items that they have the responsibility to process.

- Managers who are traveling and do not have access to Defect Manager, but do have access to e-mail via a hand-held PDA device, laptop, or web-enabled mobile phone can get summary reports on issues and defects that are still open and need attention.

- Users can receive reminders of their assigned defects. Managers see a summary of all open defects for all users.
- E-mail reminders are also an effective way to communicate with those working from remote virtual offices.

Setting Up Reminders

You can set up an unlimited number of reminders for an unlimited number of users. You are only limited by processing power and network bandwidth for e-mail. The process for setting up reminders is as follows.

- Create a list of users for a functional area.
- Optionally, create a list of managers that would want to see the defects for that functional area.
- Optionally, create a list of users that will be cc'ed for each of the user reports.
- Use Windows 2000 task scheduler or other windows scheduler (such as WinCron) to run the Defect Manager Reminders.

Reminder Lists

The system administrator sets up lists of users by workgroup, area of responsibility, manager, etc. There are three types of lists. *User lists*, *Management Lists*, and *cc Lists*.

- When Defect Manager Reminder is run, it will send an e-mail reminder to each user in the *User List*. In that e-mail will be a list of issue items that are open for that user.
- A *Management List*, is a list of management users that will receive a summary of all the open defects for individuals on the user list that received reminders.
- A *cc list*, called “carbon-copied list”, is a list of users that will be copied when each e-mail reminder is sent to the individuals on the user list.

Each list is specified as a text file of items, with one (1) list-item on each line.

When the Windows 2000 Task Scheduler (or equivalent program) runs Defect Manager reminders, the command line should delimit a list of multiple list-file-names on one line with the semicolon character (;).

When you are creating a Defect Manager user list, each item in the list is placed on a separate line of the text file:

Defectmanagerusername-1

Defectmanagerusername-2

...

where **defectmanagerusername-n** is the user id for a Defect Manager worker (i.e., a User), as defined in the repository under the **Users** part of the repository tree.

For example, you might create a user list file called **techsupport.lst** that includes Harry Thornton and Sharon Tweed. This **techsupport.lst** would have the following entries in the file:

harryt

sharont

When you are creating a management list, or a cc list, each item in the list is placed on a separate line of the text file:

<e-mailname-1>Friendly Name-1

<e-mailname-2>Friendly Name-2

...

where **e-mailname-1**, **email-name-2** are the e-mail address and **Friendly Name-1**, **Friendly Name-2** are the appropriate text string for each e-mail respectively.

For example, you might create a manager list file called **techsupportmanager.lst** which would have the following entries in the file:

<johnt@yourco.com>John Techmanager

<cliffb@yourco.com>Cliff Bossman

Optionally, you can create a list of names of people who will be cc'ed on the reminders that will be sent to the **techsupport.lst** (e.g., Harry Thornton and Sharon Tweed).

You will create this association between a reminder list and the associated cc-reminder-list when you schedule the generation of reminders to run. The Reminders program can be automatically launched at a predefined time by the Windows Task Scheduler.

Once the lists are created you are ready to schedule the Defect Manager Reminder.

Generating Reminders

To generate reminders to your user, the ***Reminders program*** must be executed. When this program is run, it takes the following parameters:

```
Reminder HOME="dmhomepath" FILEDSN="dmfiledsnpath"  
DBUSER="dbusername" DBPASSWORD="dbpassword" USERLIST="userlist"  
MANAGEMENTLIST="managementlist" CCLIST=usercclist
```

Please observe the following notes:

- All parameters are separated by blanks.
- All parameter values such as *dmhomepath*, that have embedded blanks must have quotes around them.
- There should be no spaces between a parameter name and parameter value.

Important: In most cases you do not need to set any parameters and you can just start the executable.

An explanation of parameters for the ***Reminders program*** follows.

- **[HOME="dmhomepath"]**

This parameter is the path where the product is installed. If the product was installed in c:\Program Files\Defect Manager, then this parameter would be:

```
HOME="c:\Program Files\Defect Manager"
```

- **[FILEDSN="dmfiledsnpath"]**

This optional parameter is the path where the FILEDSN is located. The FILEDSN is used to connect to the database via an ODBC Data Source Name (DSN).

- The Defect Manager Reminder program will automatically look for the ***defectmgrwe.dsn*** (the default, when Microsoft Access holds the repository) or ***defectmgrdsn*** .

If you are using Access to implement your repository, this DSN is the default so you can omit this parameter.

- If you are using another type of database to implement your repository, use the FILEDSN value *defectmgr.dsn* (for SQLServer, Ingres II, and Oracle) in the \bin directory where you installed the product.
- If you are using a FILEDSN in another location, such as
c:\Document Settings\Common\ODBC\defectmgr.dsn,

then this parameter would be:

FILEDSN=" c:\Document Settings\Common\ODBC\defectmgr.dsn"

- **[DBUSER="dbusername"]**

This optional parameter is used if you configured the system with an ODBC DSN (data source name) of *defectmgr* .

A Microsoft Access database does not require this parameter, but the other types of databases used to implement the repository require it. If the specified user name requires a password, then you will also need to specify the **DBPASSWORD** parameter as well.

- **[DBPASSWORD="dbpassword"]**

This optional parameter is used only if you configured the system with an ODBC data source of *defectmgr* (for SQL Server, Oracle, DB2, Sybase, Ingres II, and Postgres).

When using these databases, you need to specify a database user name to establish a connection to the database. If the specified user name requires a password, then you will also need to specify this parameter as well.

- **[USERLIST="userlist"]**

This optional parameter specifies a list of users that should be reminded of their open defects. If this parameter is omitted, all users will be reminded. The user list can be specified as an in-line list of users separated by semicolons:

USERLIST="mgould;hschwartz"

or as a file that contains the list of names that exist in a file:

USERLIST="@userlistfilename"

Note: The ampersand (@) prefix in this parameter indicates that a file name follows.

- **[MANAGEMENTLIST="managementlist"]**

This parameter specifies a list of users that will receive a summary e-mail of all open defects for all the users specified in the USERLIST parameter. The management list can be specified with a list of users separated by semicolons or a file that contains the list of management names. Management users are always defined as:

<Friendly Name> e-mailname

Using the in-line form would be:

MANAGEMENTLIST ="<Mark Gould>mgould@a.com; <Harry Schwartz>hschwartz.com"

Using the file list form would be:

MANAGEMENTLIST ="@userlistfilename"

Note: The ampersand (@) prefix in this parameter indicates that a file name follows.

- **[CCLIST=usercclist]**

This parameter specifies a list of users that will be copied on every e-mail reminder that is sent to each user specified in the USERLIST. The cc list can be specified with a list of users separated by semicolons or a file that contains the list of cc users. Cc users are always defined as: **<Friendly Name> e-mailname**

Using the in-line form would be:

CCLIST =”<Mark Gould>mgould@a.com; <Harry Schwartz>hschwartz.com”

Using the file list form would be: **CCLIST =”@userlistfilename”**

Note: The ampersand (@) prefix in this parameter indicates that a file name follows.

To have the Reminder program run periodically, we recommend that you use the **Windows Task Scheduler..**

For instance, you can configure the Windows Task Scheduler to run different sets of reminders nightly, so that everybody will have their reminders in their e-mail inbox when they arrive for work the next morning.

Troubleshooting Reminders

The Defect Manager Reminder program runs in two stages. The first stage parses the command line, and the second stage actually creates and sends the reminder e-mails.

If the Defect Manager Reminder encounters problems during the first stage, it finishes and sets a non-zero return code that will indicate the type of problem encountered.

After the first stage completes successfully, the second stage begins. During this stage, Defect Manager Reminder creates a log file where all reminder activities are recorded.

If stage two fails, Defect Manager Reminder sets a non-zero return code, and you will have to review the log file in order to see what went wrong. The Defect Manager Reminder program places the log file in the **\Reminders\Log** directory.

The log filename format is:

logmm-dd-yyyy-hh-mm-ss.txt

where **mm** is month,

dd is day,

yyyy is year,

hh is hour,

mm is minute and

ss is the second that the reminder was run.

You can view this file with any text file viewer, including notepad. You should periodically delete obsolete log files to reclaim disk space.

Below are the Defect Manager Reminder *return codes* and their meanings.

Return Code	Return Code Meaning
0	Success – Everything worked fine.
1	Internal error. Call Technical support.
2	No parameters specified.
3	Invalid parameter specified. The parameter was not recognized.
4	No HOME parameter specified.
5	Invalid HOME directory
6	License check failed. The .lic file in the \bin directory is missing or has expired.
7	Could not open a list file. Check log file for more info.
8	Could not connect to database. Check log file for more info
9	Processing the request failed. Check log file for more info

Figure: Defect Manager Reminder Return Codes

System Event Log

To help the system administrator manage the system, Defect Manager maintains a system wide event log. The System Event Log contains the following information:

- Disabled accounts due repeated login failure
- Unusual system problems
- System Failures
- Tracing Information (turned on by Tiera Technical Support)

Entries in the System Event Log are categorized as:

- Error- Action should be taken immediately to correct event item
- Warnings – Consideration should be given to the event item to see if a larger problem may be looming
- Informational – For review only
- Tracing Information (when turned on by Tiera Technical Support)

To view the System Event Log, you need to start the Event Viewer. This can be done in one of two ways.

- Select the **File->Tools->Event Viewer** menu item.
- Select Event Viewer from the Defect Manager Start menu.

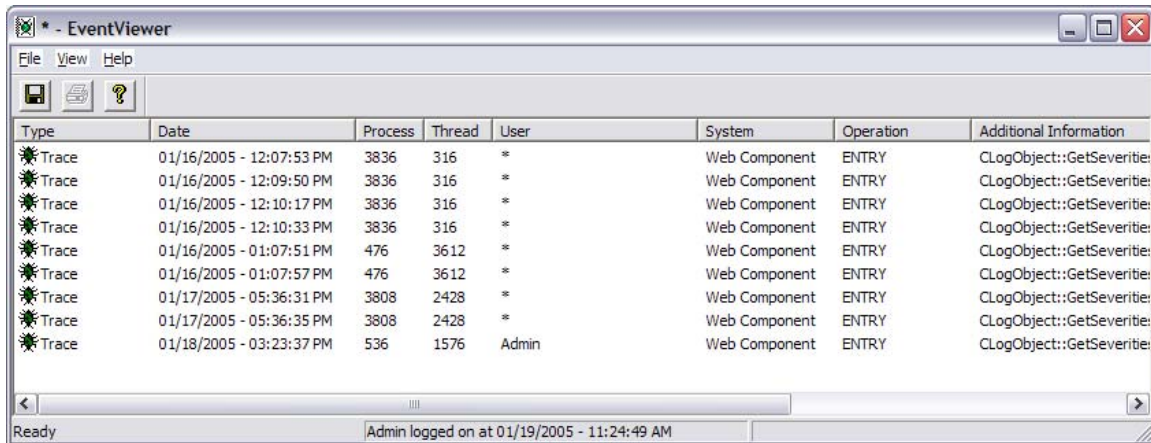


Figure: Defect Manager Event Viewer

Running SQL Scripts

Defect manager gives you the ability to run SQL scripts. Defect manager uses this capability to load some of the sample repository configurations, perform upgrades, etc.

You can also use this capability; given the following restrictions:

- Cannot do Select statements.
- Multiple statements need to be delimited by semi-colons.
- Passes the SQL statement as it is coded.

To run a SQL script you will choose the **File→Run SQL** menu item. If a repository is opened, then the script will be run against the opened repository. If a repository is not open, then the following window will be displayed, allowing you to select an ODBC data source as shown below.

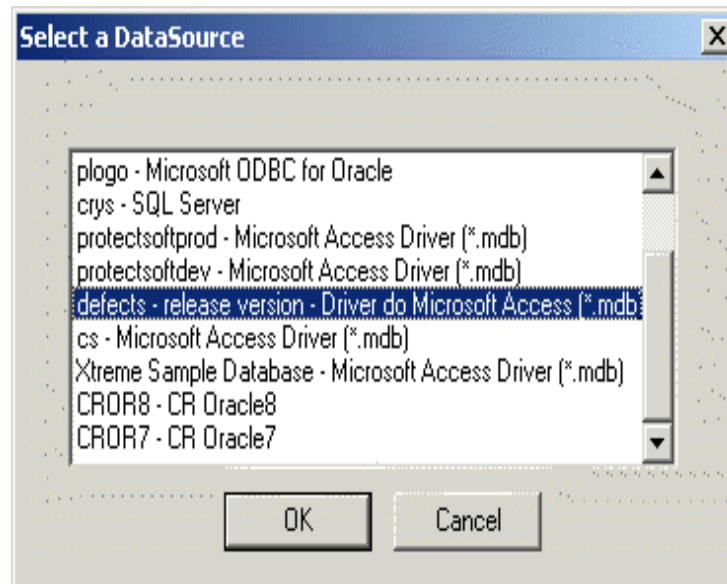


Figure: Selecting an ODBC Data Source Driver

After selecting the data source, you will then select the SQL script file as shown below.

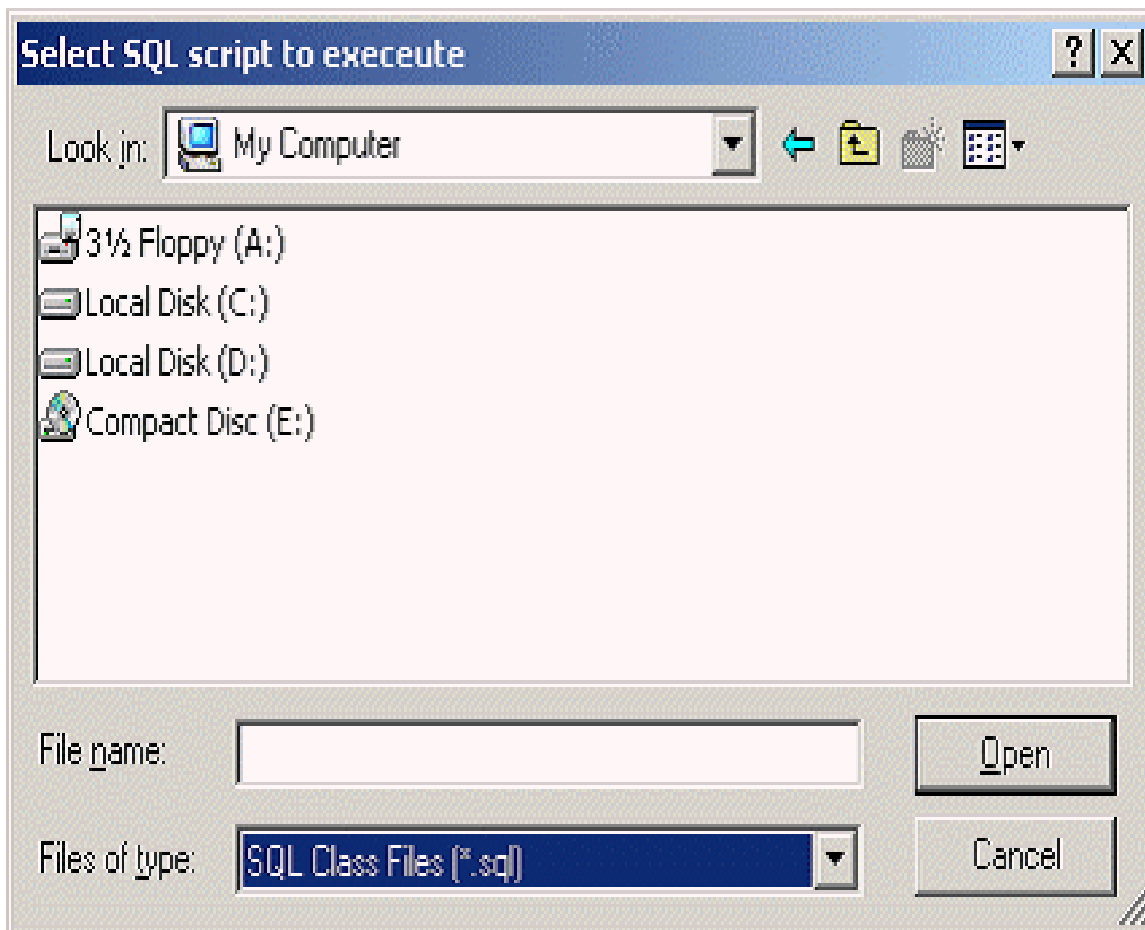


Figure: Select SQL Script to Execute from Disk Directory

Your SQL script will now be run. After it has been run, a summary screen will be displayed showing the status of each statement and the return code. The return code indicates the success or failure of the script's execution.

Upgrading The System

If you are installing Defect Manager for the first time, you do not need to upgrade the system.

If you are a current Defect Manager user, you will need to upgrade your current system.

Before upgrading, we recommend the following test procedure:

- (1) Install Defect Manager release 4.2 as described in the [Installation Guide](#).
- (2) Copy your production repository database to make a new database. You will use this database to test Defect Manager 4.2 with your production data before going live.
- (3) Copy the file **DefectManager.ini** from the **\bin** directory in the existing Defect Manager installation to the **\bin** directory of the Release 4.2 installation.
- (4) Copy all files (and all sub directories) under the existing **\Attachments** directory into the **\Attachments** directory in the Release 4.2 installation directory.
- (5) Create a new **defectmgr** FILEDSN that points to the new copy (created in step #2) of your production database. Put the new **defectmgr.dsn** in the Release 4.2 **\bin** directory.
- (6) Open a Command Window (cmd.exe). On the command line change the current directory (using the CHDIR DOS command) to the **\bin** directory in the Release 4.2 installation and run the **upgrade.exe** program.
- (7) Test Defect Manager 4.2 using the new copy of your production repository data by experimenting with some operations and reports. Try some of the new features. Make sure your data looks correct.

After you feel comfortable with Release 4.2 and want to go live, you should perform the following steps.

- (1) Backup your existing database.
- (2) Copy the **DefectManager.ini** from the **\bin** directory in the existing Defect Manager installation to the **\bin** directory of the Release 4.2 installation.
- (3) Copy all files (and all sub-directories) under the **\Attachments** directory in the existing Defect Manager installation to the **\Attachments** directory in the Release 4.2 installation.
- (4) Copy the **defectmgr.dsn** (or **defectmgrwe.dsn**, if using Access) under the **\bin** directory in the existing Defect Manager installation to the **Release 4.2 \bin** directory.
- (5) Open a Command Window (cmd.exe). Change the current directory to the **\bin** directory of the Release 4.2 installation (using the CHDIR DOS command) and run the **upgrade.exe** program.

When you are running the **upgrade.exe** program, you will see a lot of output displayed on your monitor which will be very difficult to read as it scrolls by quickly. That's OK.

All of the output that is displayed is also written to a log file in the **\upgrade** sub-directory. You will only be interested in viewing the last line that is displayed on the screen. The last line will tell you whether the system has been upgraded successfully or not. If the system has been upgraded, Defect Manager is ready for use.

If the last line tells you that it could not upgrade the system, you can e-mail and attach the output from the upgrade.exe program run that was recorded in the log file to Tiera Software Technical Support .. The upgrade log file to attach is located in the **Release 4.2 \upgrade** directory.

When you upgrade the system by running upgrade.exe from the **\bin** directory, the **upgrade.exe** program makes the following assumptions:

- The home directory for Defect Manager is **one** directory above upgrade.exe.
- If a FILEDSN is found in the same directory as upgrade.exe (which will probably be the case), it will upgrade the associated database. If the FILEDSN does not exist, it terminates without upgrading a repository database.

If you are not using a FILEDSN, and you are using a user/system ODBC DSN (Data Source Name) as a source, you can use the DBUSER and DBPASSWORD command line parameters to specify the username and password associated with the user/system data source.

You can also specify the location for the FILEDSN and HOME directory via command line parameters.

Defect Manager is a standalone executable program that accepts the following parameters:

```
upgrade HOME="dmhomepath" FILEDSN="dmfiledsnpath"  
DBUSER="dbusername" DBPASSWORD="dbpassword"
```

Please observe the following notes:

- All parameters are separated by blanks.
- All parameter values such as *dmhomepath*, that contain embedded blanks must have quotes around them.
- There should be no spaces between a parameter name and a parameter value.

Explanation of parameters follows.

- **[HOME=*"dmhomepath"*]**

This parameter is the path where the Defect Manager product is installed. If the product was installed in c:\Program Files\Defect Manager, then this parameter would be:

```
HOME="c:\Program Files\Defect Manager"
```

- **[FILEDSN=*"dmfiledsnpath"*]**

This optional parameter is the path where the FILEDSN is located. The FILEDSN is used to connect to the database via an ODBC Data Source Name (DSN).

- The Defect Manager Reminder program will automatically look for the *defectmgrwe.dsn* (the default, for Microsoft Access repository).

If you are using Access to implement your repository, this DSN is the default so you can omit this parameter.

- If you are using another type of database to implement your repository, use the FILEDSN value *defectmgr.dsn* (for SQLServer, Oracle, IBM DB2, Sybase, Ingres, and Postgres) in the \bin directory where you installed the product.
- If you are using a FILEDSN in another location, such as

c:\Document Settings\Common\ODBC\defectmgr.dsn,

then this parameter would be:

FILEDSN=" c:\Document Settings\Common\ODBC\defectmgr.dsn"

- **[DBUSER="dbusername"]**

This optional parameter is used if you configured the system with an ODBC DSN (data source name) of *defectmgr* .

A Microsoft Access database does not require this parameter, but the other types of databases used to implement the repository require it. If the specified user name requires a password, then you will also need to specify the **DBPASSWORD** parameter as well.

- **[DBPASSWORD="dbpassword"]**

This optional parameter is used only if you configured the system with an ODBC data source of *defectmgr* (for SQLServer, Oracle, IBM DB2, Sybase, Ingres, and Postgres) and the DBUSER name requires a password.

