



Version 6.5

Serena® TeamTrack® INSTALLATION AND SETUP GUIDE

Copyright © 1996-2005 SERENA Software, Inc. All rights reserved.

This document, as well as the software described in it, is furnished under license and may be used or copied only in accordance with the terms of such license. Except as permitted by such license, no part of this publication may be reproduced, photocopied, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written permission of SERENA Software, Inc. Any reproduction of such software product user documentation, regardless of whether the documentation is reproduced in whole or in part, must be accompanied by this copyright statement in its entirety, without modification.

The content of this document is furnished for informational use only, is subject to change without notice, and should not be construed as a commitment by SERENA Software, Inc. SERENA Software, Inc. assumes no responsibility or liability for any errors or inaccuracies that may appear in this document.

Trademarks

TeamTrack, Serena, and ChangeMan are registered trademarks of SERENA Software, Inc. Microsoft, Windows, Windows NT, Microsoft Internet Explorer, Visual SourceSafe, Visual C++, Active Directory, and Outlook are registered trademarks of Microsoft Corporation.

Microsoft SQL Server is a trademark of Microsoft Corporation.

Netscape is a registered trademark of Netscape Communications Corporation.

Oracle is a registered trademark of Oracle Corporation.

Intel and Pentium are registered trademarks of Intel Corporation.

Rational and ClearCase are registered trademarks of Rational Software Corporation.

Sun, Java, and iPlanet are trademarks of Sun Microsystems, Inc.

Perforce is a registered trademark of Perforce Software, Inc.

TestDirector is a registered trademark of Mercury Interactive Corp.

Linux is a registered trademark of Linus Torvalds

UNIX is a registered trademark of The Open Group

DB2, DB2 Universal Database, and Lotus Notes are trademarks or registered trademarks of International Business Machines.

Adaptive Server is a registered trademark of Sybase, Inc.

The following are copyrights of their respective companies or organizations:

OpenLDAP, Copyright 1999-2001, The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved

The Sentry Spelling-Checker Engine, Copyright 2000 Wintertree Software Inc.

RegExp, Copyright 1994 The Regents of the University of California. All rights reserved.

The Apache Software License, Version 1.1 Copyright (c) 1999 The Apache Software Foundation

Portions of this software are copyrighted by DataDirect Technologies, 1991-2003.

U.S. Government Rights

Any Software product acquired by Licensee under this Agreement for or on behalf of the U.S. Government, its agencies and instrumentalities is "commercial software" as defined by the FAR. Use, duplication, and disclosure by the U.S. Government is subject to the restrictions set forth in this Rider. The manufacturer is Serena Software, Inc. 2755 Campus Drive, 3rd Floor, San Mateo, CA 94403

Part Number: MA-TTINST-001

Contents

	Welcome to TeamTrack	7
	Guide to TeamTrack Documentation	8
	TeamTrack Documentation Suite	8
	Using the Manuals	10
	Accessing Online Help	11
	Terminology Conventions.	11
<i>Chapter 1</i>	Planning Your System	13
	Steps to Implementing Your System	14
	Design Considerations for Your System	15
<i>Chapter 2</i>	Licensing TeamTrack With the Serena License Manager	
	17	
	Installing the License Manager	18
	Understanding the TeamTrack Licensing Model.	18
	Named Licenses	18
	Concurrent Licenses	20
	Using the Two Models Together	20
	TeamTrack Product License Types	20
	TeamTrack User License Types	22
	Enabler License Types.	23
	The Licensing Process	23
	Licensing Process Overview	24
	Installing the License Manager	25
	About Upgrading the License Manager	25
	Installing the License Manager on Windows	25
	Installing the License Manager on UNIX	26
	After You Install	26
	Licensing the Product	27
	Getting Licenses.	27
	Adding Licenses	31

Starting the License Manager Server	31
Running the License Server As a Service	32
Managing Named Licenses	33
Managing Named Solution and Enabler Licenses	33
Managing Named User Licenses	34
Setting Up Notification for Licensing Issues.	35
Working With TeamTrack License Options.	36
Managing Your Licenses and the License Server	39
Upgrading Evaluation Licenses	39
Finding Out What Licenses You Have	40
Moving the License Server	40
Changing License Servers.	40
Using the Licenses with TeamTrack	41
Reserving Concurrent Licenses for Groups of Users	41
<i>Chapter 3</i> Installing TeamTrack for Windows.	45
Installation Overview	46
The Installation Process	46
TeamTrack Program Icons	52
Changing Default Spell Check Dictionaries	53
Adding Custom Spell Check Dictionaries.	54
<i>Chapter 4</i> Creating a Database	55
Using the Database Wizard	56
Selecting a Destination Database	56
Providing Connection Information for the Database.	57
Creating a Microsoft Access Database	58
Specifying License Server Information	59
Specifying Field Information	60
Finishing the Wizard	61
Connecting to Your Database	61
Allowing Users to Connect to Database in the Browser Interface	64
Core Database Elements.	64
Base Project	65
Base Workflow	65
Root Folders	65
System Auxiliary Tables	65

	Linking Users to the Server	67
Chapter 5	Creating the Issue Management Solution	69
	Using the Issue Management Solution Wizard	70
	Creating the Solution Table	71
	Creating the Solution Workflow	73
	Specifying Field Information	74
	Specifying Projects for the Solution	74
	Specifying Groups for the Issue Management Solution	75
	Finishing the Wizard	76
	Core Solution Elements	77
	Projects	77
	Base Solution Workflow.	77
	Initial Groups.	78
	Notifications	78
	Solution Table	79
	Solution-Based Reports.	79
Chapter 6	Creating the Incident Management Solution	83
	Using the Incident Management Solution Wizard	84
	Creating the Incident Workflow	85
	Specifying Field Information	89
	Specifying Projects for the Solution	90
	Specifying Groups for the Incident Management Solution	91
	Finishing the Wizard	92
	Core Solution Elements	93
	Projects	93
	Base Incident Workflow.	93
	Initial Groups.	94
	Notifications	94
	TeamTrack Incident Management Tables.	95
	Incident-Based Reports.	95
Chapter 7	Creating Solutions From Tracker Projects	97
	Creating and Augmenting Solutions From Tracker Projects	98
	Considerations for Using the Solution Wizard.	99
	Creating a Solution From a Tracker Project	99
	Connecting to the Tracker Source Project	101

Creating the Solution Table	102
Specifying Issue Type Information	102
Adding Tracker Fields to a New Solution.	104
Specifying Projects for the Solution	108
Specifying Groups for a Tracker Solution	108
Importing or Converting Users to a New Solution.	110
Finishing the Wizard	112
Core Solution Elements	112
Augmenting a Solution From a Tracker Project	120
Selecting Solutions and Workflows to Augment.	121
Adding Tracker Fields to an Augmented Solution.	122
Adding Tracker Groups to an Augmented Solution.	124
Adding Tracker Users to an Augmented Solution.	126
Finishing the Wizard	128
Index.	129

Welcome to TeamTrack

This document describes how to install and set up Serena® TeamTrack® 6.5, a product of Serena Software, Inc. TeamTrack is a Web-architected change request and process management solution that empowers application development teams to improve communication and development processes across the enterprise.

Audience and scope

This guide describes how to install and configure a full version of TeamTrack. For instructions on installing an evaluation copy of TeamTrack, refer to the *Serena TeamTrack Reviewer's Guide*.

This guide is intended for administrators who will install and implement Serena TeamTrack. At times, the reader may need to refer to additional TeamTrack documentation, which is discussed in the ["Guide to TeamTrack Documentation" on page 8](#).

Navigating this book

This guide is organized as follows:

- ["Planning Your System" on page 13](#) - Provides steps to implementing TeamTrack and guidance on planning your business process. System requirements for TeamTrack and the Serena License Manager are also provided.
- [Chapter 2, "Licensing TeamTrack With the Serena License Manager"](#) - Provides installation instructions for the Serena License Manager.
- [Chapter 3, "Installing TeamTrack for Windows"](#) - Provides instructions on how to install TeamTrack on a Windows server. Instructions on linking users to the server are included. (TeamTrack for Solaris and TeamTrack for Linux installation instructions are provided in the install.txt file included in the tar files for these versions.)
- [Chapter 4, "Creating a Database"](#) - Discusses the Database Wizard, including the elements provided by the wizard. Instructions on connecting to your database are also provided.
- [Chapter 5, "Creating the Issue Management Solution"](#) - Discusses using the Solution Wizard to create the Issue Management Solution.
- [Chapter 6, "Creating the Incident Management Solution"](#) - Discusses using the Solution Wizard to create the Incident Management Solution.

-
- [Chapter 7, "Creating Solutions From Tracker Projects"](#) - Discusses using the Solution Wizard to create a solution from a Serena Tracker project.

Guide to TeamTrack Documentation

The following sections provide basic information about Serena® TeamTrack documentation.

TeamTrack Documentation Suite

The TeamTrack documentation set includes the following manuals in PDF format. Most documents are installed with TeamTrack; to obtain a document that is not installed with the product, visit Serena Online Services at:

<http://support.serena.com>.

Manual	Description
Serena® TeamTrack® Administrator's Guide	Provides information on configuring and administering TeamTrack.
Serena® TeamTrack® User's Guide	Provides information about the TeamTrack browser interface and is intended for end users. Instructions on using the browser interface, including TeamTrack's robust reporting feature, are included as well. To ease the process of providing a copy for every user in your system, the <i>Serena TeamTrack User's Guide</i> is provided in PDF and can be accessed from the Product Information tab of the About page in the TeamTrack browser interface.

Manual	Description
SourceBridge User's Guide	Provides information on installing, configuring, and using the SourceBridge extension. The guide is intended for end users who integrate TeamTrack with version control software used within the integrated development environment (IDE) or within the Serena Version Manager Windows or Web clients. The <i>SourceBridge User's Guide</i> is provided in PDF and can be accessed from the Product Information tab of the About page in the TeamTrack browser interface.
TeamScript Reference Guide	Provides information on customizing TeamTrack using TeamScript, a programming language built around VBScript 4.0. This guide is intended for VBScript programmers who want to use TeamScript to implement custom features in your TeamTrack system.
Serena® Tracker™ toTeamTrack® Migration Guide	Describes the issues and decisions you need to make to successfully migrate from Tracker to TeamTrack. An overview of the process is also provided.
ProjectBridge User's Guide	Provides information on setting up and using the integration between Microsoft Project® and TeamTrack.
TeamTrack® for ChangeMan® ZMF Solution Guide	Explains how Serena® ChangeMan® ZMF integrates with TeamTrack to help you manage changes to your mainframe code.
TeamTrack® for SAP Guide	Describes the integration between Serena TeamTrack, Serena® ChangeMan® DS, and SAP Transport Management Systems.

Manual	Description
Serena® TeamTrack® TestBridge for Mercury Quality Center™ Integration Guide	Provides information on setting up and using components that allow integration between Mercury Quality Center and TeamTrack. This manual is designed for TeamTrack and TestDirector administrators.
VersionBridge for Serena® ChangeMan® DS	Explains how Serena® ChangeMan® DS integrates with TeamTrack through VersionBridge so that users can associate ChangeMan DS source control activities with related TeamTrack items.

Using the Manuals

The PDF manuals include the following features:

- **Bookmarks** - All of the manuals contain predefined bookmarks that make it easy for you to quickly jump to a specific topic. By default, the bookmarks appear to the left of each online manual.
- **Links** - Cross-reference links within an manual enable you to jump to other sections within the manual and to other manuals with a single mouse click. These links appear in blue.
- **Printing** - While viewing a manual, you can print the current page, a range of pages, or the entire manual.
- **Advanced search** - Starting with version 6, Adobe Reader includes an advanced search feature that enables you to search across multiple PDF files in a specified directory. (This is in addition to using any search index created by Adobe Catalog—see step 3 below.)

To search within multiple PDF documents at once, perform the following steps (requires Adobe Reader version 6 or higher):

- 1 In Adobe Reader, select Edit | Search (or press CTRL+F).
- 2 In the text box, enter the word or phrase for which you want to search.
- 3 Select the **All PDF Documents in** option, and browse to select the folder in which you want to search.

- 4 Optionally, select one or more of the additional search options, such as **Whole words only** and **Case-Sensitive**.
- 5 Click the **Search** button.

**NOTE**

Optionally, you can click the **Use Advanced Search Options** link near the lower right corner of the application window to enable additional, more powerful search options (if this link says **Use Basic Search Options** instead, the advanced options are already enabled.) For details, see Adobe Reader's online help.

Accessing Online Help

The following online help is installed with TeamTrack:

- **Serena® TeamTrack® Administrator Online Help** - Provides detailed information about specific features and properties in the Administrator client. To access online help, click the **Help** button located on each tab and dialog box in the Administrator client, or select **Help Topics** from the **Help** menu.
- **Serena® TeamTrack® Browser Online Help** - Provides information to using the browser interface. To access online help, click the **Help** link on the toolbar or the **Help** icon located on each page and frame.
- **SourceBridge User Help** - Provides information to end users about operating SourceBridge. To access help, click the **Help** button located on each dialog box.

Terminology Conventions

The following terminology conventions are used throughout TeamTrack documentation to discuss the following elements:

- **Items:** Generic term that encompasses both primary and auxiliary items, including issues, incidents, contacts, and problems. Reports are also referred to generically as items.
- **Primary Items:** Items like issues and incidents, which are stored in a Primary table and follow a workflow process.

-
- **Auxiliary Items:** Items like contacts, companies, and problems, which are stored in an Auxiliary table and do not follow a workflow process.

Chapter 1

Planning Your System

Several steps are necessary to implement your TeamTrack system. The first steps are to define your business processes and review TeamTrack system requirements.

[Steps to Implementing Your System](#) 14

[Design Considerations for Your System](#) 15

Steps to Implementing Your System

TeamTrack is designed to help you quickly and efficiently install and implement your tracking system.

Following these steps to install and set up a full version of TeamTrack:

- 1** Plan your system by defining your business processes (refer to ["Design Considerations for Your System" on page 15](#)).
- 2** Install the Serena License Manager tool (refer to ["Licensing TeamTrack With the Serena License Manager" on page 17](#).)
- 3** Install TeamTrack (refer to ["Installing TeamTrack for Windows" on page 45](#)).
- 4** Create a database using the **Database Wizard** (refer to ["Creating a Database" on page 55](#)).
- 5** Create the TeamTrack Issue Management and/or TeamTrack Incident Management solutions by running the **Solution Wizard** (refer to ["Creating the Issue Management Solution" on page 69](#) and ["Creating the Incident Management Solution" on page 83](#)).
- 6** Establish your system's workflows (refer to the *Serena TeamTrack Administrator's Guide*).
- 7** Establish your system's projects (refer to the *Serena TeamTrack Administrator's Guide*).
- 8** Establish group and user accounts (refer to the *Serena TeamTrack Administrator's Guide*).
- 9** Create Auxiliary tables and establish table relationships (refer to the *Serena TeamTrack Administrator's Guide*).
- 10** Review your work.

Design Considerations for Your System

The first step to implementing TeamTrack is to define your business processes and determine how TeamTrack can improve communication and collaboration between teams.

Before installing TeamTrack, imagine how to best track your business processes, and at this point, do not worry about technical limitations or how to best utilize TeamTrack. Instead, set overall goals for your system by concentrating on the following concepts:

- What is driving your need for a tracking system? In other words, is there a particular business problem you are trying to solve?
- How is information currently being shared internally among members of your organization and externally with business partners and customers? What are the problems caused by the current system?
- Who needs access to your tracking system? Do certain individuals need more access than others? Can these individuals be assigned to groups to simplify the process of assigning access and privileges?
- Should customers be granted access to your system?
- Do you need to gather "auxiliary" information to support your tracking system? For instance, would contact information for partners or customers assist your business process?
- What type of information do you need to archive?
- Do you need to measure timing or quality of work?

Answering these questions before you install TeamTrack and create your solution will ease the process of implementing your system.

Chapter 2

Licensing TeamTrack With the Serena License Manager

The Serena License Manager enables you to centralize license management across multiple development environments. The licensing tools can help you keep track of active licenses and versions of the software in use.

Installing the License Manager	18
Understanding the TeamTrack Licensing Model	18
The Licensing Process	23
Installing the License Manager	25
Licensing the Product	27
Starting the License Manager Server	31
Managing Named Licenses	33
Setting Up Notification for Licensing Issues	35
Working With TeamTrack License Options	36
Managing Your Licenses and the License Server	39
Using the Licenses with TeamTrack	41
Reserving Concurrent Licenses for Groups of Users	41

Installing the License Manager

You designate a server to which to install Serena License Manager. From this system, you will obtain and manage licenses and set up notification if something goes wrong.

The product features that you choose to license all need to have access to the License Manager server when you install them. During product installations, you will be prompted for the server machine name or IP address so the product or features within the product will be properly licensed.

There is minimal CPU usage required on the server to run the License Manager utilities.



NOTE You do not need to install the Serena License Manager if you want to evaluate TeamTrack. In this case, install TeamTrack and select the 30-day evaluation option when prompted. This applies to all versions of TeamTrack.

Understanding the TeamTrack Licensing Model

TeamTrack's licensing system is based on the number of Web servers you operate, the different solutions you purchase, named and concurrent user licenses, and third-party integration enablers.

Named Licenses

Named licenses are reserved based on user names and database identifiers entered on the machine hosting the License Manager. You can manage named licenses from the **Products** tab in the Serena License Manager tool. For user licenses, you can name as many users as there are licenses. For solutions and enablers, you can name as many databases as there are licenses.

The following TeamTrack license types are considered named licenses:

- Named user licenses (TeamTrack license type)
- Named solution licenses (such as TeamTrackTTT and TeamTrackTTS)

- Named enabler licenses (such as TeamTrackTPB and TeamTrackTTX)

For details on the different TeamTrack license types, refer to:

- [TeamTrack Product License Types](#)
- [TeamTrack User License Types](#)
- [Enabler License Types](#)

Named User Licenses

Consider the following important information about named user licenses:

- By default, the auto-add feature is turned on for named user licenses. These licenses are consumed each time you connect to a TeamTrack database.
- User names do not need to be unique. You can assign multiple named licenses to the same user name by entering that user name multiple times in the License Manager tool.
- A user cannot log in from multiple systems simultaneously using the same named license. A user may only log in from multiple systems at the same time, using the same user name, if the user name has been assigned two or more licenses. If a user attempts to log in from multiple systems and no additional named licenses are available, then a concurrent license will be used (if one is available).
- A user may log in multiple times from the same system using different user names if licenses are available for each user name.

Named Solution and Enabler Licenses

Consider the following important information about named solution and enabler licenses:

- By default, the auto-add feature is turned on for solution and enabler licenses. These licenses are consumed each time you connect to a TeamTrack database.
- If you use multiple TeamTrack databases, you must assign solution and enabler licenses to each database.

Concurrent Licenses

Concurrent licenses, or floating licenses, allows you to purchase a number of licenses that can be used by any user. If you are in an organization spread across multiple time zones or have users who infrequently use TeamTrack, concurrent licensing may work better than named licenses because multiple people can share the same license.

Using the Two Models Together

You may have an environment in which some users use TeamTrack some of the time and other users use it exclusively throughout the day. You can purchase both types of license models to accommodate both usage types.

TeamTrack Product License Types

The following table describes the available product license types.

License	Type	Description
TeamTrackTSV	Concurrent server license	Determines the number of Web servers that can be used with TeamTrack. A TeamTrackTSV license is required for each Web server your system uses.

License	Type	Description
TeamTrackTTT	Named solution license	Enables the TeamTrack Issue Management solution, which includes the <i>Issues</i> table, issue management workflows, and pre-defined groups, reports, and notifications. The TeamTrackTTT license also enables you to run the Issue Management solution wizard multiple times within the same database and to create custom solutions. You must, however, have a TeamTrackTTT license for each database in which you will create Issue Management solutions.
TeamTrackTTS	Named solution license	Enables the TeamTrack Incident Management solution, which includes the <i>Incidents</i> table, customer support workflows, and pre-defined groups, reports, and notifications. The TeamTrack TTS license also enables you to create custom solutions. You must have a TeamTrackTTS license for each database in which you will create the Incident Management solution.

TeamTrack User License Types

User licenses are either named or concurrent. The following table describes the product-access types associated with user licenses.

License	Type	Description
Professional Package License	Named or concurrent user license	If you have purchased the Serena Professional suite, you will receive Professional package licenses. These licenses behave like any other type of named or concurrent license, except that each license grants the user the ability to simultaneously log into all products within the Professional suite. For example, if you receive 1 named Professional package license, and assign that license to a user named Joe, then Joe will be able to log into all products within the Professional suite at one time.
TeamTrack	Concurrent user license	Grants full product access, which is controlled through group and user privilege sets.
TeamTrack_named	Named user license	Grants full product access, which is controlled through group and user privilege sets.
TeamTrackExternal	Concurrent user license	Provides a minimal set of product privileges to TeamTrack on a concurrent basis.
TeamTrackAPI	Named user license	Grants access that allows TeamTrack integration products to run scripts or use the TeamTrack API. Accounts with API/Script access can be granted the same privilege set as accounts granted User access; however, because accounts with API/Script cannot be used to log on to the browser interface, some privileges and preferences may be irrelevant.

Enabler License Types

The following table describes the available third-product integration enabler license types. All enabler licenses are named licenses and you must have an enabler for each database in which the integration is used.

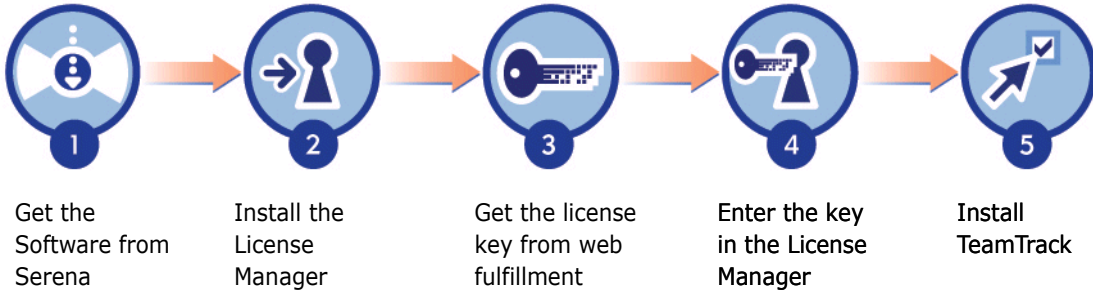
License	Type	Description
TeamTrackCMN	Named enabler	Enables the TeamTrack for ChangeMan ZMF solution, which allows users to manage the life cycle of ZMF packages from within TeamTrack.
TeamTrackCMZ	Named enabler	Enables the connector used by the TeamTrack for ChangeMan ZMF solution.
TeamTrackSAP	Named enabler	Enables the integration between TeamTrack, Serena ChangeMan DS, and SAP Transport Management Systems.
TeamTrackTPB	Named enabler	Enables the integration between TeamTrack and Microsoft Project.
TeamTrackTTB	Named enabler	Enables the integration between TeamTrack and Mercury Interactive TestDirector.
TeamTrackTVB	Named enabler	Enables the integration between TeamTrack and VersionBridge for ClearCase.
TeamTrackTVC	Named enabler	Enables the integration between TeamTrack and VersionBridge for CVS.
TeamTrackTTX	Named enabler	Enables XMLBridge, which allows developers to develop integrations between TeamTrack and third-party tools.

The Licensing Process

To purchase licenses appropriate for your organization, you need to have an understanding of your TeamTrack users, which interfaces they use, and how often they use TeamTrack. Once you've gathered this data, you can choose a licensing model that best suits your organization.

Licensing Process Overview

There are different ways to implement the license models, so you should create a plan for purchasing and rolling out the licenses that best suits your organization.



Step	Action
Select licenses for your users	Select the number and type of licenses to use in your organization.
Purchase the licenses	Contact your sales representative to purchase the licenses for your users.
Install the License Manager	Install the License Manager on a machine accessible from TeamTrack Web server and machines from which the TeamTrack Administrator client will connect to the database using an ODBC connection.
Get the licenses	Launch the License Manager and use the Web fulfillment system to get a license key with the amount and type purchased.
Add licenses to the License Manager	Paste the provided license key in the box on the Licensing tab of the Serena License Manager.
Start the License Manager server	Start the License Manager server to activate the licensing.
Install TeamTrack	Install TeamTrack and enter the hostname or IP address of the License Manager machine during installation or on the License Options dialog box in the Administrator client. For details, refer to " Working With TeamTrack License Options " on page 36.

Installing the License Manager

Install the Serena License Manager on a server that you will use as the license server for Serena products. The License Manager setup installs the features required to run the License Manager on the server.

You don't need to install TeamTrack on the License Manager server. When you install TeamTrack, you are prompted for the license server location.



TIP If TeamTrack uses multiple Web servers in different locations, you may want to designate a license server for each of those locations. You can specify a license server for each Web server on the **License Options** dialog box in the TeamTrack Administrator client. For details, refer to "[Working With TeamTrack License Options](#)" on page 36.

About Upgrading the License Manager

To upgrade an existing installation of the License Manager, follow the installation instructions, and note the following:

- Before starting installation, stop the License Manager.
- When prompted to choose an installation location, choose the directory to which the License Manager is already installed. The existing License Manager components will be uninstalled and replaced with the new License Manager components.
- On Windows, the Start menu program group will be updated to reflect the current version of the License Manager.
- When prompted to choose whether to keep your current licensing configuration, click **Yes**.
- Restart the License Manager.

Installing the License Manager on Windows

To install the License Manager:

- 1 Insert the Serena Professional CD in the appropriate drive. You may also download the Serena License Manager application from the Serena Online Services at:

<http://support.serena.com>.

- 2 Launch the following program:

<Drive>:\Serena License Manager\win32\setup.exe

- 3 Follow the prompts to complete the installation.

Installing the License Manager on UNIX

To install on UNIX:

- 1 Insert the Serena Professional CD in the appropriate drive and exit any applications. Depending on how your workstation is configured, your CD-ROM drive may be mounted automatically. If the CD-ROM drive is not mounted, you must mount it before continuing. Refer to the CD cover for information on how to mount the CD-ROM.
- 2 Navigate to the Setup program by entering:
`cd <cd_root>/licensemanager/unix`
- 3 Run the setup program by entering:
`./lminst`
- 4 Enter a location to install the program and follow the prompts to complete the installation.

After You Install

After you install the Serena License Manager you need to:

- Get licenses for your TeamTrack server, solutions, enablers, and users. For details, refer to ["Getting Licenses" on page 27](#).
- Start the License Manager server if it did not automatically start. For details, refer to ["Starting the License Manager Server" on page 31](#).
- Install TeamTrack.
- Add the TeamTrack database identifier to solution and enabler licenses. For best results, stop and start your TeamTrack Web server. For details, refer to ["Managing Named Solution and Enabler Licenses" on page 33](#).

- Add user IDs for the named licenses that match valid user IDs in TeamTrack. For details, refer to ["Managing Named User Licenses" on page 34](#).
- Set up notification for licensing errors. For details, refer to ["Setting Up Notification for Licensing Issues" on page 35](#).

Licensing the Product

Use the License Manager to automate the process of getting licenses from Serena.

Open the License Manager tool on Windows by selecting Start | Programs | Serena | License Manager | License Manager.

Open the License Manager on UNIX by navigating to where you installed it and run **serenalm**.

If you already have a license key from Serena, you can select the **I have received a license key from Serena** option and paste the key string in the field available in the License Manager tool.

Getting Licenses

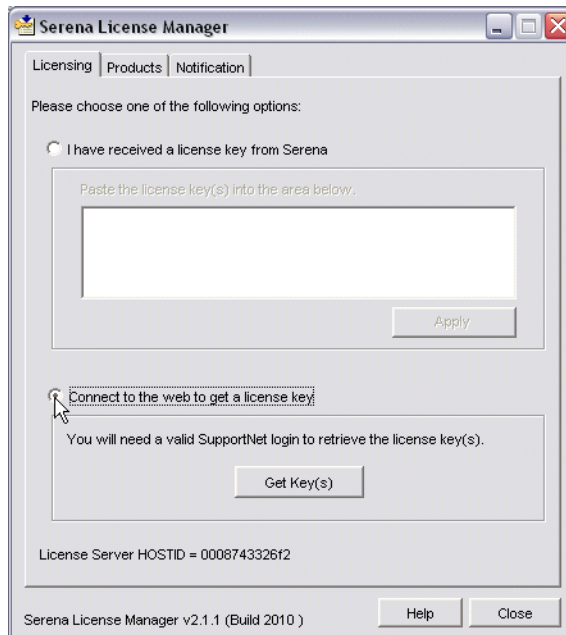
To get licenses, use the License Manager tool to access Serena's Web fulfillment.



NOTE If you have an existing Serena Tracker installation and are installing TeamTrack for the first time, you must install the current version of the Serena License Manager. You can continue to use your existing Tracker license keys with TeamTrack. Tracker and TeamTrack will share the existing concurrent and named user license keys. However, you must also get server licenses, issue management licenses, and external licenses in accordance with the terms of your agreement with Serena Software.

To get a license key from Serena using the License Manager tool:

- 1 Select the **Connect to the web to get a license key** option on the **Licensing** tab and click the **Get Key(s)** button.



- 2 The Serena support web page appears. To obtain the key from the web fulfillment:
 - a Enter your account user name and password to log in. If you don't have an account, you will need to register for one using the product's serial number. If you don't have a valid serial number, contact your Serena sales representative.
 - b On the toolbar, click Licensing | Generate Key.
 - c Select the product that you want to license and continue to the next page.
 - d On the next page, make sure that the serial number for the product you are licensing is selected, and that the host ID of the server to which you installed the License Manager is correctly

entered. If you have multiple serial numbers for the product, select the correct one from the list.



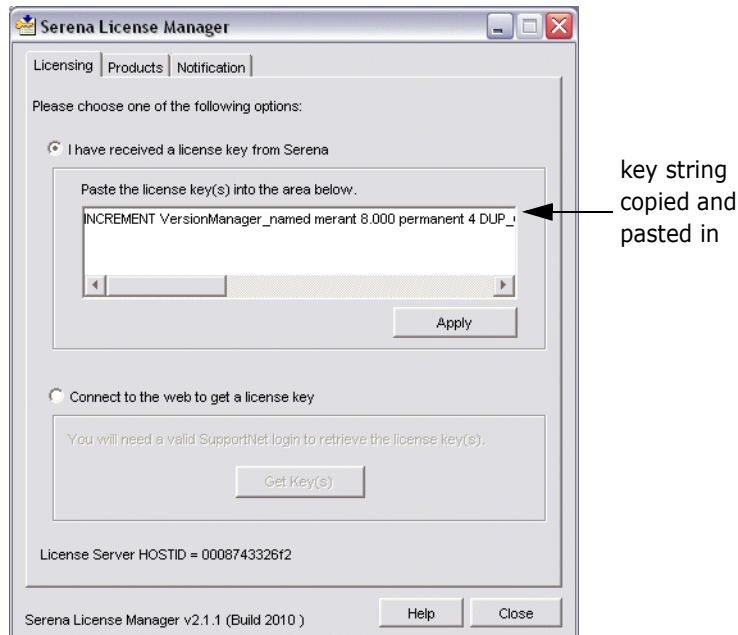
NOTE If the machine you are using to access the Web is not the license server, you need to enter the Host ID for the license server in the space provided. You can get the license server Host ID by entering `!mutil !mhostid` from a command prompt in the Serena Licenses Manager directory.

- e On the next page, enter the number of seats you would like to license for each product or product component, then continue. The total number of available seats (named and concurrent) is displayed for reference.
- f On the next page, you can confirm your license selections, and choose whether or not to use the 30-day grace key which you can use to help you ease into the licensing process. This key will give you a percentage more licenses than you purchased to ensure that you have enough to get Serena products installed and your users started. Choose whether to generate this grace key. If the license selections are correct, confirm them to continue.
- g Review the Serena Master License Agreement and click **I Agree** to receive the key.
- h On the next page, copy the entire license string from the shaded area on the page. Make sure that you don't copy any extra spaces, or the License Manager will consider the key invalid.



NOTE You will also receive the key in an e-mail notification.

- 3 Return to the License Manager tool, select the **I have received a license key from Serena** option and paste the key in the field.



4 Click **Apply**.



IMPORTANT! If you are using named licenses, you need to add at least one valid user ID into the License Manager tool, or set License Manager to add user names in automatically before you can log in to TeamTrack. See ["Managing Named Licenses" on page 33](#).

The License Manager server will start automatically. If it is currently running, you will be prompted to restart it. If the server does not start, you can start it manually. See ["Starting the License Manager Server" on page 31](#) for more information.

To get a license from Serena if your server doesn't have web access:

- 1** From a different computer with web access, connect to the support web site. Make sure you know the product serial number and the Host ID of the license server machine so that you can enter it in the web fulfillment system.

You can find your license server machine's Host ID at the bottom of the Licensing tab of the License Manager dialog box.

- 2 When you access the web page with your key string, copy that key string into a text editor. Save and copy that file to a floppy or a location on the network accessible from the license server machine.
- 3 Insert the floppy in the server machine or navigate to where the file is stored on the network. Open the file and copy the key string, select the **I have received a license key from Serena** option, and paste it in the field available on the License Manager tool.

Adding Licenses

If all the licenses you purchased are not already in use, you can add license keys for seats you have already purchased through the License Manager tool.

If you run out of purchased license seats to use, contact your sales representative at Serena to purchase additional licenses to add to your serial number.

To add license keys from your initial purchase:

- 1 Follow the steps listed in ["Getting Licenses" on page 27](#).
- 2 Click **Apply** to restart the license server.
- 3 For best results, stop and start your TeamTrack Web server.

To buy more licenses and add them to your pool of licenses:

Contact your Serena sales representative to purchase additional licenses. Once you have your serial number updated for additional seats, follow the instructions above to obtain additional licenses.

Starting the License Manager Server

If the License Manager server did not start automatically after you have obtained the licenses, start the License Manager server before installing other Serena products.

On Windows **To start and stop the License Manager server:**

Go to Start | Programs | Serena | License Manager | Start License Manager Service.

To stop the License Manager server:

Go to Start | Programs | Serena | License Manager | Stop License Manager Service.

On UNIX **To start the License Manager server on UNIX:**

At a command prompt, run:

```
/usr/serena/license_manager/<os>/start_license_server
```

To stop the License Manager server:

At a command prompt, run:

```
/usr/serena/license_manager/<os>/stop_license_server
```

Running the License Server As a Service

You may want to run the License Manager server as a service. When the license server runs as a service, the license server restarts automatically when you reboot the machine.

To run the license server as a service:

- On Windows
- 1 Go to the directory where you installed the Serena License Manager and double click to open `lmttools.exe`.
 - 2 Click the Config Services tab and select the **Use Services** check box. If you want the service to be automatic, select the **Start Server at Power Up** check box.

On UNIX For detailed information on running the License Manager as a service on UNIX platforms, refer to section 6.2, "Starting the License Manager Daemon on UNIX Platforms," in the FLEXlm End Users Guide. You can find this file in the following location:

```
<install directory>/doc/enduser.pdf
```



NOTE When you set up the License Manager service on UNIX, make sure that the path to the `start_license_manager` startup script is defined as a fully qualified path.

Section 6.2.2 explains how to automatically start the License Manager server as a service.

Managing Named Licenses

User names and database identifiers must be specified for named licenses, which include the following license types:

- Named user licenses (TeamTrack license type)
- Named solution licenses (such as TeamTrackTTT and TeamTrackTTS)
- Named enabler licenses (such as TeamTrackTPB and TeamTrackTTX)

For details on the different types of TeamTrack licenses, refer to:

- ["TeamTrack Product License Types" on page 20](#)
- ["TeamTrack User License Types" on page 22](#)
- ["Enabler License Types" on page 23](#)

Managing Named Solution and Enabler Licenses

TeamTrack solution and enabler licenses are named licenses that must be assigned database identifiers. The database identifier can be found on the **License Options** dialog box in the TeamTrack Administrator client. For details, refer to ["Working With TeamTrack License Options" on page 36](#).



NOTE You must assign solution and enabler licenses to each TeamTrack database you use, including test databases.

To assign, reassign, or delete database identifiers to licenses:

- 1 On the **Products** tab, select the applicable license from the **Product Licenses** list, and then click the **Manage User IDs** button.

- 2 The **User Management** dialog box opens. Do one of the following:
 - Click **Add User** to add a database identifier by typing in the ID. You can add as many IDs as you like by separating them with a space.
 - Click **Remove User** to remove the database identifier from the list.
- 3 For best results, stop and start your TeamTrack Web server.

To automatically assign named solution licenses and enablers to a database:

- 1 On the **Products** tab, select the applicable license from the **Product Licenses** list and select **Auto-add user IDs for named licenses**. The database identifier is added automatically when you connect to the database. This option is set by default.
- 2 For best results, stop and start your TeamTrack Web server.

Managing Named User Licenses

User names must be added to the Serena License Manager for users who are assigned named licenses.

To assign, reassign, or delete users to licenses:

- 1 On the **Products** tab, select the applicable license from the **Product Licenses** list, and then click the **Manage User IDs** button.
- 2 The **User Management** dialog box opens. Do one of the following:
 - Click **Add User** to add a user(s) by typing in the user ID. You can add as many users as you like by separating the IDs with a space. Keep the following in mind when you add users:
 - User names are not case-sensitive.
 - You can assign multiple licenses to the same user name. This allows users to log in simultaneously from multiple systems, using the same user name.
 - Click **Remove User** to remove the selected user(s) from the list.

To automatically assign named licenses to users who request them:

On the **Products** tab, select the applicable license from the **Product Licenses** list and select **Auto-add user IDs for named licenses** to automatically add user IDs to a named license list when users log into TeamTrack. This option is set by default.

When users to log in to a product, the server will check to see if there are licenses available for the feature they are attempting to use. If there is a license available, the server will write the user ID in the users list and assign a named license to the user for that feature.

Multiple licenses are automatically assigned to the same user name if:

- The user attempts to log in using a name to which a named license is already assigned, and
- The existing license is currently in use, and
- Additional named licenses are available, and
- The user is logging in from a different machine.

Setting Up Notification for Licensing Issues

The **Notification** tab gives you the ability to set up notification from the license server. You need to supply your SMTP server address and e-mail address to be notified of licensing issues by e-mail.

You can be notified of conditions such as when:

- You are out of licenses
- Users are requesting licenses that are not on the server
- Users are denied a license because they are not on the named list

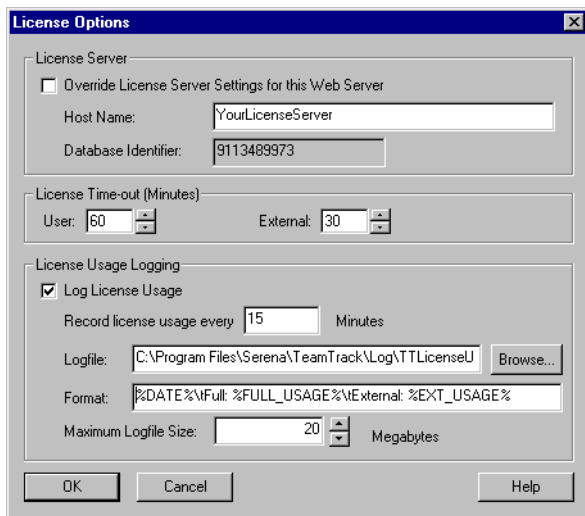
To set up notification of licensing errors:

- 1 Specify your e-mail server and address:
 - Enter your license server SMTP Server IP/Hostname
 - Enter the e-mail address that will appear as the from address in the **From address** field.

- Enter the e-mail address to which notifications should be sent in the **To address** field.
 - Click **Send email notification of licensing issues** to enable notification. If you want to put your notifications on hold, deselect it.
- 2 Click **Apply Changes**.

Working With TeamTrack License Options

License options are available within the TeamTrack Administrator client and enable you to specify license server settings, a license time-out period, and set up license usage logging. The **License Options** dialog box, shown in the following figure, can be opened by selecting **License Options** from the **Options** menu.



- **License Server Options** - The following settings apply to the Serena License Manager, which manages TeamTrack licenses.
 - **Override License Server Settings for This Web Server** - Select this check box if your system uses multiple license servers and you want to override the license server for a specific Web server. When the check box is cleared, the license server host name applies to all Web servers.

- **Host Name** - To begin using TeamTrack, you must specify a license server name during installation or immediately after installing TeamTrack. Provide the host name or IP address of your Serena License Server machine. You can provide the IP address of the machine or the host name that is found in the Domain Name Server (DNS). To specify a port number for the server, use the @ symbol before the host name. For example, if your license server uses port 81, type *81@license server name*.
- **Database Identifier** - The database identifier represents the name associated with solution and enabler licenses. Solution and enabler licenses are named licenses that you must add to the Serena License Manager for each TeamTrack database you use. If the "Auto-add" feature is disabled for solution and enabler licenses within the Serena License Manager, you must manually add the TeamTrack database identifier before starting your Web server. For details on adding a database identifier to the License Manager, refer to ["Managing Named Solution and Enabler Licenses" on page 33](#).
- **License Time-out Options**
 - **License Time Out (Minutes)** – Set the time-out period in minutes for inactive named and concurrent licenses. When users do not perform TeamTrack actions for this period of time, their licenses are released. Timed-out concurrent license users cannot access TeamTrack until another concurrent license is available. If you use Form/URL/Cookie authentication, you can force users to re-authenticate if they have not actively used TeamTrack within the time-out period. The **Auto-Logout Timed-Out User** option is located on the **Server** tab of the **Settings** dialog box.
 - **User** – Select the timeout period for inactive User licenses. The default User time-out period is 60 minutes; the minimum it can be set to is 30 minutes.
 - **External** – Select the timeout period for inactive Concurrent External licenses. The default External time-out period is 30 minutes; the minimum it can be set to is 15 minutes.
- **License Usage Logging**
 - **Log License Usage** – Select this option to enable license usage logging. This feature allows you to track usage of user and external licenses.

- **Record license usage every X minutes** – Specify a time interval in minutes when license usage should be recorded in the logfile. Information about license usage is recorded at each interval. By default, information is recorded to the logfile every 15 minutes.
- **Logfile** – By default, the logfile is stored in the *Serena\TeamTrack\Log* directory. Click **Browse** to navigate to a different directory in which to store the logfile.
- **Format** – You can specify a format using keywords and plain text. The format determines which information should be stored in the logfile. Keywords return licensing data when written to the log file. All keywords must be enclosed by percent (%) signs.

The default format is:

```
%DATE%\tFull: %FULL_USAGE%\tExternal: %EXT_USAGE%
```

This format adds the following sample information to the log file:

```
12/23/2004 09:49:40: Full: 10 External: 5
```



TIP If you made changes to the provided format, you can return to it by clearing the information in the **Format** box, and then clicking **OK**. When you open the **License Options** dialog box again, the **Format** box contains the default format.

The following table describes the available license usage format keywords.

Keyword	Description
%FULL_USAGE%	Provides the number of User licenses being used at the time information is written to the log file.
%EXT_USAGE%	Provides the number of External licenses being used at the time information is written to the log file.
%DATE%	Provides the date and time that information is written to the logfile. The date and time are formatted as MM/DD/YYYY HH:MM:SS.
%MON%	Provides the two-digit month that information is written to the logfile.

Keyword	Description
%DAY%	Provides the two-digit day of the month that information is written to the logfile.
%YEAR%	Provides the four-digit year that information is written to the logfile.
%YEAR2%	Provides the two-digit year that information is written to the logfile.
%HOUR%	Provides the two-digit hour of the day based on a 24-hour clock that information is written to the logfile.
%MIN%	Provides the two-digit minute of the hour that information is written to the logfile.
%SEC%	Provides the two-digit second of the minute that information is written to the logfile.

- Maximum Logfile Size** – Specify the maximum file size of the log file. Once the log file reaches the size specified in this box, the data in the file is deleted and new data is added. The default setting is 20 Megabytes.

Managing Your Licenses and the License Server

After you have installed the License Manager tool to obtain a license key for your users, you can use a combination of the Serena License Manager and the licensing utilities to manage the server and licenses.

Upgrading Evaluation Licenses

If you installed TeamTrack to use evaluation licenses, they are valid for 30 days.

To upgrade to permanent licenses:

- Set up your license server and get permanent license keys. For details, refer to ["Licensing the Product" on page 27](#).
- Add valid licenses to the Serena License Server to continue using TeamTrack.

- 3 In the TeamTrack Administrator client, specify the license server on the **License Options** dialog box. For details, refer to "[Working With TeamTrack License Options](#)" on page 36.

Finding Out What Licenses You Have

Named Licenses If you are using named licenses, you can use the **Products** tab to see how many licenses are in use and how many are available.

Concurrent License on Windows If you are using concurrent licenses, you can check the license usage by selecting a product or feature, and clicking the **Concurrent Usage** button on the **Products** tab.



NOTE If you have concurrent licenses for Serena ChangeMan Professional licenses, you cannot display usage information by selecting the Professional licenses. This is because the number of licenses in use are included in the totals for TeamTrack, Tracker, Builder, and Version Manager. If you have TeamTrack, Tracker, Builder, or Version Manager licenses, you can get a total usage for Professional by adding up the usage for applications.

Concurrent Licenses on UNIX If you are using concurrent licenses, you need to check the log file from the command line. Refer to the *FLEXIm End Users Guide* for instructions on how to get an activity log. You can find *FLEXIm End Users Guide* in the following location:

```
<install directory>/doc/enduser.pdf
```

Moving the License Server

If you need to move the license server to a new machine, contact your Serena sales representative for assistance.

Changing License Servers

To switch valid license servers, you must specify a new license server on the **License Options** dialog box in the TeamTrack Administrator client. For details, refer to "[Working With TeamTrack License Options](#)" on page 36.

After specifying a new license server, you must stop and start your TeamTrack Web server.

Using the Licenses with TeamTrack

When a user leaves TeamTrack by clicking the Exit button

Licenses for concurrent users who log out via the **Exit** button in the browser interface are retained for 1 minute and then released for other concurrent users. For maximum concurrent license usage, advise users to always click the **Exit** button when they close TeamTrack.

When a user leaves TeamTrack without clicking the Exit button

If users consuming concurrent licenses close the browser without clicking the **Exit** button, their licenses are consumed for the remainder of the time-out period specified on the **License Options** dialog box. For example, if the default time-out setting is 30 minutes, and a concurrent user closes the browser after 10 minutes of inactivity, the license is released 20 minutes after the browser is closed. For details, refer to ["Working With TeamTrack License Options" on page 36](#).

When a user logs in to several machines

If users in your organization are logged in to more than one machine and they are using concurrent licensing, each machine they are logged in to consumes a license.

If users are logged in to more than one machine with a named license, each machine they log into will require a named license. If the same user needs to log in from multiple machines at one time, or if multiple users with the same user name need to log in from multiple machines at one time, you can assign the same user name to as many named licenses as you need.

Reserving Concurrent Licenses for Groups of Users

You can use the License Manager to reserve a specific number of concurrent licenses for different groups of users.

For example, if you have 20 concurrent licenses available for use by 40 users, you can reserve a specific number of licenses for each functional area to which the users belong. If those 40 users are spread across four functional areas (such as Development, Test, Support, and Documentation), you can create four user groups, one for each of the functional areas. To ensure that each user group has an equal number of available licenses, reserve five for each group. Then, none of the

functional areas can use up all 20 available licenses. For example, if five members of the Development group are logged in, no more may log in.



IMPORTANT! If you will reserve concurrent licenses, disable the option to automatically assign named licenses to users when they log in. If this feature is enabled, and there are named licenses that aren't yet assigned to specific user IDs, any of the users for whom concurrent licenses are reserved will be assigned a named license when they log in. By disabling this, you ensure that users for whom concurrent licenses are reserved do not use up the remaining named licenses. For details, refer to ["Managing Named Licenses" on page 33](#).

To reserve licenses for groups of users:

- 1 In the License Manager install directory (the directory that contains the `serena.lic` and `lmgrd.exe` files), create a file called `merant.opt`. You can create this file from a text editor, such as Windows Notepad, but you must make sure that the file extension is `.opt`.

- 2 Open this file in a text editor, and add the following lines:

```
USER_GROUP <group> <user1> <user2>  
RESERVE # TeamTrack USER_GROUP <group>
```

Where:

- *group* is the name of the user group.
- *user1* and *user2* are the TeamTrack login IDs of the users who will belong to this group. You can define as many users as you want to include in this group.
- #Is the number of licenses to reserve for this group.

For example, if you define the following lines:

```
USER_GROUP Dev joeb alysong williamy  
RESERVE 2 TeamTrack USER_GROUP Dev
```

Then two licenses will be reserved for the user group called Dev, which comprises the users with the Version Manager login IDs of joeb, alysong, and williamy.

- 3 Repeat step 2 for each group of users. Group each USER_GROUP line together, and group each RESERVE line together. For example, the final file might look something like:

```
USER_GROUP Dev joeb alysong williamy  
USER_GROUP Doc amyl johnr  
USER_GROUP Test seano kayleen jayb
```

```
RESERVE 2 TeamTrack USER_GROUP Dev  
RESERVE 1 TeamTrack USER_GROUP Doc  
RESERVE 2 TeamTrack USER_GROUP Test
```

- 4** Save the Merant.opt file.

Chapter 3

Installing TeamTrack for Windows

TeamTrack for Windows installation instructions are provided, along with instructions for changing default spell check dictionaries.

Installation Overview	46
The Installation Process	46
Changing Default Spell Check Dictionaries	53

Installation Overview

TeamTrack for Windows can be installed from the TeamTrack CD-ROM or by downloading a Web package from Serena's Web site. The process for installing TeamTrack is the same for each package.



NOTE TeamTrack for Solaris and TeamTrack for Linux installation instructions are provided in the install.txt file included in the tar files for these versions.

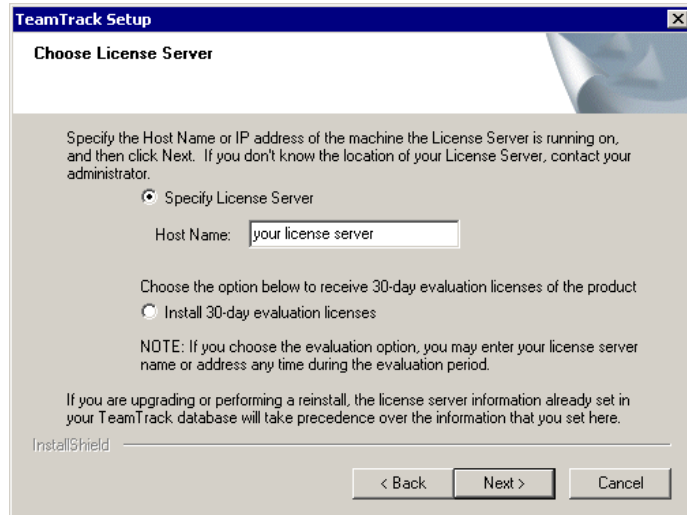
The Installation Process

If you are upgrading from a previous version of TeamTrack, refer to the TeamTrack readme for important information pertaining to your upgrade.

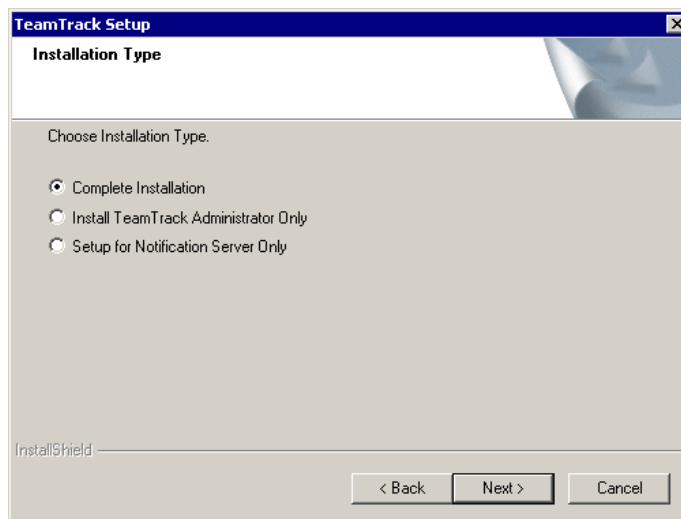
To install TeamTrack for Windows:

- 1 Launch the TeamTrack.exe file. After installation files are extracted, the **Welcome** dialog box opens. Click **Next** to continue.
- 2 Read through the license agreement text on the **Master License Agreement** dialog box, and then select **I Accept the terms of the Master License Agreement**. Click **Next**.
- 3 The **Master License Agreement Confirmation** dialog box opens. Select **I confirm my acceptance of the terms of the Master License Agreement**, and then click **Next**.
- 4 The **Choose License Server** dialog box opens, as shown in the following figure. Select one of the following options:
 - **Specify License Server** - Select this option to specify a license server installed with the Serena License Manager. For details, refer to "[Working With TeamTrack License Options](#)" on page 36.
 - **Host Name** - Provide the host name or IP address of your Serena license server machine. You can provide the IP address of the machine or the host name that is found in the Domain Name Server (DNS).

- **Install 30-day Evaluation Licenses** - Select this option to install TeamTrack using evaluation licenses. To continue using TeamTrack after the evaluation period, you must install the Serena License Manager, add permanent licenses, and specify a license server in the TeamTrack Administrator client. You can specify a license server on the **License Options** dialog box; open this dialog box by selecting **License Options** from the **Options** menu.



- 5 Click **Next** to continue.
- 6 The **Installation Type** dialog box opens, as shown in the following figure.



The following installation options are available on the **Installation Type** dialog box:

- **Complete Installation** - This type of setup automatically installs all TeamTrack components and necessary ODBC (Open Database Connectivity) drivers.
- **Install TeamTrack Administrator Only** - This setup option installs the Administrator client only. Select this option to install the Administrator client on machines of those who will use TeamTrack's Remote Administrator feature.
- **Setup for Notification Server Only** - This type of setup installs the TeamTrack Notification Server and Administrator client components only. Select this option if you want to run the Notification Server on a different machine than the one operating TeamTrack. The Administrator client is included to enable you to configure the Notification Server.

7 Select a setup type, and then click **Next**.

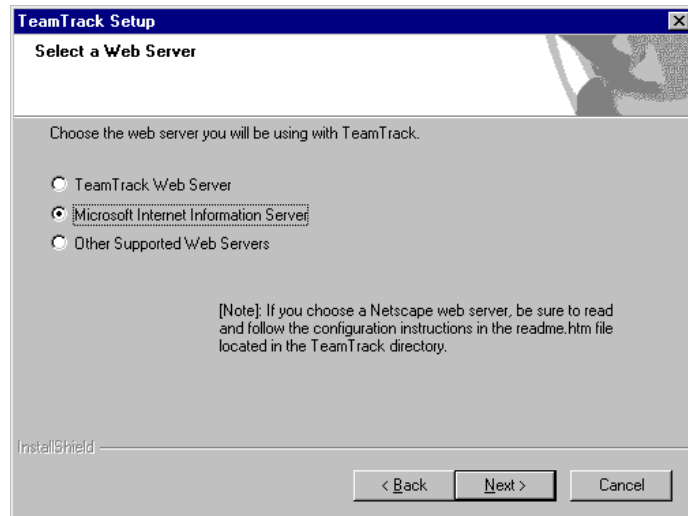


NOTE When TeamTrack uses a Microsoft Access database, the TeamTrack Notification Server must be installed on the same machine as TeamTrack.

8 If you selected a complete installation, the **Select a Web Server** dialog box opens. If you do not have a supported Web Server

installed, setup defaults to the TeamTrack Web Server and this dialog box does not open. Select one of the following Web Server options:

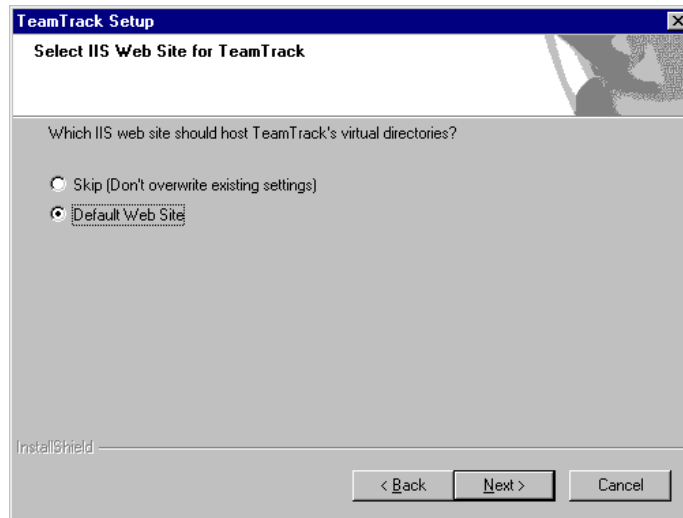
- **TeamTrack Web Server** - For best results, use this option for evaluation purposes only.
- **Microsoft Internet Information Server** - Select this option if you have installed and are using Microsoft IIS Web Server.
- **Other Supported Web Servers** - Select this option if you have installed and are using iPlanet, Sun Java System Web Server, or another supported Web Server. Instructions for setting up TeamTrack manually on an iPlanet or Sun Java System Web Server are available in the Solutions area of Serena Online Services at <http://support.serena.com>.



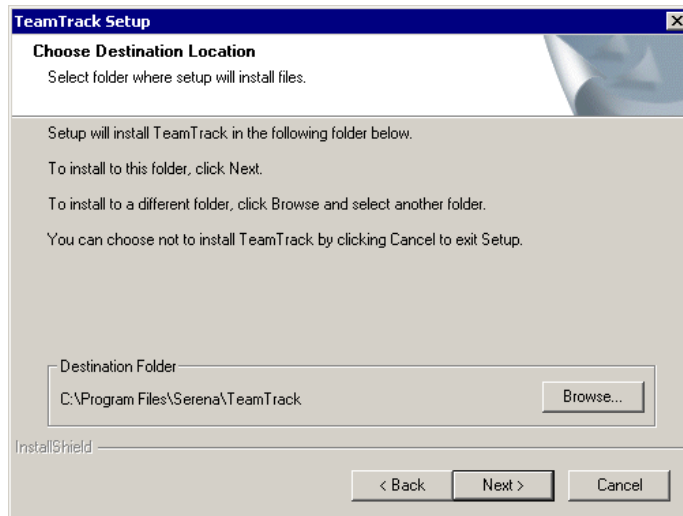
NOTE If you selected the **Install TeamTrack Administrator Only** or **Setup for Notification Server Only** options, the **Choose Destination Location** dialog box opens. Accept the default destination folder or browse for a different location, and then click **Next** to continue the installation process.

- 9 If you are installing a complete TeamTrack installation, click **Next** after selecting a Web Server. If you selected the Microsoft Internet Information Server option, you must specify the IIS Web site that will contain the TeamTrack virtual directories. From the **Select IIS Web Site for TeamTrack** dialog box shown in the following figure, select the IIS Web site where you want to create the TeamTrack virtual

directories. The default Web site will generally be selected for you in this dialog box. This is typically the Web site selection you want to use.

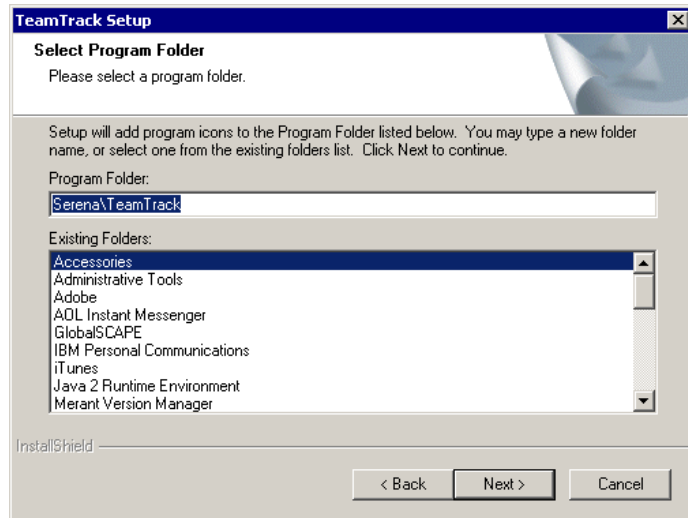


- 10 From the **Choose Destination Location** dialog box shown in the following figure, accept the default destination folder or browse for a different location, and then click **Next**.

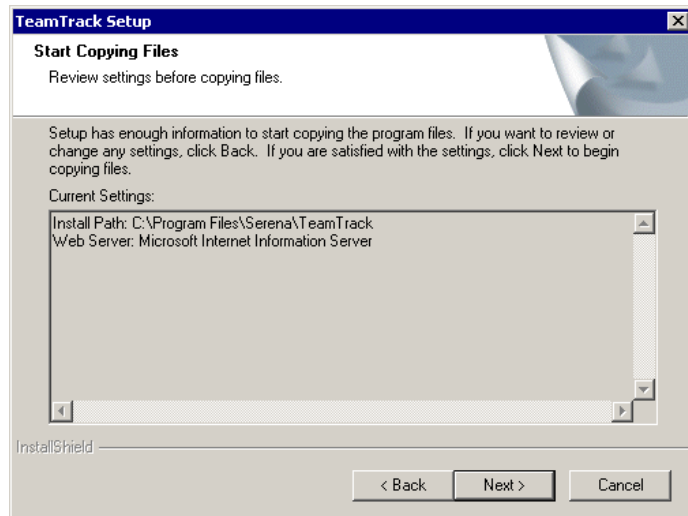


- 11 From the **Select Program Folder** dialog box shown in the following figure, accept the default program folder, which is

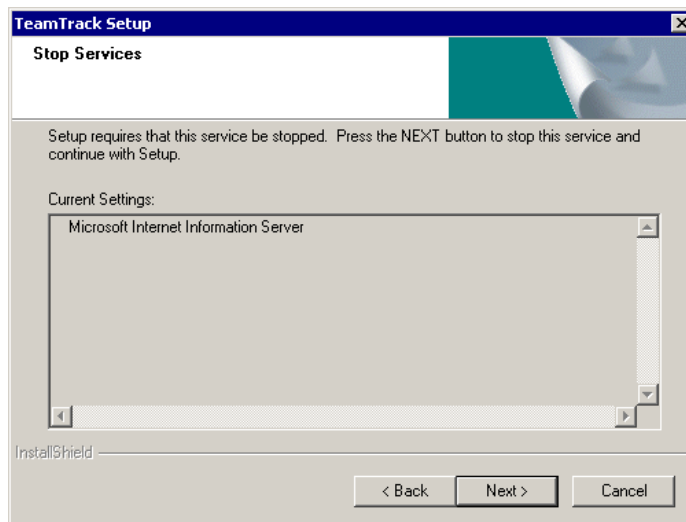
Serena\TeamTrack, or rename the program folder. Click **Next** to continue.



- 12** From the **Start Copying Files** dialog box shown in the following figure, confirm the components that will be installed, and then click **Next**.



- 13** The **Stop Services** dialog box opens, as shown in the following figure. Click **Next** to stop services that are running on the server.



- 14** The **Setup Complete** dialog box opens. You can select to open the readme file. Instructions on connecting to TeamTrack using a browser are also provided. Click **Finish** to install TeamTrack on the server.



NOTE TeamTrack automatically connects to the Sample database after a new installation.

TeamTrack Program Icons

The TeamTrack setup program creates the program group and following program icons:

- **Live Serena Home Page** – This icon connects you to Serena Software's Web site.
- **Serena Technical Support** – This icon connects you to Serena Software's technical support page.
- **TeamTrack 6.3** – This icon launches the TeamTrack 6.3 end-user browser interface.
- **TeamTrack Administrator** – This icon launches the TeamTrack Administrator client.
- **TeamTrack Readme** – This icon opens an HTML file that contains upgrade information, known issues, issue fixes, and other

information that may not be contained in other TeamTrack documentation.

- **Serena TeamTrack User's Guide** – This icon opens the *Serena TeamTrack User's Guide*, which discusses the end-user browser interface.
- **Serena TeamTrack Administrator's Guide** – This icon opens the *Serena TeamTrack Administrator's Guide*, which discusses the Administrator client.
- **TeamScript Reference Guide** – This icon opens the *TeamScript Reference Guide*, which provides information on customizing TeamTrack using TeamScript, a programming language built around VBScript 4.0.
- **TeamTrack Installation and Setup Guide** – This icon opens the *Serena TeamTrack Installation and Setup Guide*, which discusses installing and configuring TeamTrack.
- **TeamTrack Reviewers Guide** - This icon opens the *Serena TeamTrack Reviewers Guide*, which provides an overview of the TeamTrack browser interface and Administrator client.
- **Tracker to TeamTrack Migration Guide** - This icon opens the *Serena Tracker to TeamTrack Migration Guide*, which describes the process of moving successfully from Serena Tracker to Serena TeamTrack.



NOTE The Uninstall icon is not located with the program icons. To uninstall the TeamTrack application, select **Add/Remove Programs** from the Windows Control Panel.

Changing Default Spell Check Dictionaries

By default, TeamTrack uses a standard American English dictionary for the Spell Check feature. You can change this default dictionary if needed. Serena Software provides British and Canadian English lexicons; other lexicons can be purchased from third-party vendors.

To change the default Spell Check dictionary:

- 1 On the TeamTrack Web server, copy one of the following file sets from the *Serena/TeamTrack/ExtraLexicons* directory to the *Serena Software/TeamTrack/Bin* directory.
 - British lexicons: *sscebr.tlx* and *sscebr2.clx*
 - Canadian lexicons: *ssceca.tlx* and *ssceca2.clx*
- 2 Delete the American English lexicon files (*ssceam.tlx* and *ssceam2.clx*) from the bin directory. (Copies of these files are provided in the *ExtraLexicons* directory, so you can safely delete the copy in the bin directory.)



NOTE When TeamTrack is upgraded, the American English lexicon is automatically added to the bin directory. The Spell Check feature uses this dictionary unless you manually remove it.

Adding Custom Spell Check Dictionaries

The TeamTrack Spell Check checks every dictionary in the bin directory on the TeamTrack Web server. This allows you to add additional custom dictionaries, such as a dictionary specific to your company.



CAUTION! Do not modify the provided standard dictionary files. These files are overwritten when you upgrade TeamTrack.

To add custom a Spell Check dictionary:

- 1 Using a text editor, create a file named with a *.tlx* extension, such as *custom.tlx*.
- 2 Add words to this file that make up your custom dictionary. The file should only contain one word per line, followed by a carriage return.
- 3 Add the file to the bin directory.

Chapter 4

Creating a Database

After exploring TeamTrack through the Sample database, you can begin implementing your own system. The first steps to setting up your system are to create a database, and then populate that database with solution elements.

Using the Database Wizard	56
Connecting to Your Database	61
Core Database Elements	64
Linking Users to the Server	67

Using the Database Wizard

TeamTrack's **Database Wizard** provides core elements for your system's database. If you are using Oracle, DB2, Microsoft SQL Server, or Sybase Adaptive Server Enterprise, you must establish a database before running the **Database Wizard**. If you are using Microsoft Access, you can use the **Database Wizard** to create a data source and database. After running the wizard, you can create a Issue Management or Incident Management solution that further populates the core database.



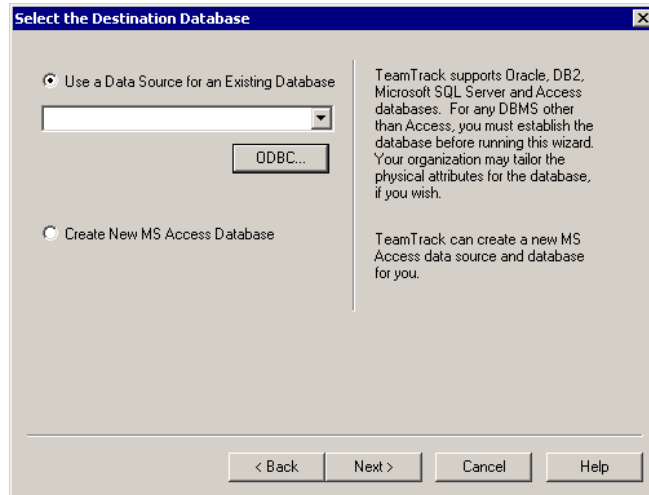
NOTE If you are using Oracle, the VARCHAR2 size for Memo fields is set to 4,000 for the database you create using the TeamTrack **Database Wizard**.

To run the Database Wizard:

- 1 Select **Tools** from the Administrator menu bar, and then select **Create New Database**. You can also click the **Create New Database** icon on the Administrator toolbar.
- 2 The **Welcome** dialog box opens and the wizard begins to guide you through the process of creating a new database. Click **Next** to continue. The **Select the Destination Database** dialog box opens.

Selecting a Destination Database

The **Select the Destination Database** dialog box, shown in the following figure, allows you to select an ODBC data source for an existing Oracle, DB2 (Universal Database), Microsoft SQL Server, Sybase Adaptive Server Enterprise, or Microsoft Access database or to create a new Microsoft Access database.



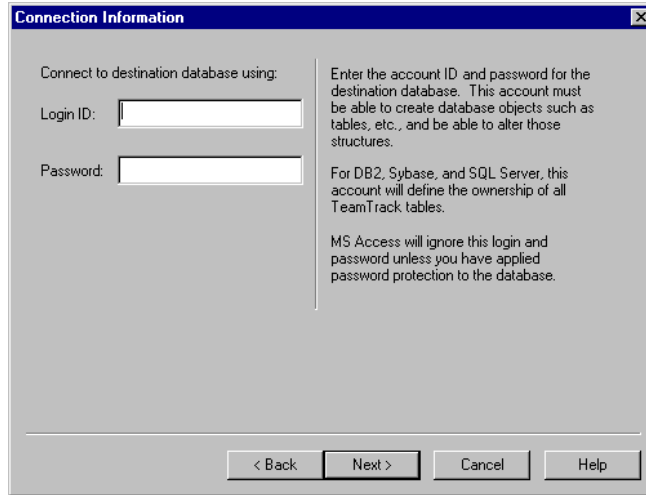
The following options are available:

- From the **Use a Database Source for an Existing Database** drop-down list, select the ODBC data source for an existing supported database. Click the **ODBC** button to open the **ODBC Data Source Administrator** to create a data source for your database, if necessary, you must create a system data source when you create an ODBC data source. Select the **System DSN** tab on the **ODBC Data Source Administrator** dialog box before creating your data source.
- Select the **Create New MS Access Database** option if you want to create a Microsoft Access data source and database. For best results, use Access if your database is going to remain fairly small, the number of users accessing it at one time is minimal, and the Web server will execute on the same machine as the Access database. TeamTrack includes all of the necessary ODBC drivers so additional drivers do not need to be purchased.

Click **Next** to continue.

Providing Connection Information for the Database

If you are using an existing data source, the **Connection Information** dialog box opens, as shown in the following figure.



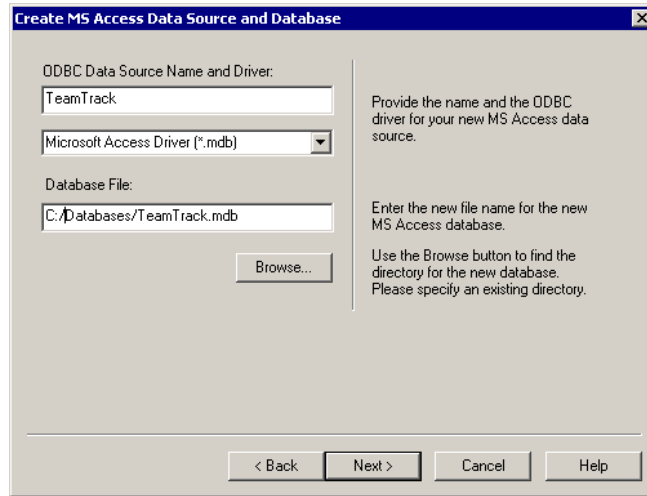
For Oracle, DB2, Microsoft SQL Server, and Sybase Adaptive Server Enterprise, provide login ID and password for the database. Consider the following information when you connect to different types of databases:

- For Microsoft Access, the Login ID and password are ignored unless you have applied password protection to the database.
- When you connect to an Oracle database, Oracle always uses the database specified by the user name at the time of login, not what was originally specified in the data source.
- For DB2, Microsoft SQL Server, and Sybase Adaptive Server Enterprise, the schema/owner for the account used to create a TeamTrack database is used when tables are created. (If you are using the SQL Server system administrator account, the tables will have dbo ownership.) The schema/owner owns all TeamTrack tables created by the wizard. To use a different schema/owner for your database, exit the **Database Wizard** and prepare the correct account in your DBMS, and then run the wizard again.

Click **Next** to continue.

Creating a Microsoft Access Database

If you are creating a new Microsoft Access database, the **Create MS Access Data Source and Database** dialog box opens, as shown in the following figure.

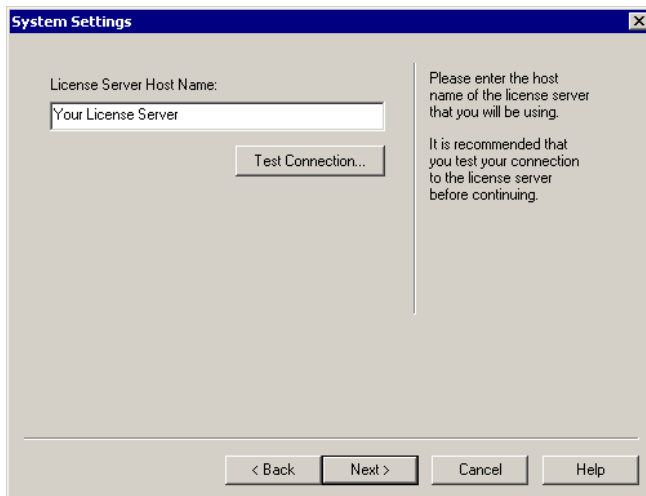


To create an Access database for TeamTrack:

- 1 In the **ODBC Data Source Name and Driver** box, type a name for your data source. The drop-down list below this box contains the Microsoft Access drivers available on the local machine. Select the appropriate driver from the list.
- 2 In the **Database File** box, specify the location and file name for the new database. You must create a file in an existing directory, but you must create a new file rather than overwrite an existing file. Click **Browse** to navigate to an existing directory if necessary.
- 3 Click **Next** to continue.

Specifying License Server Information

The **System Settings** dialog box opens, as shown in the following figure, enabling you to specify a license server used by the new database. You do not need to specify a license server when you create a database, but you must specify a license server for the database before you can run the **Solution Wizard** or create custom solutions.



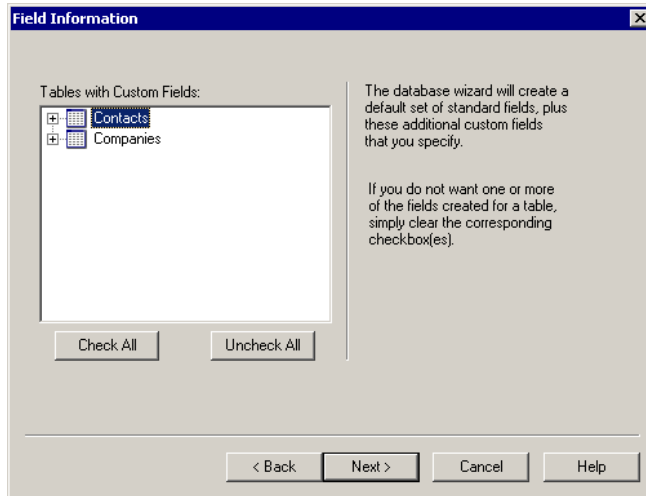
The following options are available on the **System Settings** dialog box.

- **License Server Host Name** - Provide the host name or IP address of your Serena License Server machine. You can provide the IP address of the machine or the host name that is found in the Domain Name Server (DNS). For details, refer to ["Licensing TeamTrack With the Serena License Manager" on page 17](#).
- **Test Connection** - Click this button to test the connection to the license server specified in the **License Server Host Name** box.

Click **Next** to continue.

Specifying Field Information

The **Field Information** dialog box opens, as shown in the following figure.



The wizard creates a default set of system fields plus the additional custom fields you specify here. You can choose to use the suggested custom fields displayed or add your own later. If you do not want one or more of the fields created for a particular table, clear the corresponding check box. To select all of the available custom fields, select the **Check All** button and to clear all of the fields, select the **Uncheck All** button.

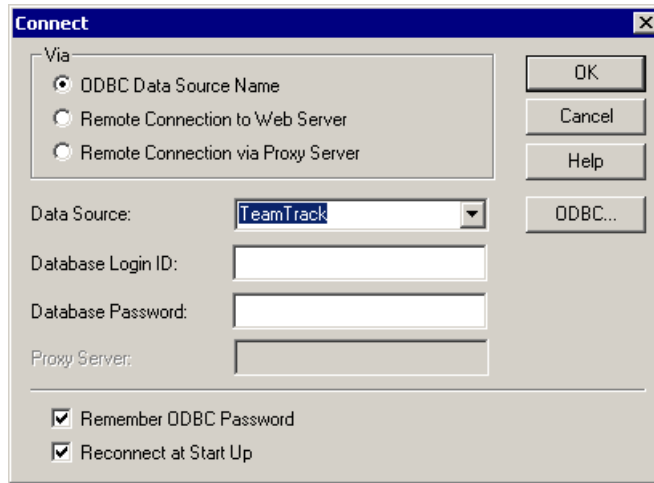
Click **Next** to continue.

Finishing the Wizard

The **Finish** dialog box opens. This is the final step of the wizard. If you need to verify the information supplied, before finishing the wizard, use the **Back** button to move up to the previous pages. Click **Finish** to create a database.

Connecting to Your Database

After creating a database, the **Connect** dialog box opens. The **Connect** dialog box can also be opened by selecting **Connect** from the **File** menu or by clicking the **Connect** toolbar button. Initially, you must connect to your database using the **ODBC Data Source Name** option. Later, you can connect to the database through a remote connection if needed.



The following connection options are available on the **Connect** dialog box:

- **ODBC Data Source Name** – Select the ODBC Data Source Name option to connect to the database through an ODBC data source.
- **Remote Connection to Web server** - Select this option to connect to the database via a Web server. The remote connection allows you to perform administrator functions from computers other than the TeamTrack server computer.
- **Remote Connection via Proxy Server** - Select this option to connect to a Web server via a proxy server. The remote connection allows you to perform administrator functions from computers other than the TeamTrack server computer.
- **Reconnect at Startup** - Select this check box if you would like the Administrator to automatically log back into the same database or server the next time you start the program.
- **ODBC** - Click this button to open the ODBC Data Source Administrator, which allows you to add, configure, or remove existing data sources.

The following options are available when you select **ODBC Data Source Name**:

- **Data Source** - The data source is the name of the ODBC data source you want to connect to. From the drop-down list, select one of the data sources available on the current server.

- **Database Login ID** - Type the name for the database account you want to use to connect to the database. This database account must have permissions to alter tables structures and add columns to tables.
- **Database Password** - Type the password that corresponds to the provided database login ID.
- **Remember ODBC Password** - Select this check box if you would like TeamTrack to remember your password and automatically provide it the next time you log on. This option is available if you chose to connect via an ODBC data source.

The following options are available when you select **Remote Connection to Web Server**:

- **Web Address** - Enter the server name or IP address of the computer of the configured Web server that is running TeamTrack.
- **TeamTrack Login ID** - Enter the TeamTrack login name. Enter your network User ID when you are using Windows authentication.
- **TeamTrack Password** - Enter the TeamTrack password associated with the login ID.
- **Remember Remote Password** - Select this check box if you would like TeamTrack to remember your password and automatically provide it the next time you log on.
- **Secure Connection** - Select this check box if you would like to use the secure protocol configured for the Web server. Accepted protocols are, SSL 2.0 and 3.0, TSC 1.0, and PCT.

The following options are available when you select **Remote Connection via Proxy Server**:

- **Web Address** - Enter the server name or IP address of the computer of the configured Web server that is running TeamTrack.
- **TeamTrack Login ID** - Enter the TeamTrack login name. Enter your network User ID when you are using Windows authentication.
- **TeamTrack Password** - Enter the TeamTrack password associated with the login ID.
- **Remember Remote Password** - Select this check box if you would like TeamTrack to remember your password and automatically provide it the next time you log on.

- **Proxy Server** - Type the server name or IP address of the proxy server. To specify a port number, type the server name or IP address by typing a colon and the number.
- **Secure Connection** - Select this check box if you would like to use the secure protocol configured for the Web server. Accepted protocols are, SSL 2.0 and 3.0, TSC 1.0, and PCT.

Allowing Users to Connect to Database in the Browser Interface

When you change the database connection using the **Connect** dialog box, you must restart your Web server to enable users to access the new database through the browser interface. The method you use to restart your Web server depends on the type of Web server you are using:

- To restart the TeamTrack Web Server, select **Manage Services** from the **Options** menu in the TeamTrack Administrator. Select **Web Server** from the **Manage Processes** list, and then click **Stop Process**. Click **Start Process** to restart the TeamTrack Web Server.
- If you are using Microsoft Internet Information Service (IIS) or a Netscape server, you can restart the Web server using the **Services** dialog box on Windows operating systems.
- If you are using the Apache Web server, run the `ttctl teamtrack stop` and `ttctl teamtrack start` commands.

Core Database Elements

The **Database Wizard** provides core elements needed for your TeamTrack system. These elements include the Base Project, Base Workflow, root folders, and system Auxiliary tables.



NOTE The **Solution Wizard**, discussed in the "[Creating the Issue Management Solution](#)" on page 69 and "[Creating the Incident Management Solution](#)" on page 83, populates your database with core elements needed for the solution.

Base Project

The Base Project serves as a root for your system's project hierarchy. The Base Project cannot be deleted, but it can be renamed to suit your company's needs. You can also set numbering properties for the Base Project. These numbering properties can be inherited by new projects created in the hierarchy.

Base Workflow

The Base Workflow serves as a root for your system's workflow hierarchy. The Base Workflow cannot be edited, deleted, or used by any project.

Root Folders

Two types of root folders are provided for you to add to as needed:

- **Public Folders** - Public folders contain links to items that can be accessed by all TeamTrack users. Users with appropriate privileges can view items in, add items to, and remove items from public folders.
- **Knowledge Base** - Knowledge Base folders contain links to items in the TeamTrack Knowledge Base. Problems and resolutions can be published to Knowledge Base folders for internal and external viewing.

System Auxiliary Tables

The following System Auxiliary tables are provided for storing auxiliary information related to the tracking system:

- **Companies table:** This table can be used to store information about the companies with which you interact. The **Database Wizard** provides two system required fields for this table (*Company Name* and *Company Number*), but you can also add custom fields, such as *Address*, *City*, *State*, *Phone Number*, and more. The fields can be modified at a later time, and all but the system required fields can be deleted.
- **Contacts table:** This table can be used to store information about individuals with which your company interacts. The **Database**

Wizard provides five system required fields for this table (*First Name, Middle Name, Last Name, User Name, E-mail, and Company*), but you can also add custom fields, such as *Phone Number, City State, Fax Number*, and more. The fields can be modified at a later time, and all but the system required fields can be deleted.

- **Problems table:** This table stores problem records that can be associated with a primary item, published to the Knowledge Base for either public or internal viewing, or both. The **Database Wizard** provides several fields for this table that can be modified at a later time. Additionally, all but two system required fields (*Title and Visibility*) can be deleted at a later time.
- **Resolutions table:** This table stores resolution records that can be associated with a problem contained in the *Problems* table and published to the Knowledge Base for either public or internal viewing, associated with a primary item, or both. The **Database Wizard** provides several fields for this table that can be modified at a later time. Additionally, all but three system required fields (*Title, Problem, and Visibility*) can be deleted at a later time.

The following System Auxiliary tables are provided for translating the TeamTrack browser interface into one or more languages or for modifying provided labels in the browser interface:

- **Languages table:** This table stores language records that enable users to specify their preferred language if the user interface has been translated to multiple languages. This table is used in conjunction with the *Strings* and *String IDs* tables when you translate elements such as labels, button names, and error messages into one or more languages.
- **Strings table:** This table stores string records that can be used to translate browser interface elements, such as labels, button names, and error messages, into one or more languages. You can also modify the provided U.S. English strings to meet your needs. For example, you can change label for the **Submit** button located on the Solution toolbar to display as "Create."
- **String IDs table:** This table stores a unique resource identifier, referred to as an internal ID, for each string in all languages supported by a given database. To prevent display errors in the

browser interface, however, these provided identifiers and their association with their related strings should not be changed.



CAUTION! For best results, limit privileges to the *Languages*, *Strings*, and *String IDs* tables to users who will translate your TeamTrack system into another language or are responsible for modifying existing strings. For example, you might grant privileges to these tables to a translator from a globalization vendor or to a TeamTrack managed administrator who is authorized to modify string names. Before granting privileges to the *Languages*, *Strings*, and *String IDs* tables, refer to the *Serena TeamTrack Administrator's Guide*.

Linking Users to the Server

Whether you are using the World Wide Web or a company's internal Web, such as an Intranet, TeamTrack's URL (Uniform Resource Locator) is:

`http://<your_server_web_address>/TeamTrack`

To make it easier for users to access the system, create a link from your company's Web site or Intranet site to TeamTrack.

Chapter 5

Creating the Issue Management Solution

After exploring TeamTrack through the Sample database, you can begin implementing your own system. The first steps to setting up your system are to create a database as discussed in ["Creating a Database" on page 55](#), and then populate that database with solution elements using the **Solution Wizard**.

Using the Issue Management Solution Wizard	70
Core Solution Elements	77

Using the Issue Management Solution Wizard

After creating a database, run the **Solution Wizard** to populate your database with elements that allow you to begin using your Issue Management solution quickly. You may add, edit, or delete portions of the provided elements through the Administrator after completing the wizard.



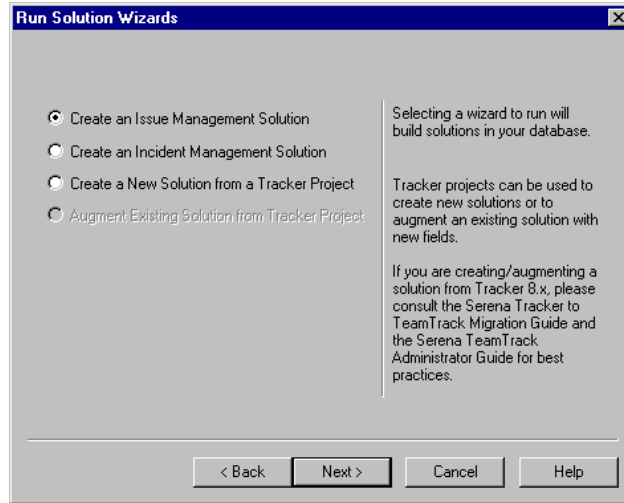
NOTE You must be connected to the TeamTrack database via an ODBC connection to run the **Solution Wizard**.

To create the Issue Management solution:

- 1 Connect to the database to which you would like to add the solution. The **Connect** dialog box can be accessed by selecting **Connect** from the **File** menu or by clicking the **Connect** toolbar button.
- 2 After connecting to a database, select **Tools** from the **Administrator** menu bar, and then select **Run Solution Wizard**.
- 3 The **Welcome** dialog box opens. Click **Next**. The wizard begins guiding you through the process of creating the solution.
- 4 The **Run Solution Wizards** dialog box opens, as shown in the following figure. The **Create an Issue Management Solution** option is enabled if you have purchased or are evaluating the TeamTrack Issue Management solution. Select this option to create the Issue Management solution.



NOTE You can generate multiple Issue Management solutions as needed.



5 Click **Next** to continue.

Creating the Solution Table

The **Solution Table** dialog box opens, as shown in the following figure. This dialog box enables you to name your solution and the primary items in that solution. For example, your solution may track "issues," which can include defects, enhancements, and change requests. For this example, type "Issue" in the singular item name box. You must also provide a name for the solution tab in the browser interface and a description that is used as help text for users.

Solution Table

Issue Wizard:

Plural Item Name: Singular Item Name:

Solution Tab Name:

Solution Description:

Please provide plural and singular names for these items. Item names define high-level 'items' stored within this solution, independent of their type. For example, a solution may contain both 'Defects' and 'Enhancements'. Both can be considered 'Issues', which would be entered for the 'Item Name'. Users will see the Solution Tab Name on the main tab in their browser. The Description is displayed in hover help text. Any of these names can be changed later.

< Back Next > Cancel Help

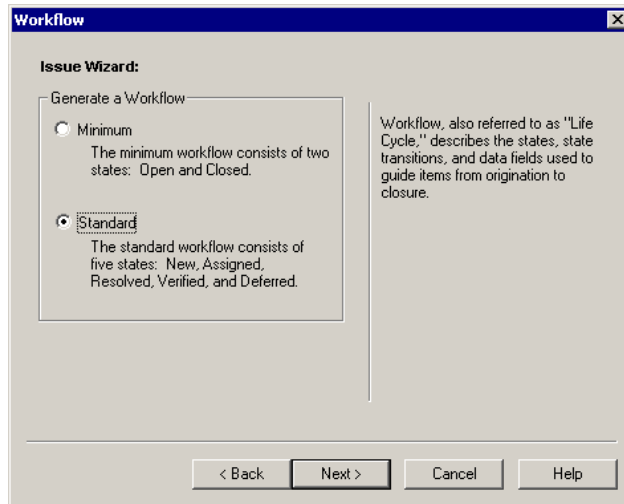
Provide the following information for your solution:

- **Plural Item Name** - Type a plural name for the type of items that will be stored in the Primary table used by the solution. This plural name must be unique for your system and is used for the solution display name, the logical table name, and the database table name. For example, type *Issues* to create the Issue Management solution.
- **Singular Item Name** - A singular item name describes a single item in the table and is automatically populated based on the plural item name you provide. For example, if you type *Issues* in the **Plural Item Name** box, the Singular Item Name is automatically called *Issues*. You can change this property as needed. The singular item name determines the names of various solution elements, such as the Base Solution Workflow, notifications, and built-in reports.
- **Solution Tab Name** - Type a label of up to 16 bytes (characters) that will display as a **Solution** tab in the browser interface. The **Solution Tab Display** box is automatically populated as you enter the Plural Item Name. You can modify the **Solution** tab name as needed, as long as you provide a unique name for each **Solution** tab in your system.
- **Solution Description** - Type a description for the solution.

Click **Next** to continue.

Creating the Solution Workflow

The **Workflow** dialog box opens, as shown in the following figure.



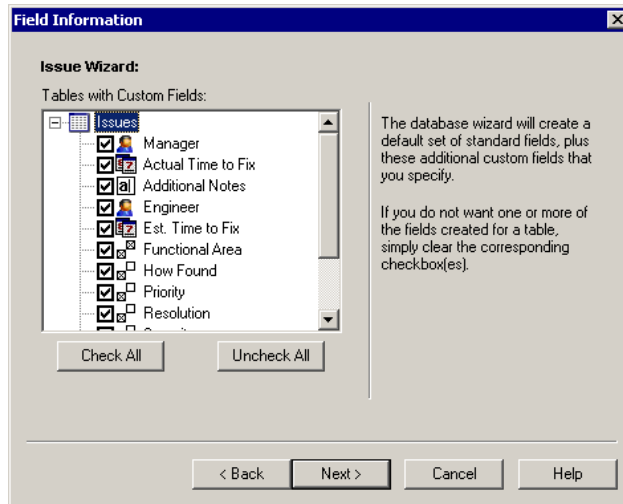
Select one of the following options for generating an Issue Management solution workflow:

- **Standard** - The Standard workflow automatically generates five states or positions that issues can reside in.
 - New - The item has been submitted.
 - Assigned - The item has been assigned ownership.
 - Resolved - The item has been resolved.
 - Verified - The resolution has been verified and the item is now considered closed.
 - Deferred - A decision to postpone this item has been made; the item is considered closed until re-opened at a later time.
- **Minimum** - The Minimum workflow is recommended for managing small projects. The workflow consists of only two states" Open and Closed.

Click **Next** to continue.

Specifying Field Information

The **Field Information** dialog box opens, as shown in the following figure.

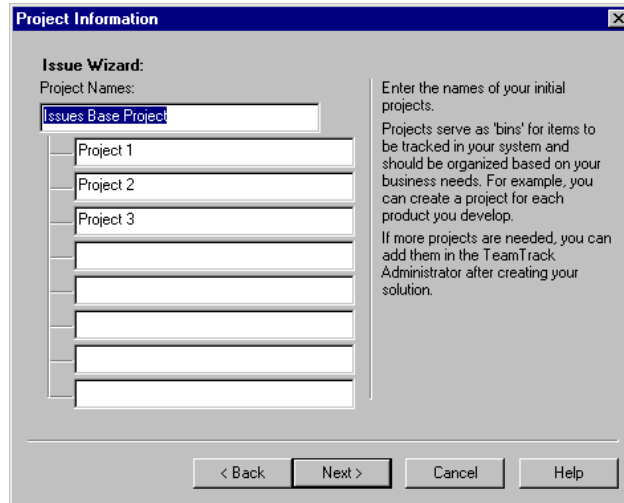


The wizard creates a default set of system fields plus the additional custom fields you specify here. You can choose to use the suggested custom fields displayed or add your own later. If you do not want one or more of the fields created for a particular table, clear the corresponding check box. To select all of the available custom fields, select the **Check All** button and to clear all of the fields, select the **Uncheck All** button.

Click **Next** to continue.

Specifying Projects for the Solution

The **Project Information** dialog box opens, as shown in the following figure.



The **Project Information** dialog box allows you to define some initial projects. Projects serve as "bins" for items to be tracked in your system and should be organized based on your business needs. For example, you can create a project for each product you develop.

The first box is pre-populated depending on the type or solution you are creating. You can change the name of this project as needed. After the solution is created, the first project is placed under the Base Project in the project hierarchy.

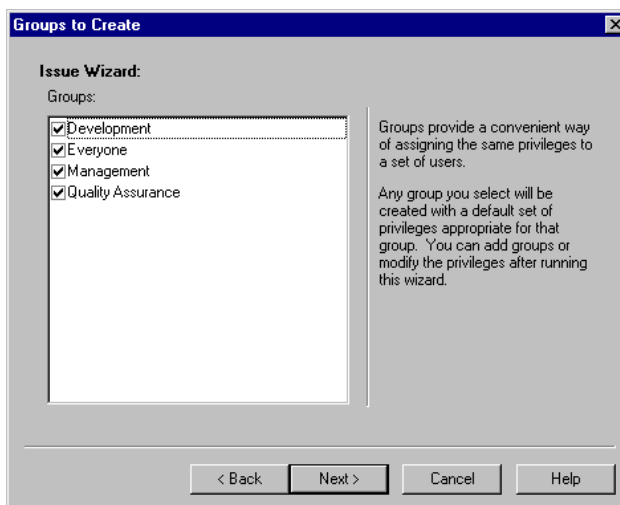
If more projects are needed, you can add them in the TeamTrack Administrator after creating your solution.

When you enter the names for your initial projects, the maximum length a project name can be is 32 bytes (characters). In addition, sibling project names must be unique.

Click **Next** to continue.

Specifying Groups for the Issue Management Solution

The **Groups to Create** dialog box opens, as shown in the following figure.



Select the initial groups you would like added to your database. Each group you select is created with an appropriate product-access type and a default set of privileges appropriate for that particular group. If the **Solution Wizard** detects that one of the provided groups already exists in your TeamTrack system, solution privileges are granted to that group. You can later modify privileges, groups and users as needed.

In addition, these groups are used to populate *User* field selections. When you create user accounts, assign those users to appropriate groups and their names appear in the drop-down lists for selection in the browser interface.

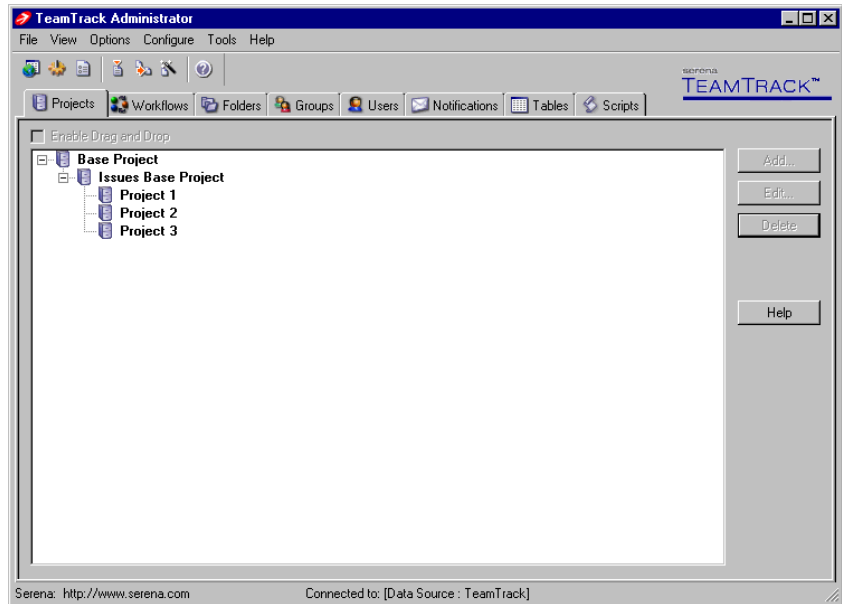
Click **Next** to continue.

Finishing the Wizard

Click **Finish** to create the Issue Management solution. The Administrator client updates to reflect enhancements made by the wizard, as shown in the following figure.



NOTE You must stop and start your Web server to make your new solution available to users in the browser interface.



Core Solution Elements

The **Solution Wizard** provides core elements needed for your TeamTrack Issue Management system. These elements include projects you define when you run the wizard, the solution primary table, the Base Solution Workflow, initial groups, notifications, reports, and system reports.

Projects

The projects you defined in the wizard are listed on the **Projects** tab in the Administrator. By default, these projects are assigned the Base Solution Workflow. You can reassign workflows to these projects later.

Base Solution Workflow

The Base Solution Workflow is provided by the **Solution Wizard**. The name of the workflow is based on the singular item name you provided

when you created the solution. To view the Base Solution Workflow, select the **Workflows** tab, select the workflow from the list, and then click **Edit**. The Base Solution Workflow may vary depending on the workflow generated and the custom fields you selected when you ran the **Solution Wizard**.

The Base Solution Workflow includes a default set of states, transitions, system required fields, and custom fields. You can customize the Base Solution Workflow by adding, editing, and deleting states and transitions. Fields can also be added, edited, or removed, except for those that are required by the system. You may choose, however, to use the Base Solution Workflow as a placeholder workflow, the properties of which are inherited by customized child workflows created further down the hierarchy.

Initial Groups

The initial groups you selected when you ran the wizard are listed in the **Groups** tab. The provided groups and their default product-access type are:

- Development – User Access
- Everyone – External Access
- Management – User Access
- Quality Assurance – User Access

The provided groups have been granted appropriate privileges, which you can modify at any time.

Notifications

Notifications are used to notify users of events that occur within the system, such as when a TeamTrack user becomes the owner of an issue. Several Standard e-mail notifications are provided and are listed in the **Notifications** tab. You can modify the provided notifications or create new notifications to suit your needs. The **Solution Wizard** automatically sets the **Allow Subscriptions** option for appropriate initial groups; after customizing your system, you may want to review these settings and other notification subscription settings for groups and individual users.

E-mail templates that can be used with these notifications are installed in the *Serena/TeamTrack/emailtemplate* folder. Before implementing e-mail notifications, review these templates and modify them to meet your needs as necessary. For details, refer to the *Serena TeamTrack Administrator's Guide*.

The provided notifications are:

- Any *issue* changes owner
- Any *issue* changes state
- Any *issue* changes to inactive
- Any *issue* I submitted changed state
- Any *issue* I submitted changed to inactive
- Any *issue* is submitted
- I become the owner of any *issue*



NOTE Notification names are based on the singular item name you provided when you created the solution.

Solution Table

Primary tables store information about items that follow a workflow process. These items are referred to as primary items. The **Solution Wizard** provides a Primary table for the Issue Management solution. The name of this table is based on the singular item name you provided when you created the solution. To view this table, select the **Tables** tab, select the table, and then click **Edit**.

Solution-Based Reports

Nearly 20 pre-generated solution-based reports are provided by the **Solution Wizard**. Reports are accessed in the browser interface by users who have been granted privileges to access various levels of reports. The provided reports allow User-level access and can be executed by users given this privilege in the TeamTrack Administrator.

The provided solution-based reports are available at the Base Solution Project level and by default return information about all items based on

the search criteria. The name of each report is determined by the singular item name you provided when you created the solution. For example, the provided reports include:

- **All Assigned Issues** – This **Listing** report displays all issues residing in the Assigned state.
- **All Deferred Issues** – This **Listing** report displays all issues residing in the Deferred state.
- **All Issues by Issue Type** – This **Distribution** report provides a bar chart of all issues by type. Both active and inactive issues display. The issue types provided by the **Solution Wizard** are bug reports, enhancement requests, change requests, tasks, and problem reports.
- **All Issues by Owner** – This **Distribution** report displays in pie-chart form the distribution of issues by owner.
- **All Issues by Project and Issue Type** – This **Distribution** report displays in stacked-bar-chart form the number of issues by type in each project.
- **All Issues by Project and Owner** – This **Distribution** report displays in tabular form the number of issues owned by each user in all projects.
- **All Issues by Project and State** – This **Distribution** report displays in tabular form the number of issues residing in each state in all projects.
- **All Issues by State** – This **Distribution** report displays in tabular form the number of issues residing in each state.
- **All New Issues** – This **Listing** report displays all issues residing in the New state.
- **All Resolved Issues** – This **Listing** report displays all issues residing in the Resolved state.
- **All Verified Issues** – This **Listing** report displays all issues residing in the Verified state.
- **Assigned Issues by Engineer** – This **Distribution** report displays in bar-chart form the number of issues assigned to each engineer.
- **Assigned Issues by Project and Engineer** – This **Distribution** report displays in tabular form the number of issues assigned to each

engineer in each project. The total number of issues assigned to each engineer is also provided.

- **My Assigned Issues** – This **Listing** report displays each issue assigned to the current user.
- **My Resolved Issues** – This **Listing** report displays each issue residing in the Resolved state and owned by the current user.
- **New Issues by Manager** – This **Distribution** report displays in bar-chart form the number of issues in the new state. Issues are listed by the manager who owns them.
- **New Issues by Project and Manager** – This **Distribution** report displays in tabular form the number of issues in the new state in each project. Issues are listed by the manager who owns them.
- **Resolved Issues by Project and Tester** – This **Distribution** report displays in tabular form the number of issues in the resolved state in each project. Issues are listed by the tester who owns them.
- **Resolved Issues by Tester** – This **Distribution** report displays in bar-chart form the number of issues in the resolved state. Issues are listed by the tester who owns them.

Chapter 6

Creating the Incident Management Solution

After exploring TeamTrack using the Sample database, you can begin implementing your own system. The first steps to setting up your system are to create a database as discussed in ["Creating a Database" on page 55](#), and then populate that database with solution elements.

Using the Incident Management Solution Wizard	84
Core Solution Elements	93

Using the Incident Management Solution Wizard

After creating a database, run the **Solution Wizard** to populate your database with elements that allow you to begin using your Incident Management solution quickly. You may add, edit, or delete portions of the provided elements through the Administrator after completing the wizard.



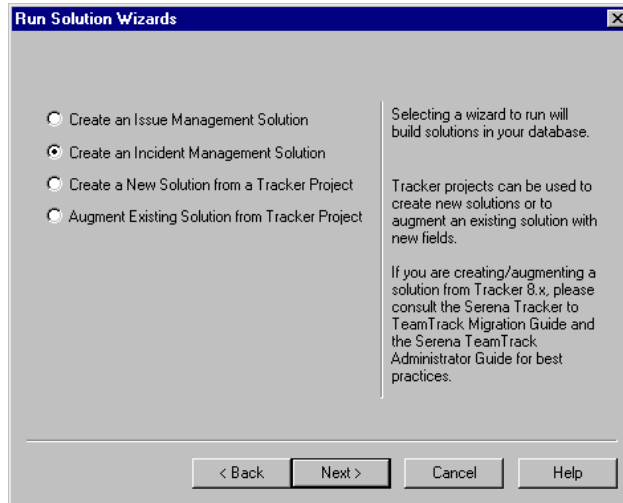
NOTE You must be connected to the TeamTrack database via an ODBC connection to run the **Solution Wizard**.

To create the Incident Management solution:

- 1 Connect to the database to which you would like to add the solution. The **Connect** dialog box can be accessed by selecting **Connect** from the **File** menu or by clicking the **Connect** toolbar button.
- 2 After connecting to the database, select **Tools** from the Administrator menu bar, and then select **Run Solution Wizard**.
- 3 The **Welcome** dialog box opens. Click **Next**. The wizard begins guiding you through the process of creating an Incident Management solution.
- 4 The **Run Solution Wizards** dialog box opens, shown in the following figure. The **Create an Incident Management Solution** option is enabled if you have purchased or are evaluating the TeamTrack Incident Management solution. Select this option to create the Incident Management solution.



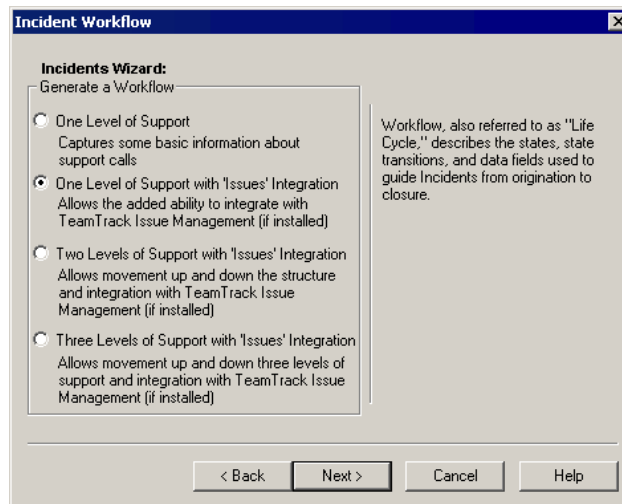
NOTE This solution can only be created once per licensed database.



5 Click **Next** to continue.

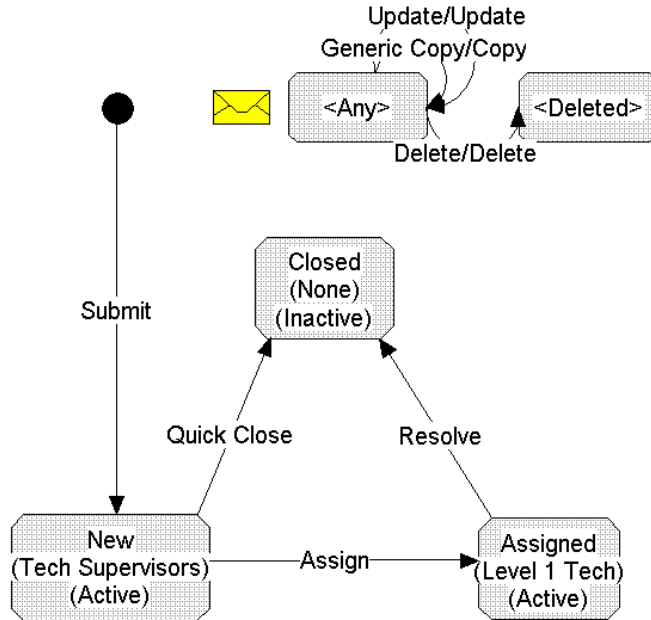
Creating the Incident Workflow

The **Incident Workflow** dialog box opens, as shown in the following figure. Four workflow options ranging from basic to complex are available for you to select as your Base Incident Workflow. The workflow generated by the wizard can be modified at a later time as needed.

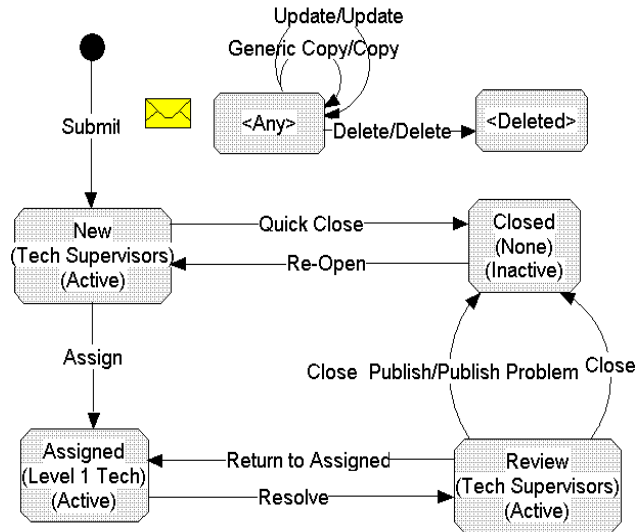


Select one of the following options:

- One Level of Support** – This workflow allows users to capture some basic information about calls. For example, a new incident is owned by a tech supervisor, who can close it or assign it to a level 1 tech. The level 1 tech can resolve the incident and close it. This workflow is displayed in the following figure.

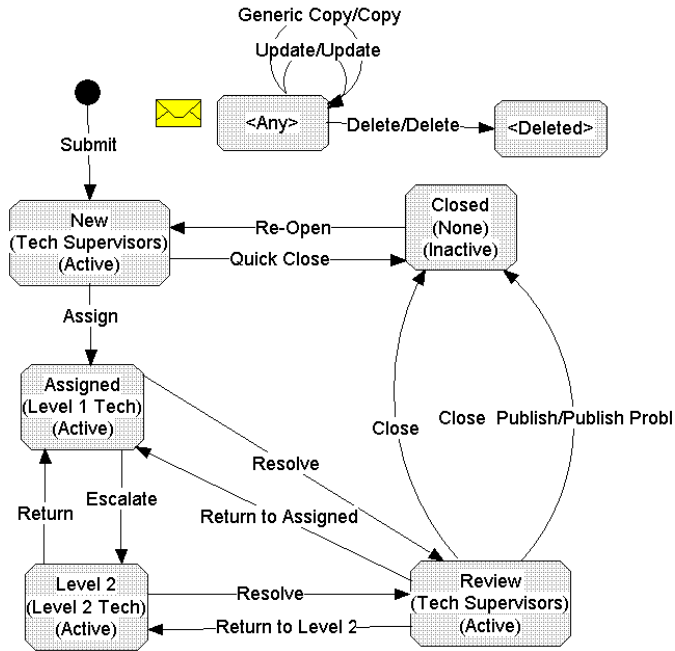


- One Level of Support with Issues Integration** – This workflow includes additional states and transitions, enabling incidents to be reviewed by a supervisor and returned to a level 1 tech, if necessary. Users can choose to publish incidents to the TeamTrack Knowledge Base, and closed incidents can be reopened. If the TeamTrack Issue Management is installed, this workflow includes additional states and transitions that enable you to post incidents to Issues table, which is the Primary table for the Issue Management solution. This workflow is displayed in the following figure.

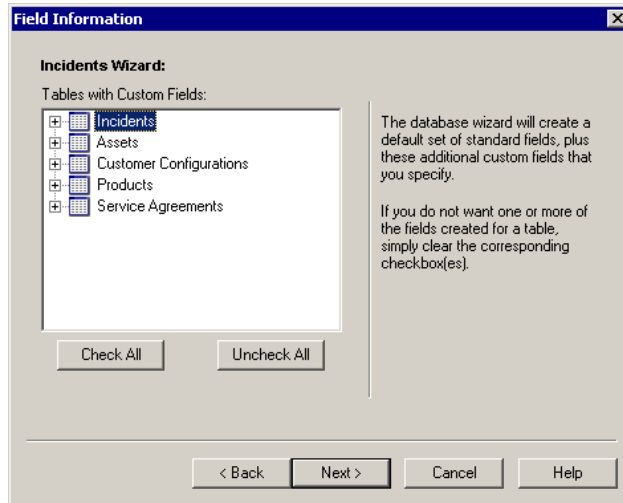


- Two Levels of Support with Issues Integration** – This workflow adds a second level of support and allows for back-and-forth movement of incidents. For example, a level 1 tech can resolve an incident and send it to a supervisor for review, or the level 1 tech can escalate the incident to a level 2 tech, who can return it to the level 1 tech or resolve it and send it to a supervisor for review. The incident can be published to the TeamTrack Knowledge Base, and closed incidents can be reopened, if necessary. If you have TeamTrack Issue Management installed, this workflow includes additional states and transitions that enable you to post incidents to the Issues table,

which is the Primary table for the Issue Management solution. This workflow is displayed in the following figure.



- Three Levels of Support with Issues Integration** – This workflow adds a third level of support and allows for back-and-forth movement of incidents. For example, a level 1 tech can escalate an incident to a level 2 tech, who can escalate it to a level 3 tech, if necessary. The level 3 tech can return the incident back to the level 2 tech, or the incident can be resolved and sent to a supervisor for review. If need be, the supervisor can then return the incident to a tech at any level. If you have TeamTrack Issue Management installed, this workflow includes additional states and transitions that enable you to post incidents to the Issues table, which is the Primary table for the Issue Management solution. This workflow is displayed in the following figure.

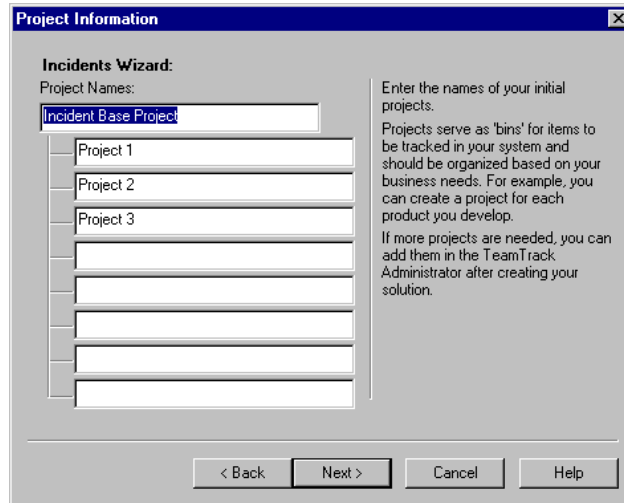


The wizard creates a default set of system fields plus the additional custom fields you specify here. You can choose to use the suggested custom fields displayed or add your own later. If you do not want one or more of the fields created for a particular table, clear the corresponding check box. To select all of the available custom fields, select the **Check All** button and to clear all of the fields, select the **Uncheck All** button.

Click **Next** to continue.

Specifying Projects for the Solution

The **Project Information** dialog box, shown in the following figure opens.



The **Project Information** dialog box allows you to define some initial projects. Projects serve as "bins" for items to be tracked in your system and should be organized based on your business needs. For example, you can create a project for each product you support.

The first box is pre-populated depending on the type or solution you are creating. You can change the name of this project. After the solution is created, the first project is placed under the Base Project in the project hierarchy.

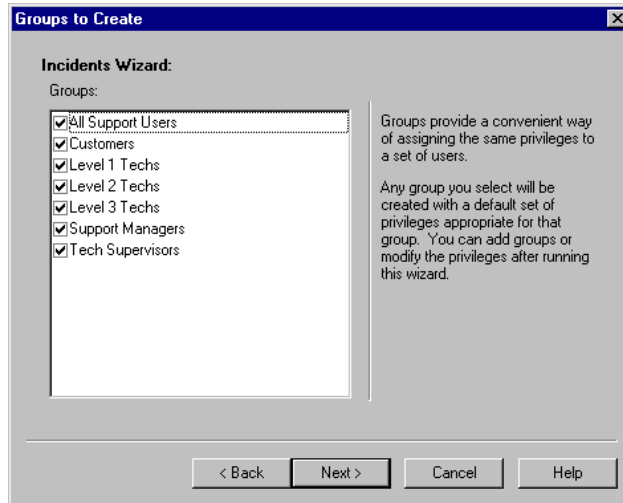
If more projects are needed, you can add them in the TeamTrack Administrator after creating your solution.

When you enter the names for your initial projects, the maximum length a project name can be is 32 bytes (characters). In addition, sibling project names must be unique.

Click **Next** to continue.

Specifying Groups for the Incident Management Solution

The **Groups to Create** dialog box opens, as shown in the following figure.



Select the initial groups you would like added to your database. Each group you select is created with an appropriate product-access type and a default set of privileges appropriate for that particular group. You can later modify privileges groups and users.

In addition, these groups are used to populate *User* field selections. When you create user accounts, assign those users to appropriate groups and their names appear in the drop-down lists for selection in the browser interface.

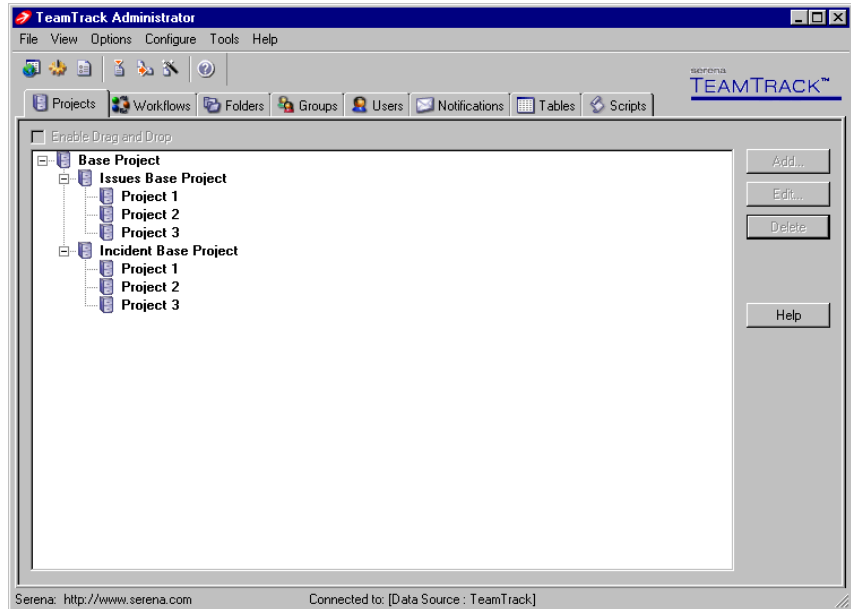
Click **Next** to continue.

Finishing the Wizard

Click **Finish** to create the solution. The following figure shows the **Projects** tab in the Administrator client after the Issue Management and Incident Management solutions have been added.



NOTE You must stop and start your Web server to make your new solution available to users in the browser interface.



Core Solution Elements

The **Solution Wizard** provides core elements needed for your TeamTrack Incident Management solution. These elements include projects you define when you run the wizard, the Base Incident Workflow, initial groups, notifications, a Primary table and several Auxiliary tables, incident-based reports, and system reports.

Projects

The projects you defined in the wizard are listed on the **Projects** tab in the Administrator. These projects are assigned the Base Incident Workflow. You can reassign workflows to these projects later.

Base Incident Workflow

The Base Incident Workflow is provided by the **Solution Wizard**. To view the Base Incident Workflow, select the **Workflows** tab, select the

workflow from the list, and then click **Edit**. The Base Incident Workflow may vary depending on the workflow generated and the custom fields selected when you ran the **Solution Wizard**.

The Base Incident Workflow includes a default set of states, transitions, system required fields, and custom fields. You can customize the Base Incident Workflow by adding, editing, and deleting states and transitions. Fields can also be added, edited, or removed, except for those that are required by the system. You may choose, however, to use the Base Incident Workflow as a placeholder workflow, the properties of which are inherited by child workflows created further down the hierarchy. These child workflows can then be customized.

Initial Groups

The initial groups you selected when you ran the wizard are listed in the **Groups** tab. The TeamTrack Incident Management-provided groups and their default product-access type are:

- All Support Users – External access
- Customers – External access
- Level 1 Techs – User access
- Level 2 Techs – User Access
- Level 3 Techs – User Access
- Support Managers – User Access
- Tech Supervisors – User Access

The provided groups have been granted appropriate privileges, which you can modify at any time.

Notifications

Several Standard e-mail notifications are provided and are listed in the **Notifications** tab. Notifications are used to notify users of events that occur within the system, such as when a user becomes the owner of an incident. You can modify the provided notifications or create new notifications to suit your needs.

The **Solution Wizard** automatically sets the **Allow Subscriptions** option for appropriate initial groups; after customizing your system, you may want to review these settings and other notification subscription settings for groups and individual users.

E-mail templates are also provided for use with these notifications. Before implementing e-mail notifications, review these templates and modify them to meet your needs as necessary.

The provided notifications are:

- Any incident changes owner
- Any incident changes state
- Any incident changes to inactive
- Any incident I submitted changed state
- Any Incident I submitted changed to inactive
- I become the owner of any incident
- Any incident is submitted
- Any incident is submitted by an external user

TeamTrack Incident Management Tables

The **Solution Wizard** provides the *Incidents* table, which is the Primary table for the Incident Management solution, and four Auxiliary tables: the *Assets*, *Customer Configurations*, *Products*, and *Service Agreements* tables.

Primary tables store information about primary items that follow a workflow process. Auxiliary tables store information to support the workflow process. To view the provided tables, click the **Tables** tab, select a table, and then click **Edit**.

Incident-Based Reports

The **Solution Wizard** provides several pre-generated incident-based reports. Reports are accessed in the browser interface by users who have been granted privileges to access various levels of reports. The provided reports allow User-level access and can be executed by users given this privilege in the TeamTrack Administrator. The provided reports are

available at the Incidents Base Project level and by default return information about all incidents based on the search criteria. The provided reports include:

- **Active Calls by Customer** - This **Listing** report displays all active incidents by the company selected when users execute the report. Users can select multiple companies when they execute this query-at-runtime report.
- **Active Calls by Owner** - This **Listing** report displays all active incidents owned by the user selected when users execute the report. Users can select multiple users when they execute this query-at-runtime report.
- **All Calls I Own** - This **Listing** report displays all incidents owned by the current user.
- **All Incidents by Incident Type** - This **Distribution** report displays in bar-chart form all incidents by their type. Both active and inactive incidents display. The provided incident types are enhancement requests and problem reports.
- **All Incidents by Owner** - This **Distribution** report displays in pie-chart form the distribution of incidents by owner.
- **All Incidents by Project and Incident Type** - This **Distribution** report displays in stacked-bar-chart form the number of incidents by type in each project.
- **All Incidents by Project and Owner** - This **Distribution** report displays in tabular form the number of incidents owned by each user in all projects.
- **All Incidents by Project and State** - This **Distribution** report displays in tabular form the number of incidents residing in each state in all projects.
- **All Incidents by State** - This **Distribution** report displays in tabular form the number of incidents residing in each state.
- **Open Calls by Type** - This **Distribution** report displays in bar-chart form the number of active incidents by type.

Chapter 7

Creating Solutions From Tracker Projects

After creating a TeamTrack database, you can run the **Solution Wizard** to create a TeamTrack solution based on a Tracker project. You can also use the **Solution Wizard** to augment existing TeamTrack solutions with fields, groups, and user accounts from a Tracker project.

Creating and Augmenting Solutions From Tracker Projects	98
Creating a Solution From a Tracker Project	99
Augmenting a Solution From a Tracker Project	120

Creating and Augmenting Solutions From Tracker Projects

The **Solution Wizard** can create or augment a TeamTrack solution based on Tracker projects. This allows you to:

- Create a single TeamTrack solution based on a Tracker project
- Create multiple TeamTrack solutions from different Tracker projects
- Create a single TeamTrack solution based on a Tracker project, and then augment that solution with fields, groups, and users from multiple Tracker projects
- Create a TeamTrack for Issue Management or TeamTrack for Incident Management solution, and then augment that solution with fields, groups, and users from multiple Tracker projects
- Create a custom TeamTrack solution and augment it with fields, groups, and users from multiple Tracker projects

In all cases, the **Solution Wizard** creates mapping information that can be used later to import data from Tracker into your TeamTrack solution.

When you create a solution from a Tracker project, most elements needed to get your solution up and running are provided. A list of these elements is provided in ["Core Solution Elements" on page 112](#). For details on creating solutions based on Tracker projects, refer to ["Creating a Solution From a Tracker Project" on page 99](#).

When you augment a solution from a Tracker project, fields and groups from the Tracker project are added to the solution. Existing fields and groups are left intact. You can also map Tracker user accounts to existing TeamTrack user accounts or convert Tracker user accounts to TeamTrack. For details on augmenting existing solutions with Tracker project elements, refer to ["Augmenting a Solution From a Tracker Project" on page 120](#).



IMPORTANT! Serena Software recommends that you read the *Serena Tracker to TeamTrack Migration Guide* before creating or augmenting a solution from a Tracker project. This guide is installed in the *TeamTrack/manuals* directory.

Considerations for Using the Solution Wizard

Consider the following information before running the **Solution Wizard**:

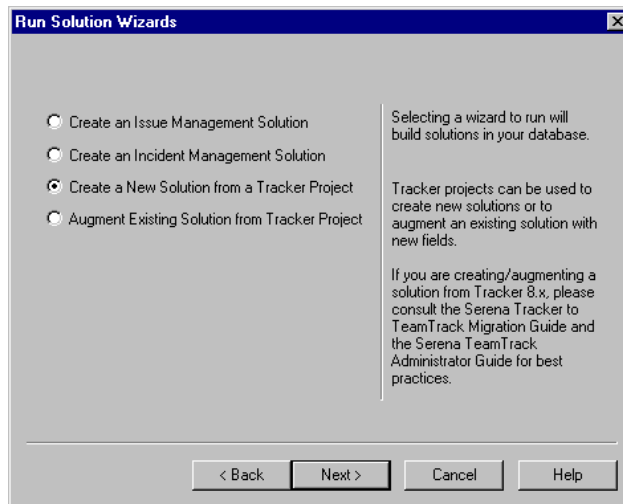
- The **Solution Wizard** converts elements from Tracker version 7.5 or later.
- You must be connected to the TeamTrack database via an ODBC connection to run the **Solution Wizard**.
- The **Solution Wizard** must be run on a machine on which the Tracker Administrator is installed and from which you can perform Tracker server administration. In addition, the database connections to the projects from which you intend to create solutions must be established on this machine.
- If you intend to administer TeamTrack from a machine other than the machine on which the Tracker Administrator is installed, consider installing the TeamTrack Administrator on the Tracker machine. Make sure that you select the **Install TeamTrack Administrator Only** option when you install TeamTrack and that you can connect to the TeamTrack database via an ODBC connection. You can then run the **Solution Wizard** and later uninstall the Administrator.
- You can add, edit, or delete portions of the provided solution elements through the TeamTrack Administrator after completing the wizard.
- TeamTrack supports one character set per database. The **Solution Wizard** does not perform character-set conversion. All source Tracker projects and the receiving TeamTrack database should use the same character set. In TeamTrack, the browser character set is specified on the **Database** tab of the **Settings** dialog box. Open this dialog box by selecting **Settings** from the **Options** menu.

Creating a Solution From a Tracker Project

For best results when you use the **Solution Wizard** to create a solution from a Tracker project, you should select the Tracker project that is most representative of all the Tracker projects you want to migrate from TeamTrack. This is especially useful if you intend to augment the solution you create with elements from other Tracker projects.

To create a TeamTrack solution from a Tracker project:

- 1** From a machine on which the Tracker Administrator is installed and from which you can perform Tracker server administration, launch the TeamTrack Administrator.
- 2** Connect to the TeamTrack database in which you would like to create the solution. You can access the **Connect** dialog box by selecting **Connect** from the **File** menu or by clicking the **Connect** toolbar button.
- 3** Select **Tools** from the **Administrator** menu bar, and then select **Run Solution Wizard**.
- 4** The **Welcome** dialog box opens. Click **Next**. The wizard begins guiding you through the process of creating the solution.
- 5** The **Run Solution Wizards** dialog box opens, as shown in the following figure.



- 6** The **Create a Solution From a Tracker Project** option is enabled if you have purchased or are evaluating the TeamTrack Issue Management solution and the Serena Tracker Administrator is installed on the machine from which you are running the TeamTrack

Administrator. Select this option to connect to a Serena Tracker project and create a solution based on properties within that project.



IMPORTANT! If you are creating a solution from a Tracker 8.x project that contains multiple issue types, refer to the Serena Tracker to TeamTrack Migration Guide for best practices before proceeding.

7 Click **Next**.

Connecting to the Tracker Source Project

Use the **Connect to Serena Tracker Source** dialog box, shown in the following figure, to specify a Tracker project from which the solution should be created.

The following options are available:

- Server** - This drop-down list contains the available Tracker server definitions. Select the server that contains the project for which you want to create a TeamTrack solution.

- **Project** - This drop-down list contains the projects for the specified server. Select the project for which you want to create a TeamTrack solution.



NOTE If the Tracker server and project you want to convert is not listed, launch the Tracker Administrator interface and define a connection to the server and project.

- **Server Administrator Password** - Type the password for the specified server and project.

Click **Next** to continue.

Creating the Solution Table

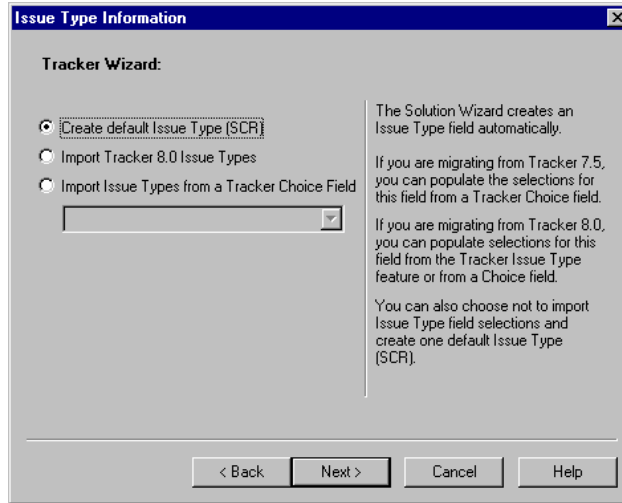
The **Solution Table** dialog box enables you to name your solution and the primary items in that solution. For example, your solution may track "issues," which can include defects, enhancements, and change requests. For this example, type "Issue" in the singular item name box. You must also provide a name for the solution tab in the browser interface and a description that is used as help text for users.

For details, refer to ["Creating the Solution Table" on page 71](#).

After providing solution table information, click **Next** to continue.

Specifying Issue Type Information

The **Issue Type Information** dialog box, shown in the following figure when TeamTrack is connected to a Tracker 8.x project, enables you to populate selections for the TeamTrack *Issue Type* field based on information from Tracker.



TeamTrack issue types are used to categorize the types of items in a solution, such as defects and enhancement requests. You can tailor your workflow to manage each issue type differently if needed. For example, you can enable or disable certain issue types for each project.

The TeamTrack *Issue Type* field uses three-letter prefixes that are prepended to the Issue ID. For example, a defect might have an Issue ID of DEF00011 and an enhancement might have an Issue ID of ENH00025. When you import Issue Type information using the **Solution Wizard**, the first three characters of each selection are used as the prefix. For example, the imported prefix for a Tracker Issue Type of "Support Request" is SUP. You can later change the provided prefixes as needed.



NOTE You can choose to create issue types for your solution when you import data using the **Import Data Wizard**. Note, however, that Issue Type prefixes are automatically created only when you use the **Solution Wizard** and must be manually created if you import *Issue Type* selections using the **Import Data Wizard**.

If you are migrating from Tracker 7.5, select one of the following Issue Type options:

- **Create Default Issue Type (SCR)** - Select this option to populate the *Issue Type* field with an SCR item type.
- **Import Issue Types From a Tracker Choice Field** - Select this option, and then select a Tracker *Choice* field from the drop-down list

to create a TeamTrack *Issue Type* selection for each *Choice* field selection. If the Tracker *Choice* field does not contain any selections, an SCR issue type is automatically created in TeamTrack.

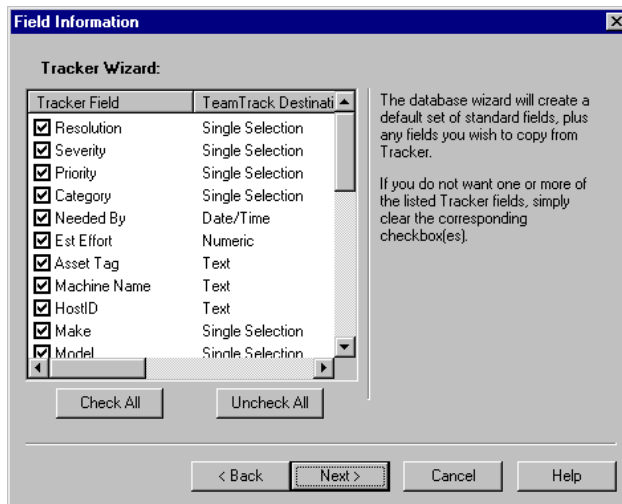
If you are migrating from Tracker 8.x, select one of the following Issue Type options:

- **Create Default Issue Type (SCR)** - Select this option to populate the *Issue Type* field with an SCR issue type.
- **Import Tracker 8.0 Issue Types** - Select this option to populate the TeamTrack *Issue Type* field with Tracker issue types. Each issue type is imported as an enabled *Issue Type* selection.
- **Import Issue Types From a Tracker Choice Field** - Select this option, and then select a Tracker *Choice* field from the drop-down list to create a TeamTrack *Issue Type* selection for each *Choice* field selection. If the Tracker *Choice* field does not contain any selections, an SCR issue type is automatically created in TeamTrack.

Click **Next** to continue.

Adding Tracker Fields to a New Solution

The **Field Information** dialog box, shown in the following figure, enables you to import Tracker fields into TeamTrack when you create a solution from a Tracker project.



Consider the following when you select Tracker fields to add to TeamTrack:

- Before importing fields using the **Solution Wizard**, compare your Tracker fields to possible TeamTrack fields. TeamTrack field types offer greater flexibility and you may want to create different field types in TeamTrack and import data into those fields using the **Import Data Wizard**. For details, refer to "[Tracker Field Type Conversion](#)" on page 106, the *Tracker to TeamTrack Migration Guide*, and the *TeamTrack Administrator's Guide*.
- Fields selected on the **Field Information** dialog box are added to TeamTrack and added to the solution map that is used when you run the **Import Data Wizard**.
- *Choice* field selections import as enabled *Single Selection* values in TeamTrack. The group selection for Tracker *User* fields imports as an enabled *User* field value in TeamTrack. Tracker *Date*, *Time*, *Numeric*, and *String* values are imported using the **Import Data Wizard**.
- Tracker field properties, such as default values and required field settings, do not import. These properties must be set manually in TeamTrack after you create your solution.
- The **Solution Wizard** adds TeamTrack System fields to the Base Solution Workflow, along with fields that replace Tracker system fields. Most Tracker system fields are automatically mapped to TeamTrack System fields. For details, refer to "[Tracker Fields](#)" on page 113 and "[TeamTrack System Fields](#)" on page 114.
- For details on field mapping for custom Tracker fields, refer to "[Tracker Field Type Conversion](#)" on page 106.

The following information and options are available on the **Field Information** dialog box:

- **Tracker Field** - Displays the Tracker source field. Select the check box next to each field you want to import into TeamTrack. Note that Tracker System fields that are automatically mapped to TeamTrack system fields are not listed.
- **TeamTrack Destination Type** - Displays the type of TeamTrack field the Tracker field will be imported as.
- **Check All** - Click this button to select all Tracker fields.
- **Uncheck All** - Click this button to clear the check boxes for all selected Tracker fields.

After selecting fields to import into TeamTrack, click **Next** to continue.

Tracker Field Type Conversion

All Tracker fields imported using the **Solution Wizard** are added to the **User Fields** section of the Base Solution Workflow. The following table describes how Tracker field types are converted to TeamTrack field types.

Tracker Field Type	TeamTrack Field Type	Notes
Choice	Single Selection	Choice field selections and weights are imported.
Date	Date/Time (Date and Time display option)	TeamTrack offers several display options for <i>Date/Time</i> fields. You can change these options after running the Solution Wizard to display Tracker <i>Date</i> fields as date only, time of day, or elapsed time. For details on <i>Date/Time</i> field display options, refer to the <i>Serena TeamTrack Administrator's Guide</i> .
Number	Numeric (Integer display option)	TeamTrack <i>Numeric</i> fields can be displayed as integers, floating points, or fixed precision. <i>Numeric</i> field display options CANNOT be changed after a field is created. If you want to display Tracker <i>Number</i> fields as floating points or fixed precision, do not import them using the Solution Wizard . Instead, create these fields manually in TeamTrack and use the Import Data Wizard to map data to the fields. For details on <i>Numeric</i> field display options, refer to the <i>Serena TeamTrack Administrator's Guide</i> .

Tracker Field Type	TeamTrack Field Type	Notes
String	Text (Fixed Length display option)	<p>Tracker <i>String</i> fields import to display as fixed-length fields based on the character length specified in Tracker. TeamTrack offers numerous display options for <i>Text</i> fields, however, including Memo fields, which can store up to 64,000 bytes (characters), depending on your DBMS, and Journal fields, which automatically insert a date/time and user ID stamp for the <i>Text</i> field. <i>Text</i> field display options CANNOT be changed after a field is created. If you want to use the Memo or Journal field options, do not import <i>Text</i> fields using the Solution Wizard. Instead, create the field manually in TeamTrack and use the Import Data Wizard to map data to the fields. For details on <i>Text</i> field display options, refer to the <i>Serena TeamTrack Administrator's Guide</i>.</p>
Time	Date/Time (Elapsed Time display option)	<p>TeamTrack offers several display options for <i>Date/Time</i> fields. You can change these options after running the Solution Wizard to display Tracker <i>Time</i> fields as date and time, date only, or time of day. For details on <i>Date/Time</i> field display options, refer to the <i>Serena TeamTrack Administrator's Guide</i>.</p>
User	User	<p>The group selection for the Tracker <i>User</i> fields are imported as selections for the TeamTrack <i>User</i> field if you choose to import the group on the Groups to Create dialog box of the Solution Wizard. For details, refer to "Specifying Groups for a Tracker Solution" on page 108.</p>

Specifying Projects for the Solution

The **Project Information** dialog box enables you to define some initial projects. Projects serve as "bins" for items to be tracked in your system and should be organized based on your business needs. For example, you can create a project for each product you develop.

Projects are also the means by which you apply privileges and control access to items.

The first box is pre-populated depending on the type of solution you are creating. You can change the name of this project. After the solution is created, the first project is placed under the Base Project in the project hierarchy.

If more projects are needed, you can add them in the TeamTrack Administrator after creating your solution.



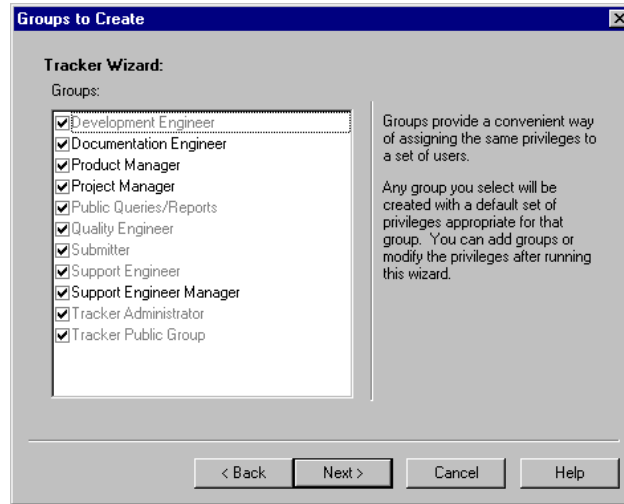
TIP If you are creating a solution from a Tracker project and plan to augment it with other Tracker projects, you may want to create your corresponding TeamTrack projects at this time.

When you enter the names for your initial projects, the maximum length a project name can be is 32 bytes (characters). In addition, sibling project names must be unique.

Click **Next** to continue.

Specifying Groups for a Tracker Solution

The **Groups to Create** dialog box, shown in the following figure, enables you to add Tracker groups to your TeamTrack solution.



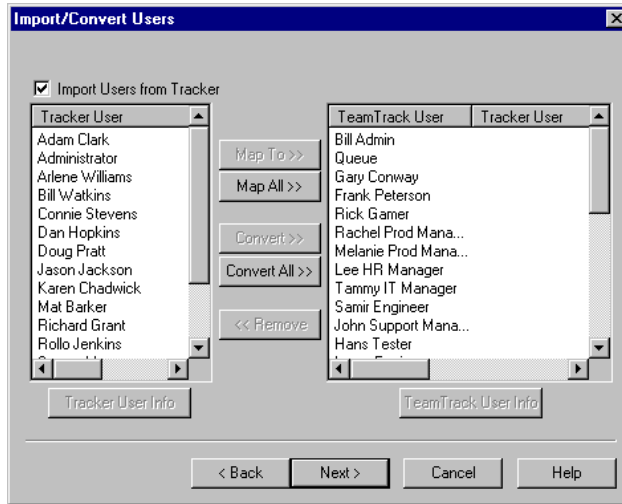
The following information applies to Tracker groups added by the **Solution Wizard** when you are creating a solution from a Tracker project:

- All groups in the Tracker project are listed, along with the Tracker Administrator and Tracker Public groups. Groups that are disabled in the list already exist in the TeamTrack database or are based on default Tracker groups. You cannot clear the check boxes for these groups, and new privileges are added to the group based on Tracker permissions.
- All groups are established with User access in TeamTrack.
- TeamTrack privileges are granted to these groups based on Tracker permissions. You can modify these privileges as needed after creating the solution. For details on privilege conversion, refer to the *Serena Tracker to TeamTrack Migration Guide*.
- If the **Solution Wizard** detects that a Tracker group already exists in your TeamTrack system, solution privileges are granted to the existing TeamTrack group.
- If you import users using the **Solution Wizard**, group membership is established. For details on adding users, refer to ["Importing or Converting Users to a New Solution"](#) on page 110.

Select the Tracker groups you want to add to your TeamTrack solution, and then click **Next** to continue.

Importing or Converting Users to a New Solution

The **Import/Convert Users** dialog box, shown in the following figure, enables you to add Tracker users to TeamTrack or map Tracker users to existing TeamTrack users.



When you add or map Tracker users to TeamTrack, a user map is established that can later be used during the **Import Data Wizard**. This map ensures that user information is correctly tied to your solution's field selections. The user map also establishes membership for the groups specified on the **Groups to Create** dialog box.

When you convert Tracker user accounts to TeamTrack user accounts, general Tracker user account information, such as login ID, password, and e-mail address, is added to the TeamTrack user account. Users added by the **Solution Wizard** are created with the TeamTrack default set of user preferences.

When you map Tracker user accounts to existing TeamTrack user accounts, general account information and user preferences are not overwritten in the TeamTrack account. Group membership and associated privileges are added to the account, however.

The following information and options are available on the **Import/Convert Users** dialog box:

- **Import Users From Tracker** - Select this check box to add or map Tracker users as defined in the right pane and create a user map that can be used when you import data with the **Import Data Wizard**. Clear this check box to create a solution that does not add or map Tracker users and does not create a user map. This may be preferred when users are imported using LDAP or if you have previously added or mapped users with another solution or data import. You may want, however, to map Tracker users to existing TeamTrack users.



TIP Clear this check box to remove selected mappings and conversions.

- **Tracker User** - This left-pane list contains all user accounts in the Tracker project database.
- **Tracker User Info** - Select a Tracker user in the list, and then click this button to view the user's name, login ID, e-mail address, and phone number, if available. Deleted users are also noted in the **Tracker User** dialog box.
- **TeamTrack User** - This list contains all user accounts in the TeamTrack database. You can map Tracker users to existing TeamTrack users as needed. This might be optimal if you are converting multiple Tracker project databases to a single TeamTrack database and Tracker users have been previously imported. You can map multiple Tracker user accounts to TeamTrack user accounts if needed.
- **Tracker User** - This right-pane list indicates which Tracker users are mapped to TeamTrack users or will be added to TeamTrack. If both the **TeamTrack User** and **Tracker User** column contain names, the users will be mapped in the new solution. If the **Tracker User** column contains names but the **TeamTrack User** column is empty, the Tracker users are added to TeamTrack. If the **TeamTrack User** column contains names but the **Tracker User** column is empty, the TeamTrack user accounts are left intact after creating the solution.
- **TeamTrack User Info** - Select a TeamTrack user in the list, and then click this button to view the user's name, login ID, e-mail address, and phone number, if available.
- **Map To** - Select a Tracker user in the left-pane list and a TeamTrack user in the right-pane list, and then click this button to map the Tracker user account to the TeamTrack user account.

- **Map All** - Select this button to automatically map all Tracker users who match TeamTrack users. Matching is based on user name and is not case-sensitive.
- **Convert All** - Click this button to move all users in the Tracker project to the Tracker User column in the right pane. The **Solution Wizard** will add all converted Tracker users to TeamTrack.
- **Convert** - Select a Tracker user in the left-pane list, and then click this button to move the user to the **Tracker User** column in the right pane. The **Solution Wizard** will add the converted Tracker users to TeamTrack.
- **Remove** - Select a mapped TeamTrack user or a converted Tracker user in the right-hand pane, and then click this button to remove the mapping or conversion.

Map or convert Tracker users as needed, and then click **Next** to continue.

Finishing the Wizard

Click **Finish** to create the solution. The Administrator client reflects enhancements made by the wizard.



NOTE You must stop and start your Web server to make your new solution available to users in the browser interface.

Core Solution Elements

The **Solution Wizard** provides core elements needed for solutions created from Tracker projects. These elements include projects you define when you run the wizard, the solution Primary table, the Base Solution Workflow, initial groups, users, notifications, reports, and system reports.

Projects

The projects you defined in the wizard are listed on the **Projects** tab in the Administrator. By default, these projects are assigned the Base Solution Workflow. You can reassign workflows to these projects later. You can also add, delete, reorder, and rename projects as needed.

Base Solution Workflow

The Base Solution Workflow is provided by the **Solution Wizard**. The name of the workflow is based on the singular item name you provided when you created the solution. To view the Base Solution Workflow, select the **Workflows** tab, select the workflow from the list, and then click **Edit**.

The Base Solution Workflow is a basic "open-closed" workflow that contains the following elements:

- **States** - TeamTrack states are added based on Tracker *State* field selections. For details, refer to ["TeamTrack System Fields" on page 114](#). Additionally, the "owner" setting for active states created by the solution is set to "Tracker Owner." You should modify states after the solution is created to set the owner property appropriately. This setting is located on the **General** tab of the **Add/Edit State** dialog box. For details, refer to the *Serena TeamTrack Administrator's Guide*.
- **Transitions** - Several system transitions are provided, along with two transitions to link the "Open" and "Closed" states in the workflow. These states are determined by selections in the Tracker *State* field. After running the **Solution Wizard**, you must manually create transitions to link the remaining states in your solution. For details, refer to the *Serena TeamTrack Administrator's Guide*.
- **Default System Fields** - TeamTrack system fields are added to the workflow's **Standard Fields** section. System fields are necessary for the operation of the tracking system. Required system fields cannot be deleted. For details, refer to ["TeamTrack System Fields" on page 114](#).

You can customize the Base Solution Workflow by adding, editing, and deleting states and transitions. You may choose, however, to use the Base Solution Workflow as a placeholder workflow, the properties of which are inherited by customized "child" workflows created further down the hierarchy.

Tracker Fields

The Solution Wizard adds Tracker fields selected on the **Field Information** dialog box to the workflow's User Fields section. For details, refer to ["Tracker Field Type Conversion" on page 106](#).

When you create a solution from a Tracker project, three fields are added to the solution and are TeamTrack and mapped to corresponding source Tracker system fields. The names of these fields are provided by the **Solution Wizard**, but you can change the display names for these fields later using the Administrator client.

These new fields help you maintain historical data from Tracker, especially if you intend to augment the solution with elements from other Tracker projects. When you use the **Import Data Wizard** to import Tracker data to TeamTrack, you can modify the automatic mapping as needed.

Tracker System Field	Tracker Field Type	TeamTrack Replacement Field	TeamTrack Field Type
ID	Number	Tracker ID	Numeric
Internal ID	Number	Tracker Internal ID	Numeric
Owner	User	Tracker Owner	User

TeamTrack System Fields

When you create a solution from a Tracker project, all TeamTrack system fields created by the **Solution Wizard** are added to the **Standard Fields** section of the Base Solution Workflow. With the exception of the *Tracker ID*, *Tracker Internal Id*, and *Tracker Owner* fields, Tracker field names are maintained. For example, if the Tracker system *Submitter* field has been named "Creator," the TeamTrack system *Submitter* field is renamed to "Creator."

The following table describes TeamTrack system fields are the corresponding Tracker system fields. Fields are listed in the order in which they are listed in the **Standard Fields** section in the new solution.

TeamTrack System Field	Corresponding Tracker Field	Notes
Issue ID	N/A	You can map the Tracker <i>ID</i> field to the <i>Issue ID</i> field when you import Tracker data using the TeamTrack Import Data Wizard . Doing so may result in duplicate Issue ID numbers in your projects, however. For details, refer to the "Importing Data from a Serena Tracker Database" section in the <i>Serena TeamTrack Administrator's Guide</i> .
Title	Title	Generally, the TeamTrack system <i>Title</i> field is a <i>Text</i> field with an 80-character fixed-length display option. This is the optimal display length for items in the TeamTrack browser interface. Because Tracker <i>Title</i> fields are set to display 255 characters, the Solution Wizard creates a 255-character <i>Title</i> field when you create a solution from a Tracker project only. This ensures that Tracker <i>Title</i> field data is maintained.
Description	Description	The Tracker <i>Description</i> field is imported to TeamTrack as a <i>Text</i> field with a Memo display option and can store up to 64,000 bytes (characters), depending on your DBMS.
Issue Type	See Notes	<i>Issue Type</i> mapping depends on selections made on the Issue Type Information dialog box. For details, refer to " Specifying Issue Type Information " on page 102.

TeamTrack System Field	Corresponding Tracker Field	Notes
Close Date/ Time	Close Date	The Tracker <i>Close Date</i> field is imported as an auto-populated <i>Date/Time</i> field with the Date and Time display option and cannot be modified after being imported.
Submit Date/ Time	Submit Date	The Tracker <i>Submit Date</i> field is imported as an auto-populated <i>Date/Time</i> field with the Date and Time display option and cannot be modified after being imported.
Submitter	Submitter	The Tracker <i>Submitter</i> field is imported as an auto-populated <i>User</i> field.
Active/ Inactive	N/A	TeamTrack states use the <i>Active/Inactive</i> field to automatically determine the status of items in each state. You can map the <i>Active/Inactive</i> field to a Tracker field when you run the Import Data Wizard , but it may be more beneficial to use TeamTrack's automatic setting of the <i>Active/Inactive</i> field.
Owner	Tracker Owner	Because the TeamTrack <i>Owner</i> field does not store historical data but changes value as items change ownership, the Solution Wizard creates two <i>Owner</i> fields: the TeamTrack system <i>Owner</i> field and a replacement for the Tracker <i>Owner</i> system field. The word "Tracker" is prepended to this field in TeamTrack. This allows historical data in the Tracker <i>Owner</i> field to be maintained.
Project	N/A	By default, the system <i>Project</i> field is automatically populated by TeamTrack based on the projects to which items are imported.

TeamTrack System Field	Corresponding Tracker Field	Notes
State	State	Selections from the Tracker <i>State</i> field are added to the TeamTrack <i>State</i> field. In addition, a state is added to the Base Solution Workflow for each Tracker <i>State</i> field selection. The first Tracker <i>State</i> field selection that is not a "final" state is mapped to the workflow's "Open," or first, state. The Tracker <i>State</i> field selection that is a "final" state is mapped to the workflow's "Closed" state. Workflow states are created for all other Tracker <i>State</i> field selections (except deleted selections). All states are set as active, unless they are set as "final" states in Tracker. These states are set as inactive in TeamTrack.
Last Modified Date	N/A	By default, the system <i>Last Modified Date</i> field is automatically populated by TeamTrack.
Last Modifier	N/A	By default, the system <i>Last Modifier</i> field is automatically populated by TeamTrack.
Last State Change Date	N/A	By default, the system <i>Last State Change Date</i> field is automatically populated by TeamTrack.
Last State Changer	N/A	By default, the system <i>Last State Changer</i> field is automatically populated by TeamTrack.

Initial Groups

The Tracker groups you selected when you run the **Solution Wizard** are listed in the **Groups** tab. All imported groups are granted User access and privileges that correspond to the privileges the group was granted in Tracker. You can modify these privileges at any time. If you used the **Solution Wizard** to import Tracker users, group membership is re-established as well. You must manually subscribe the group to provided

notifications, however. For details on subscribing groups to notifications, refer to the *Serena TeamTrack Administrator's Guide*.

Users

If you converted Tracker user accounts to TeamTrack user accounts, new user accounts are listed on the **User** tab in the TeamTrack Administrator. The group membership for these accounts determines the privilege assignments. You can modify general settings, privileges, and user preference settings as needed.

If you mapped Tracker user accounts to existing TeamTrack user accounts, all TeamTrack general settings, privileges, and user preference settings are left intact. Group membership may be modified based on the user's Tracker membership, however, and new privileges may be inherited from these groups.

Notifications

Notifications are used to notify users of events that occur within the system, such as when a TeamTrack user becomes the owner of an issue. Several Standard e-mail notifications are provided and are listed in the **Notifications** tab. You can modify the provided notifications or create new notifications to suit your needs. The **Solution Wizard** automatically sets the **Allow Subscriptions** option for all initial groups from Tracker; after customizing your system, you may want to review these settings and other notification subscription settings for groups and individual users.

E-mail templates that can be used with these notifications are installed in the *Serena/TeamTrack/emailtemplate* folder. Before implementing e-mail notifications, review these templates and modify them to meet your needs. For details, refer to the *Serena TeamTrack Administrator's Guide*.

The provided notifications are:

- Any *issue* changes owner
- Any *issue* changes state
- Any *issue* changes to inactive
- Any *issue* I submitted changed state
- Any *issue* I submitted changed to inactive
- Any *issue* is submitted

- I become the owner of any *item*



NOTE Notification names are based on the singular item name you provided when you created the solution.

Solution Table

Primary tables store information about items that follow a workflow process. These items are referred to as primary items. The **Solution Wizard** provides a Primary table for the solution created from a Tracker project. The name of this table is based on the plural item name you provided when you created the solution. To view this table, select the **Tables** tab, select the table, and then click **Edit**.

Solution-Based Reports

Pre-generated solution-based reports are provided by the **Solution Wizard**. Reports are accessed in the browser interface by users who have been granted privileges to access various levels of reports. The provided reports allow User-level access and can be executed by users given this privilege in the TeamTrack Administrator.

The provided solution-based reports are available at the Base Solution Project level and by default return information about all items based on the search criteria. The name of each report is determined by the plural item name you provided when you created the solution, and the type of workflow you created determines which reports you receive. For example, the provided reports may include the following:

- **All Issues by Issue Type** – This **Distribution** report provides a bar chart of all issues by type. Both active and inactive issues display.
- **All Issues by Owner** – This **Distribution** report displays in pie-chart form the distribution of issues by owner.
- **All Issues by Project and Issue Type** – This **Distribution** report displays in stacked-bar-chart form the number of issues by type in each project.
- **All Issues by Project and Owner** – This **Distribution** report displays in tabular form the number of issues owned by each user in all projects.

- **All Issues by Project and State** – This **Distribution** report displays in tabular form the number of issues residing in each state in all projects.
- **All Issues by State** – This **Distribution** report displays in tabular form the number of issues residing in each state.
- **All Closed Issues** – This **Listing** report displays all issues residing in the Closed state.
- **All Open Issues** – This **Listing** report displays all issues residing in the Open state.
- **My Open Issues** – This **Listing** report displays all issues owned by the current user that reside in the Open state.

Augmenting a Solution From a Tracker Project

You can use the **Solution Wizard** to augment existing TeamTrack solutions with elements, such as fields, groups, and user accounts, from Tracker projects. This enables you to combine these elements from multiple Tracker projects into a single TeamTrack solution.

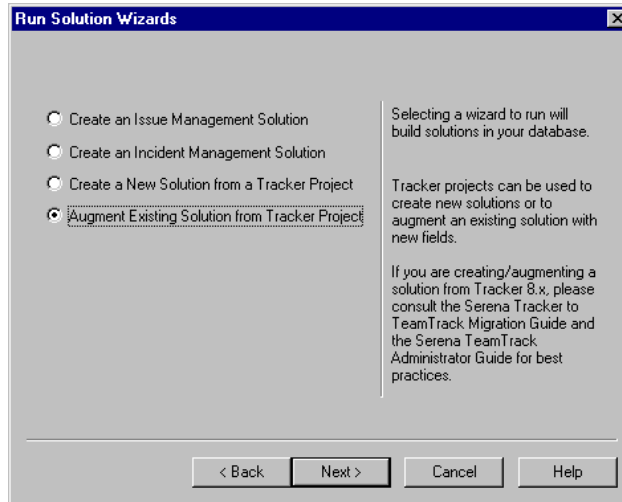
The **Solution Wizard** can augment all solutions, including those originally created from Tracker projects, custom solutions, or the provided Issue Management and Incident Management solutions.

Custom solutions must contain at least one workflow before you can augment them.

To augment a TeamTrack solution from a Tracker project:

- 1 From a machine on which the Tracker Administrator is installed and from which you can perform Tracker server administration, launch the TeamTrack Administrator.
- 2 Connect to the TeamTrack database in which you would like to augment an existing solution. You can access the **Connect** dialog box by selecting **Connect** from the **File** menu or by clicking the **Connect** toolbar button.
- 3 Select **Tools** from the **Administrator** menu bar, and then select **Run Solution Wizard**.

- 4 The **Welcome** dialog box opens. Click **Next**. The wizard begins guiding you through the process of creating the solution.
- 5 The **Run Solution Wizards** dialog box opens, as shown in the following figure.



- 6 The **Augment Existing Solution From a Tracker Project** option is enabled if you have purchased or are evaluating the TeamTrack Issue Management solution, you have an existing solution in your TeamTrack database, and the Serena Tracker Administrator is installed on the machine from which you are running the TeamTrack Administrator. Select this option to connect to a Serena Tracker project and augment an existing solution.

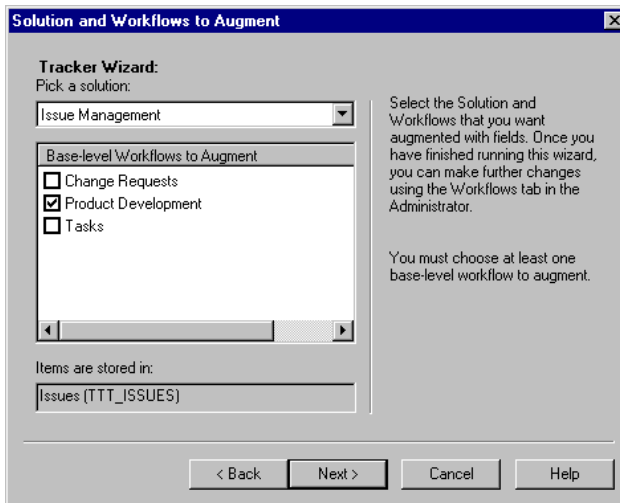


IMPORTANT! If you are augmenting a solution with elements from a Tracker 8.x project that contains multiple issue types, refer to the *Serena Tracker to TeamTrack Migration Guide* for best practices before proceeding.

- 7 Click **Next**.

Selecting Solutions and Workflows to Augment

The **Solution and Workflows to Augment** dialog box opens, as shown in the following figure.



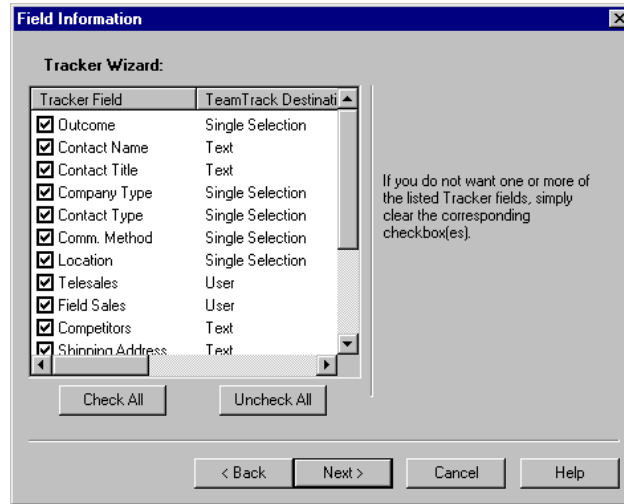
The following information and options are available on the **Solution and Workflows to Augment** dialog:

- **Pick a Solution** - This drop-down list contains all solutions in your TeamTrack system. Select the solution you want to augment with elements from a Tracker project.
- **Base Level Workflows to Augment** - This list contains all base-level workflows associated with the selected solution. Select the workflows to which you want to add Tracker project fields. These fields are added to the **User Fields** section of each workflow you select. If you clear the check box for a base-level workflow, Tracker project fields are added to the **Not Used** section of that workflow.
- **Items Are Stored In** - Indicates the name and the database name of the Primary table of the solution you are augmenting.

After selecting a solution and base-level workflows to augment, click **Next**.

Adding Tracker Fields to an Augmented Solution

The **Field Information** dialog box, shown in the following figure, enables you import to Tracker fields into TeamTrack when you augment an existing solution from a Tracker project.



Consider the following when you select Tracker fields to add to an augmented solution:

- Fields selected on the **Field Information** dialog box are added to TeamTrack and added to the solution map that is used when you run the **Import Data Wizard**.
- Fields that do not already exist in the solution you are augmenting are added, but existing fields are not updated.
- The **Solution Wizard** copies field display names for Tracker system fields for newly created solutions; when you augment a solution, however, system field names are not modified in the existing solution.
- When you add fields, *Choice* field selections import as enabled *Single Selection* values in TeamTrack. The group selection for Tracker *User* fields imports as an enabled *User* field value in TeamTrack. Tracker *Date*, *Time*, *Numeric*, and *String* values are imported using the **Import Data Wizard**.
- For details on how custom Tracker fields map to TeamTrack fields, refer to "[Tracker Field Type Conversion](#)" on page 106.
- Tracker field properties, such as default values and required field settings, do not import. These properties must be set manually in TeamTrack after you create your solution.

The following information and options are available on the **Field Information** dialog box:

- **Tracker Field** - Displays Tracker source fields that do not already exist in the solution you are augmenting. For example, if you created a solution from Tracker Project A that contained a *User* field named "Tester," and you are augmenting the solution with Tracker Project B that also contains a *User* field named "Tester," that field is not listed. Select the check box next to each field you want to import into TeamTrack.



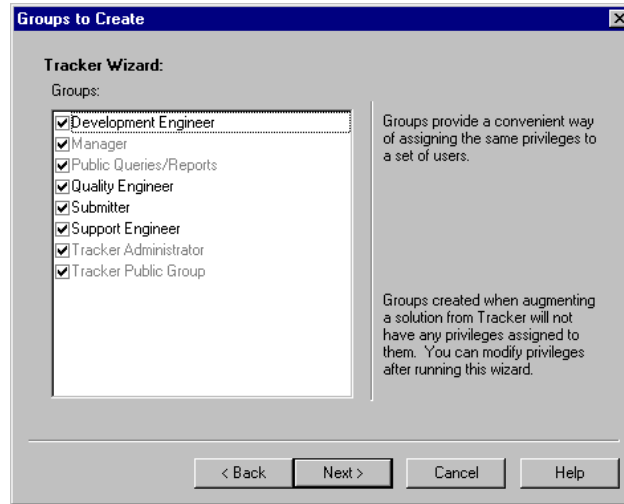
NOTE Fields are matched by database field name and type. For example, if your TeamTrack solution contains a *Multi-User* field named "Tester" and your Tracker project contains a *User* field named "Tester," the Tracker "Tester" field is added to TeamTrack because the types do not match. A number is appended to the database name for this field, but the display name is left intact. In this example, the database field name for the newly added Tester field might be TS_TESTER1. For details on field type mapping, refer to ["Tracker Field Type Conversion" on page 106](#).

- **TeamTrack Destination Type** - Displays the type of TeamTrack field the Tracker field will be imported as.
- **Check All** - Click this button to select all Tracker fields.
- **Uncheck All** - Click this button to clear the check boxes for all selected Tracker fields.

After selecting fields to import into TeamTrack, click **Next** to continue.

Adding Tracker Groups to an Augmented Solution

The **Groups to Create** dialog box, shown in the following figure, enables you to add Tracker groups to your augmented TeamTrack solution.



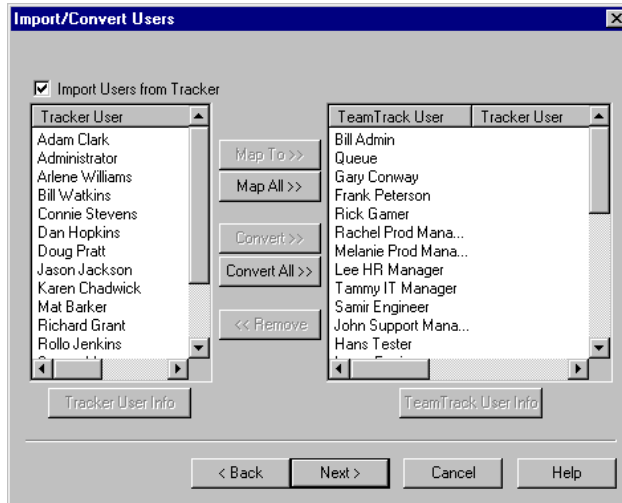
The following information applies to Tracker groups added by the **Solution Wizard** when you are creating a solution from a Tracker project:

- All groups in the Tracker project are listed, along with the Tracker Administrator and Tracker Public groups. Groups that are disabled in the list already exist in the TeamTrack database or are based on default Tracker groups. You cannot clear the check boxes for these groups.
- All groups are established with User access in TeamTrack.
- Membership is established based on Tracker group membership.
- TeamTrack privileges are not granted to groups added to an augmented solution. You can grant privileges to groups later in the Administrator client.
- If you convert or map users using the **Solution Wizard**, group membership is established.

Select the Tracker groups you want to add to your augmented TeamTrack solution, and then click **Next** to continue.

Adding Tracker Users to an Augmented Solution

The **Import/Convert Users** dialog box, shown in the following figure when a solution created from a Tracker project is augmented, enables you to add Tracker users or map Tracker users to existing TeamTrack users in an augmented solution.



When you add or map Tracker users to TeamTrack, a user map is established that can later be used during the **Import Data Wizard**. This map ensures that user information is correctly tied to your solution's field selections. The user map also establishes membership for the groups specified on the **Groups to Create** dialog box.

When you convert Tracker user accounts to TeamTrack user accounts, general Tracker user account information, such as login ID, password, and e-mail address, is added to the TeamTrack user account. Users added by the **Solution Wizard** are created with the TeamTrack default set of user preferences.

When you map Tracker users accounts to existing TeamTrack user accounts, general account information and user preferences are not

overwritten in the TeamTrack account. Group membership and associated privileges are added to the account, however.



TIP When you augment a solution, always attempt to map user accounts before converting accounts. Converted user accounts are always added to TeamTrack, even if an account with an identical login ID already exists. The number 1 is appended to the login IDs of user accounts created in this situation.

The following information and options are available on the **Import/Convert Users** dialog box:

- **Import Users From Tracker** - Select this check box to add or map Tracker users as defined in the right pane and create a user map that can be used when you import data with the **Import Data Wizard**. Clear this check box to create a solution that does not add or map Tracker users and does not create a user map.
- **Tracker User** - This left-pane list contains all user accounts in the Tracker project database.
- **Tracker User Info** - Select a Tracker user in the list, and then click this button to view the user's name, login ID, e-mail address, and phone number, if available. Deleted users are also noted in the **Tracker User** dialog box.
- **TeamTrack User** - This list contains all user accounts in the TeamTrack database. You can map Tracker users to existing TeamTrack users as needed. This might be optimal if you are converting multiple Tracker projects to a single TeamTrack database and Tracker users have been previously imported. You can map multiple Tracker user accounts to TeamTrack user accounts if needed.
- **Tracker User** - This right-pane list indicates which Tracker users are mapped to TeamTrack users or will be added to TeamTrack. If both the **TeamTrack User** and **Tracker User** column contain names, the users will be mapped in the new solution. If the **Tracker User** column contains names but the **TeamTrack User** column is empty, the Tracker users are added to TeamTrack. If the **TeamTrack User** column contains names but the **Tracker User** column is empty, the TeamTrack user accounts are left intact after creating the solution.
- **TeamTrack User Info** - Select a TeamTrack user in the list, and then click this button to view the user's name, login ID, e-mail address, and phone number, if available.

- **Map To** - Select a Tracker user in the left-pane list and a TeamTrack user in the right-pane list, and then click this button to map the Tracker user account to the TeamTrack user account.
- **Map All** - Select this button to automatically map all Tracker users who match TeamTrack users. Matching is based on user name and is not case-sensitive.
- **Convert All** - Click this button to move all users in the Tracker project to the Tracker User column in the right pane. The Solution Wizard will add all converted Tracker users to TeamTrack.
- **Convert** - Select a Tracker user in the left-pane list, and then click this button to move the user to the **Tracker User** column in the right pane. The **Solution Wizard** will add the converted Tracker users to TeamTrack.
- **Remove** - Select a mapped TeamTrack user or a converted Tracker user in the right-hand pane, and then click this button to remove the mapping or conversion.

Map or convert Tracker users as needed, and then click **Next** to continue.

Finishing the Wizard

Click **Finish** to create the solution. The Administrator client reflects enhancements made by the wizard.

Index

A

- Administrator Interface
 - Installing 48
 - Launching 52
- Auxiliary Tables
 - System 65

B

- Browser Interface
 - Connecting Users To 64
 - Exiting 37

C

- Concurrent License
 - Defined 20
- Connecting to a Database 61
- Create Solution Wizard 84

D

- Database
 - Adding Fields To 60, 74
 - Connecting to 61
 - Core Elements 64
 - Oracle and VARCHAR2 56
- Design Considerations 15
- Documentation
 - Terminology Conventions 11

E

- Enablers
 - Licenses 23

F

- Fields
 - Adding to Database 60, 74
 - Adding to Incident Management Solution 89
 - Adding to Issue Management Solution 74
- Floating License 20

G

- Group Accounts
 - Initial Privileges 75, 92

I

- Incident Management Solution
 - Core Elements 93
 - Creating 83
- Installation 46
 - Administrator Only 48
 - Complete 48
 - iPlanet Web Server 49
 - Notification Server 48
 - Sun Java System Web Server 49
- iPlanet Web Server
 - Installation 49
- Issue Management Solution
 - Core Elements 77, 112
 - Creating 69

L

- License
 - Process Example 23
- license
 - getting from Serena 27
- License Manager Tool
 - Opening 27
- License Models
 - Concurrent 20
 - Floating 20
 - Using Together 20
- License Options 36
 - Logging Usage 37
 - Time-Out Period 37
- License Server
 - Installing 24
 - Moving 40
 - Starting and Stopping 32
- license server
 - Host ID, how to find 30
- License Types
 - Enablers 23
 - Product 20, 23
 - User 22
- Licenses
 - Adding 31
 - Buying More 31
 - Enablers 23
 - Getting from Serena 27
 - Keeping Track 17
 - Obtain From Serena 24
 - Overview 18
 - Products 20, 23
 - Selecting 24
 - Setting up Named Users Automatically 35
 - User 22
 - When to Purchase 24
- Linking to TeamTrack Web Site 67

M

- Microsoft Internet Information Server 49

N

- Named License
 - Defined 18
 - Scenario Of 18

O

- ODBC Data Source
 - Connecting to a Database 62
- Oracle
 - VARCHAR2 56

P

- Privileges
 - Initial Groups 75, 92
- Products
 - Licenses 20, 23
- Projects
 - Adding to Issue Management Solution 74

S

- Solution Wizard 70
- Sun Java System Web Server
 - Installation 49

T

- TeamTrack
 - Design Considerations 15
 - Incident Management Solution 83
 - Installation 46
 - Issue Management Solution 69
 - Terminology Conventions 11
 - Uninstalling 53

U

- Uninstalling TeamTrack 53

URL
 Setting for Users 67
Users
 Licenses 22

V

VARCHAR2 56

W

Workflow
 Creating Issue 73
Workflows
 Creating Incident 85

