



# MERCURY QUALITY CENTER™

VERSION 9.0

Installation Guide

**MERCURY™**



# **Mercury Quality Center™**

Installation Guide  
Version 9.0

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**MERCURY™**

## Mercury Quality Center Installation Guide, Version 9.0

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# Welcome to This Guide

Welcome to TestDirector for Quality Center, the Mercury enterprise-wide application that integrates and automates test management with functional testing activities. Quality Center enables you to share and reuse testing expertise across the quality life cycle. It provides a customizable workflow that easily adapts and extends to meet your specific quality process needs.

## How This Guide is Organized

The Quality Center Installation Guide describes the system requirements and installation process for Quality Center.

It contains the following chapters:

### **Chapter 1 Before You Install**

Provides an overview of the product, and specifies the server and client configurations for installing Quality Center. In addition, it provides an overview of the Quality Center Starter Edition.

### **Chapter 2 Installing Quality Center**

Describes how to install Quality Center.

### **Chapter 3 Installing Quality Center Starter Edition**

Describes how to install Quality Center Starter Edition.

### **Chapter 4 Getting Started**

Describes the contents of the Quality Center program folder, how to start and stop Quality Center services, and how to log in to Quality Center.

## **Chapter 5 Installing Quality Center Add-ins**

Describes how to install Quality Center integrations with Mercury testing tools, and with third-party, synchronization and version control tools.

## **Chapter 6 Verifying the IIS Configuration**

Describes how to verify the Internet Information Server (IIS) component settings.

## **Chapter 7 Customizing Quality Center**

Describes how to customize the names of Quality Center modules, various links, and Tools and Help menus.

## **Chapter 8 Uninstalling Quality Center**

Describes how to uninstall Quality Center from your server machine, and to uninstall the client application.

# **Documentation Library**

The Documentation Library is an online help system that describes how to use Quality Center. You can access the Documentation Library in the following ways:

- ▶ Click **Documentation Library** in the Quality Center Help menu to open the Documentation Library home page. The home page provides quick links to the main help topics.
- ▶ Click **Help on this page** in the Quality Center Help menu to open the Documentation Library to the topic that describes the current page.



## **Documentation Library Guides**

The Documentation Library consists of the following guides and references, available online, in PDF format, or both. PDFs can be read and printed using Adobe Reader which can be downloaded from the Adobe Web site (<http://www.adobe.com>).

**Getting Started** explains how to use the Documentation Library and how it is organized. (Available online.)

**What's New?** describes the newest features in the latest versions of Quality Center. You can also access the What's New? from the Quality Center **Help** menu. (Available online and in PDF format.)

**Readme** provides last-minute news and information about Quality Center.

### **Quality Center Guides:**

**Mercury Quality Center User's Guide** explains how to use Quality Center to organize and execute all phases of the testing process. It describes how to define requirements, plan tests, run tests, and track defects. (Available online and in PDF format.)

**Mercury Quality Center Administrator's Guide** explains how to create and maintain projects using Site Administration, and how to customize projects using Project Customization. (Available online and in PDF format.)

**Mercury Quality Center Tutorial** is a self-paced guide teaching you how to use Quality Center to manage the software testing process. (Available in PDF format.)

**Mercury Quality Center Installation Guide** explains how to install Quality Center on a server machine in a cluster environment or as a stand-alone application. (Available in PDF format.)

### **Business Process Testing Guides:**

**Mercury Business Process Testing User's Guide** explains how to use Business Process Testing to create business process tests. (Available online and in PDF format.)

**Mercury Business Process Testing Tutorial** provides a self-paced guide that teaches you the basics of Business Process Testing in the Quality Center application. (Available in PDF format.)

### **API References:**

**Mercury Quality Center Database Reference** provides a complete online reference for the project database tables and fields. (Available online.)

**Mercury Quality Center Open Test Architecture API Reference** provides a complete online reference for the Quality Center COM-based API. You can use the Quality Center open test architecture to integrate your own configuration management, defect tracking, and home-grown testing tools with a Quality Center project. (Available online.)

**Mercury Quality Center Site Administration API Reference** provides a complete online reference for the Site Administration COM-based API. You can use the Site Administration API to enable your application to organize, manage, and maintain Quality Center users, projects, domains, connections, and site configuration parameters. (Available online.)

**Mercury Quality Center Custom Test Type Guide** provides a complete online guide on how to create your own testing tool and integrate it into the Quality Center environment. (Available online.)

## **Additional Online Resources**

The following additional online resources are available from the Quality Center **Help** menu:

**Knowledge Base** uses your default Web browser to open the Mercury Customer Support Web Site directly to the Knowledge Base landing page.

**Customer Support Web Site** uses your default Web browser to open the Mercury Customer Support Web site. This site enables you to browse the Mercury Support Knowledge Base and add your own articles. You can also post to and search user discussion forums, submit support requests, download patches and updated documentation, and more. The URL for this Web site is <http://support.mercury.com>.

**Mercury Home Page** uses your default Web browser to open Mercury's home page. This site provides the most up-to-date information on Mercury and its products. This includes new software releases, seminars and trade shows, customer support, educational services, and more. The URL for this Web site is <http://www.mercury.com>.

**Add-ins Page** opens the Mercury Quality Center Add-ins Page which offers integrations with Mercury testing tools as well as third-party, synchronization, and version control tools. For more information, refer to the *Mercury Quality Center Installation Guide*.

In addition, you can refer to Mercury Best Practices which contains guidelines for planning, creating, deploying, and managing a world-class IT environment. Mercury provides three types of best practices: Process Best Practices, Product Best Practices, and People Best Practices. Licensed customers of Mercury software can read and use the Mercury Best Practices available from the Customer Support site, <http://support.mercury.com>.

## Documentation Updates

Mercury is continuously updating its product documentation with new information. You can download the latest version of this document from the Customer Support Web site (<http://support.mercury.com>).

This option is required if access to the Documentation Library is set to local access (default setting). Alternatively, the Quality Center site administrator can configure live Web access to the Documentation Library. For more information, refer to the *Mercury Quality Center Administrator's Guide*.

### To download updated documentation:

- 1** In the Customer Support Web site, click the **Documentation** link.
- 2** Under **Please Select Product**, select TestDirector for Quality Center.

Note that if TestDirector for Quality Center does not appear in the list, you must add it to your customer profile. Click **My Account** to update your profile.

- 3 Click **Retrieve**. The Documentation page opens and lists the documentation available for the current release and for previous releases. If a document was updated recently, **Updated** appears next to the document name.
- 4 Click a document link to download the documentation.

## Typographical Conventions

This guide uses the following typographical conventions:

<b>UI Elements</b>	This style indicates the names of interface elements on which you perform actions, file names or paths, and other items that require emphasis. For example, “Click the <b>Save</b> button.”
<i>Arguments</i>	This style indicates method, property, or function arguments and book titles. For example, “Refer to the <i>Mercury User’s Guide</i> .”
<Replace Value>	Angle brackets enclose a part of a file path or URL address that should be replaced with an actual value. For example, < <b>MyProduct installation folder</b> >\bin.
Example	This style is used for examples and text that is to be typed literally. For example, “Type <b>Hello</b> in the edit box.”
CTRL+C	This style indicates keyboard keys. For example, “Press <b>ENTER</b> .”
<b>Function_Name</b>	This style indicates method or function names. For example, “The <b>wait_window</b> statement has the following parameters:”
[ ]	Square brackets enclose optional arguments.
{ }	Curly brackets indicate that one of the enclosed values must be assigned to the current argument.

...

In a line of syntax, an ellipsis indicates that more items of the same format may be included. In a programming example, an ellipsis is used to indicate lines of a program that were intentionally omitted.

|

A vertical bar indicates that one of the options separated by the bar should be selected.

Welcome

# 1

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## Before You Install

This chapter provides an overview of the installation process, and specifies the requirements for installing Quality Center and Quality Center Starter Edition.

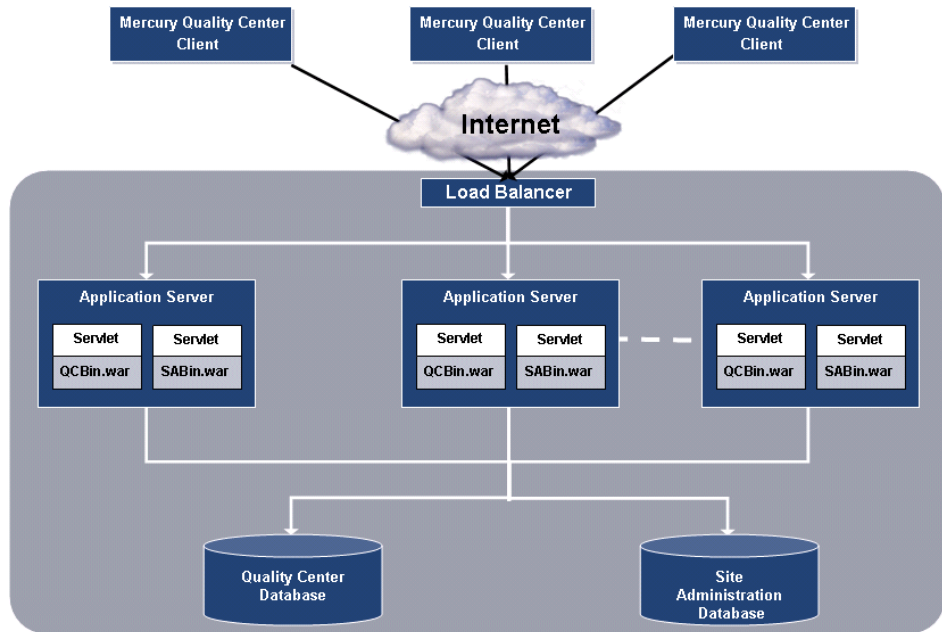
<b>This chapter describes:</b>	<b>On page:</b>
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## About the Quality Center Technology

Quality Center is an enterprise-wide application that is based on Java 2, Enterprise Edition (J2EE) technology. J2EE technology provides a component-based approach to the design, development, assembly, and deployment of enterprise applications. Within the J2EE framework, Quality Center supports clustering. A *cluster* is a group of application servers that run Quality Center as if they were a single entity. Each application server in a cluster is referred to as a *node* or a *cluster node*.

Clusters provide mission-critical services to ensure maximum scalability and high availability. The load balancing technique within the cluster is used to distribute client requests across multiple application servers, making it easy to scale to an infinite number of users. The cluster of servers can run on Windows, Linux, and Solaris based platforms.

The following diagram illustrates how Quality Center client requests are transmitted within a cluster.





- ▶ **Mercury Quality Center Client.** When users log in to Quality Center or Site Administration from their client machine, client components are downloaded to their client machine. Quality Center uses the Component Object Model (COM) interface as an interprocess communicator among the components.
- ▶ **Internet.** Client requests are transmitted via HTTP protocol to the server.
- ▶ **Load Balancer.** When working with a load balancer, client requests are transmitted to the load balancer and distributed according to server availability within the cluster.
- ▶ **Application Server.** Client requests are dispatched by servlets to the deployed Quality Center application on the application server. Quality Center supports JBoss, WebLogic, and WebSphere.

The deployed application contains Quality Center, Site Administration, and associated files which are packaged into Web Application Archive (WAR) files. Client requests from Quality Center are dispatched to the **QCBin.war** file. Client requests from Site Administration are dispatched to the **SABin.war** file.

The Java Database Connectivity (JDBC) interface is used to communicate between the application server and the databases.

- ▶ **Databases.** Client requests to the **QCBin.war** file are stored in the Quality Center schema. The Quality Center schema stores project information. Client requests to the **SABin.war** file are stored in the Site Administration schema. The Site Administration schema stores domain, project, and user data. The schemas can reside on Oracle or Microsoft SQL Server.

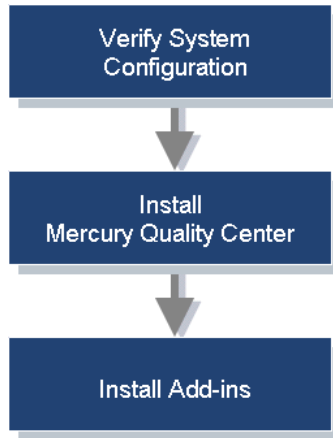
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**Note:** If you are working with the Quality Center Starter Edition, clustering is unsupported. Quality Center Starter Edition works with a JBoss application server and an MSDE database server. For more information, see “Feature Comparison between Quality Center and Quality Center Starter Edition” on page 5.

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## The Installation Process

Installing Quality Center includes the following steps:



### Verify System Configuration

Before you install Quality Center, verify that your server and client machines meet hardware and software specifications. For more information, see “System Configurations for Quality Center” on page 7.

To verify system specifications for Quality Center Starter Edition, see “System Configurations for Quality Center Starter Edition” on page 11.

If you are working with Citrix, verify the Citrix system specifications. For more information, see “Citrix Configurations” on page 13.

### Install Quality Center

Install Quality Center on your server. For more information, see Chapter 2, “Installing Quality Center”.

To install Quality Center Starter Edition, see Chapter 3, “Installing Quality Center Starter Edition”.

### Install Add-ins

You can install Quality Center add-ins to enhance the existing functionality. For more information, see Chapter 5, “Installing Quality Center Add-ins”.

## Feature Comparison between Quality Center and Quality Center Starter Edition

You can install Quality Center or its abridged entry-level version, Quality Center Starter Edition. Like Quality Center, Starter Edition includes the Requirements, Test Plan, Test Lab, and Defects modules. It also includes Customization and Site Administration functionality, excluding the DB Servers tab.

The following table compares Starter Edition with Quality Center.

Support for:	Quality Center	Quality Center Starter Edition
<b>Platforms</b>	<ul style="list-style-type: none"> <li>• Windows</li> <li>• Solaris</li> <li>• Linux</li> </ul>	Windows
<b>Application Servers</b>	<ul style="list-style-type: none"> <li>• JBoss</li> <li>• WebLogic</li> <li>• WebSphere</li> </ul>	JBoss
<b>Web Servers</b>	<ul style="list-style-type: none"> <li>• IIS</li> <li>• JBoss</li> <li>• Apache</li> <li>• WebLogic</li> <li>• WebSphere</li> </ul>	<ul style="list-style-type: none"> <li>• IIS</li> <li>• JBoss</li> </ul>
<b>Databases</b>	<ul style="list-style-type: none"> <li>• Oracle</li> <li>• Microsoft SQL</li> <li>• MSDE</li> </ul>	MSDE
<b>Clustering</b>	Yes	No
<b>Maximum Number of Users</b>	Dependent on License	5

<b>Support for:</b>	<b>Quality Center</b>	<b>Quality Center Starter Edition</b>
<b>Customization and Site Administration</b>	All functionality supported	DB Servers tab functionality not supported
<b>Business Process Testing</b>	Yes	No

For information on installing Quality Center, see “System Configurations for Quality Center” on page 7, and “Installing Quality Center” on page 15.

For information on installing Quality Center Starter Edition, see “System Configurations for Quality Center Starter Edition” on page 11, and “Installing Quality Center Starter Edition” on page 45.

## System Configurations for Quality Center

This section describes the server and client system configurations for Quality Center.

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Note: Refer to <http://www.mercury.com/us/products/quality-center/testdirector/requirements.html> for the most updated Quality Center system configurations.

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### Server System Configurations

Following are the server system configurations for installing Quality Center on Windows, Linux, and Solaris.

<b>CPU</b>	<p><b>Windows:</b> Pentium 4</p> <p><b>Linux:</b> Pentium 4</p> <p><b>Solaris:</b> UltraSPARC-III+ / 900 MHz</p>
<b>Memory (RAM)</b>	1 GB minimum
<b>Free Disk Space</b>	3 GB minimum
<b>Database</b>	<ul style="list-style-type: none"> <li>• Oracle 9.2.0.6 Standard/Enterprise Edition</li> <li>• Oracle 10.0g Release 2 Standard/Enterprise Edition</li> <li>• Microsoft SQL Server 2000 Standard/Enterprise Edition with Service Pack 4</li> <li>• Microsoft SQL Server 2005 Standard/Enterprise Edition with Service Pack 1</li> </ul> <p><b>Note:</b> To work with this database, you must install Quality Center 9.0 with Patch 7. For more information, refer to the Mercury Support Knowledge Base (<a href="http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp">http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp</a>), select <b>TestDirector for Quality Center</b>, and search for Article Number 45771.</p> <ul style="list-style-type: none"> <li>• MSDE 2000 Release A (Limited up to 2 GB of memory. Supports up to 5 concurrent users.)</li> </ul>

Operating System	Application Server	Java Virtual Machine	Web Server
<b>Windows 2000 Server with Service Pack 4</b> or <b>Windows 2003 Server with Service Pack 1 Standard/Enterprise Edition</b>	JBoss 4.0 (included with Quality Center)	JVM 1.4.2	<ul style="list-style-type: none"> <li>• IIS 5.0 or 6.0</li> <li>• JBoss 4.0</li> <li>• Apache 2.0.54</li> </ul>
	WebLogic 8.1.5	<ul style="list-style-type: none"> <li>• BEA JRockit 1.4.2_04-8130</li> <li>• Sun SDK 1.4.2_04</li> </ul>	<ul style="list-style-type: none"> <li>• WebLogic 8.1.5</li> <li>• Apache 2.0.54</li> </ul>
	WebSphere 5.1.1	IBM Java 1.4.2.04	<ul style="list-style-type: none"> <li>• WebSphere 5.1.1</li> <li>• Apache 2.0.54</li> </ul>
	WebSphere 6.0.1	IBM Java 1.4.2.05	<ul style="list-style-type: none"> <li>• WebSphere 6.0.1</li> <li>• Apache 2.0.54</li> </ul>
<b>Red Hat Enterprise Linux AS/ES, version 4</b>	JBoss 4.0 (included with Quality Center)	JVM 1.4.2	<ul style="list-style-type: none"> <li>• JBoss 4.0</li> <li>• Apache 2.0.54</li> </ul>
	WebLogic 8.1.5	<ul style="list-style-type: none"> <li>• BEA JRockit 1.4.2_04-8130</li> <li>• Sun SDK 1.4.2_04</li> </ul>	<ul style="list-style-type: none"> <li>• WebLogic 8.1.5</li> <li>• Apache 2.0.54</li> </ul>
	WebSphere 5.1.1	IBM Java 1.4.2.04	<ul style="list-style-type: none"> <li>• WebSphere 5.1.1</li> <li>• Apache 2.0.54</li> </ul>
	WebSphere 6.0.1	IBM Java 1.4.2.05	<ul style="list-style-type: none"> <li>• WebSphere 6.0.1</li> <li>• Apache 2.0.54</li> </ul>

Operating System	Application Server	Java Virtual Machine	Web Server
Solaris 9 OE or Solaris 10	JBoss 4.0 (included with Quality Center)	JVM 1.4.2	<ul style="list-style-type: none"> <li>• JBoss 4.0</li> <li>• Apache 2.0.54</li> </ul>
	WebLogic 8.1.5	<ul style="list-style-type: none"> <li>• BEA JRockit 1.4.2_04-8130</li> <li>• Sun SDK 1.4.2_04</li> </ul>	<ul style="list-style-type: none"> <li>• WebLogic 8.1.5</li> <li>• Apache 2.0.54</li> </ul>
	WebSphere 5.1.1	IBM Java 1.4.2.04	<ul style="list-style-type: none"> <li>• WebSphere 5.1.1</li> <li>• Apache 2.0.54</li> </ul>
	WebSphere 6.0.1	IBM Java 1.4.2.05	<ul style="list-style-type: none"> <li>• WebSphere 6.0.1</li> <li>• Apache 2.0.54</li> </ul>

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**Note:** You can configure JBoss to work with HTTPS. For more information, refer to the Mercury Support Knowledge Base (<http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp>), select **TestDirector for Quality Center**, and search for Article Number 40463.

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## Client System Configurations

Following are the client system configurations for Quality Center:

<b>CPU</b>	Pentium II/333 MHz or higher microprocessor
<b>Memory (RAM)</b>	256 MB minimum
<b>Free Disk Space</b>	300 MB minimum
<b>Operating System</b>	<ul style="list-style-type: none"> <li>• Windows 2000 Server/Professional with Service Pack 4</li> <li>• Windows XP Professional/Home Edition with Service Pack 2.</li> </ul> <p><b>Note:</b> If you are integrating Quality Center with other Mercury testing tools, you must modify the DCOM permissions on your client machine. For more information, refer to the Mercury Support Knowledge Base (<a href="http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp">http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp</a>), select <b>TestDirector for Quality Center</b>, and search for Article Number 33501.</p>
<b>Display</b>	<ul style="list-style-type: none"> <li>• Color palette setting of 256 colors or higher (65536 colors or higher recommended).</li> <li>• Resolution 1024x768 minimum.</li> </ul>
<b>Browser</b>	<ul style="list-style-type: none"> <li>• Microsoft Internet Explorer 6.0 with Service Pack 1</li> <li>• Quality Center Explorer</li> </ul>



## System Configurations for Quality Center Starter Edition

This section describes the server and client system configurations for Quality Center Starter Edition.

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Note: Refer to <http://www.mercury.com/us/products/quality-center/testdirector/requirements.html> for the most updated Quality Center system configurations.

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### Server System Configurations

Following are the server system configurations for installing Quality Center Starter Edition on Windows.

<b>CPU</b>	Pentium 4
<b>Memory (RAM)</b>	1 GB minimum
<b>Free Disk Space</b>	3 GB minimum
<b>Operating System</b>	<ul style="list-style-type: none"> <li>• Windows 2000 Server with Service Pack 4</li> <li>• Windows 2003 Server with Service Pack 1 Standard/Enterprise Edition</li> <li>• Windows XP Professional Edition with Service Pack 2</li> </ul>
<b>Java Virtual Machine</b>	JVM 1.4.2
<b>Application Server</b>	JBoss 4.0 (installed during the Quality Center setup)
<b>Web Server</b>	<ul style="list-style-type: none"> <li>• IIS 5.0 or 6.0</li> <li>• JBoss 4.0</li> </ul>
<b>Database</b>	MSDE 2000 Release A (Installed during the Quality Center setup. Limited up to 2 GB of memory. Supports up to 5 concurrent users.)

## Client System Configurations

Following are the client system configurations for Quality Center Starter Edition.

<b>CPU</b>	Pentium II/333 MHz or higher microprocessor
<b>Memory (RAM)</b>	256 MB minimum
<b>Free Disk Space</b>	300 MB minimum
<b>Operating System</b>	<ul style="list-style-type: none"> <li>• Windows 2000 Server/Professional with Service Pack 4</li> <li>• Windows XP Professional/Home Edition with Service Pack 2.</li> </ul> <p><b>Note:</b> If you are integrating Quality Center with other Mercury testing tools, you must modify the DCOM permissions on your client machine. For more information, refer to the Mercury Support Knowledge Base (<a href="http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp">http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp</a>), select <b>TestDirector for Quality Center</b>, and search for Article Number 33501.</p>
<b>Display</b>	<ul style="list-style-type: none"> <li>• Color palette setting of 256 colors or higher (65536 colors or higher recommended).</li> <li>• Resolution 1024x768 minimum.</li> </ul>
<b>Browser</b>	<ul style="list-style-type: none"> <li>• Microsoft Internet Explorer 6.0 with Service Pack 1</li> <li>• Quality Center Explorer</li> </ul>

## Citrix Configurations

To run Quality Center or Quality Center Starter Edition on Citrix, you need the following configurations.

Citrix Server	MetaFrame XP FR3, on: <ul style="list-style-type: none"> <li>• Windows 2000 Server with Service Pack 4</li> <li>• Windows Server 2003 Standard/Enterprise Edition</li> </ul>
Citrix Client	Program Neighborhood, Version 8, on: <ul style="list-style-type: none"> <li>• Windows 2000 Server/Professional with Service Pack 4</li> <li>• Windows XP Professional/Home Edition with Service Pack 2</li> <li>• Solaris 9 OE</li> <li>• Red Hat Linux 9.0</li> </ul>
Quality Center Server	Supports all environments

For more information on the Citrix configuration, refer to the Mercury Support Knowledge Base (<http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp>), select **TestDirector for Quality Center**, and search for Article Number 38333.

## VMware ESX Configurations

Quality Center can be deployed on VMware ESX Server 2.5.2. For more information, refer to the Mercury Support Knowledge Base (<http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp>), select **TestDirector for Quality Center**, and search for Article Number 46566.

## Working with Previously Created Projects

After installing Quality Center 9.0, if you want to work with a TestDirector 7.6 or 8.0 project, you must migrate the project to Quality Center 9.0. To migrate, use the Quality Center 9.0 Migration Tool.

If you want to work with a Quality Center 8.0 or 8.2 project, you must upgrade the project to Quality Center 9.0. To upgrade, use the Quality Center 9.0 Site Administration.

For more information, refer to the *Mercury Quality Center Administrator's Guide*.

## Text Search Configuration

Text search is available only if the text searching feature has been installed and configured on an Oracle or SQL database server. For Microsoft SQL 2005 and Oracle 10, the text search feature is built-in. For Oracle 9i, you must install and configure the text searching feature on your Oracle database server. The text search feature is not supported in Microsoft SQL 2000.

For more information, refer to the Mercury Support Knowledge Base (<http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp>), select **TestDirector for Quality Center**, and search for Article Number 43393.

# 2

---

## Installing Quality Center

This chapter describes how to install Quality Center 9.0 on Windows, Linux, and Solaris.

You can install Quality Center on a single node or as a cluster. When you install Quality Center on cluster nodes, all nodes must be identical. For example, all nodes must use the same application server, operating system, Quality Center directory location, and Site Administration database. In addition, you must install the same version of Quality Center on all nodes.

---

**Note:** When you are installing Quality Center on a secondary node of a cluster, you are not required to set up the database, because it was set up when you installed the primary node. Some of the dialog boxes described in this installation procedure are needed only for the primary node and do not display if you are installing a secondary node.

---

<b>This chapter describes:</b>	<b>On page:</b>
Mounting the File System Repository in a Clustered Environment	16
Installing Quality Center	17

## Mounting the File System Repository in a Clustered Environment

When working in a clustered environment in Solaris or Linux, you must mount the file system repository before you start the Quality Center installation process. Note that the mount to the file system repository should not use any cache mechanisms.

### To mount a file system repository in Linux:

- ▶ **NFS mounts:** When using NFS mounts, modify the `/etc/fstab` file as follows:

```
<source> <target> nfs sync,noac 0 0
```

- ▶ **SMBFS mounts:** When using SMBFS (mounted from a Windows machine), modify the `/etc/fstab` file as follows:

```
<source> <target> smbfs  
credentials=/root/.smbpasswd,rw,gid=<GID>,uid=<UID>,  
fmask=0777,dmask=0777 0 0
```

For example:

```
//qcserver/QCrepository /mnt/QCrepository smbfs  
credentials=/root/.smbpasswd,rw,gid=10,uid=qcadmin,  
fmask=0777,dmask=0777 0 0
```

Where:

- ▶ `//qcserver/QCrepository` is the UNC of the source path
- ▶ `uid=qcadmin` is a domain user. Note that `qcadmin` must be a user on the Windows server and must belong to Administrators group.
- ▶ `/mnt/QCrepository` is the local folder

The `qcadmin` in this example must be defined in the credential file (`/root/.smbpasswd`) as follows:

```
username = qcadmin  
password = <qcadmin-password>
```

You must also edit the `/etc/samba/smb.conf` file and change the **workgroup** value to a domain name (for example: MERCURY).

**To mount a file system repository in Solaris:**

**NFS mounts:** When using NFS mounts, modify the `/etc/vfstab` file as follows:

```
<source> - <target> nfs - yes sync,noac
```

## Installing Quality Center

This section describes how to install Quality Center 9.0.

If you have been working with a previous version, it is recommended that you back up your existing projects before installing the new version. For more information, refer to the *Mercury Quality Center Administrator's Guide*.

---

**Notes:**

- ▶ **Apache:** To integrate Quality Center with Apache, you can manually configure the Apache Web server to redirect requests to JBoss. The Quality Center installation CD now includes the appropriate Apache installation files, the integration files and documentation explaining how to integrate Quality Center with Apache. For more information, refer to the **Apache Integration** directory on the installation CD.
  - ▶ **JBoss on a Windows platform:** The user account that is set to run JBoss as a service must be the same as the user account that is used to install Quality Center. The user must have full administrator privileges on the Quality Center server machine.
  - ▶ **JBoss on a Solaris or Linux platform:** The user must have full control permissions to run JBoss. The user must also have full control permissions on the Quality Center installation folder and on an existing Quality Center repository folder.
  - ▶ **WebLogic/WebSphere:** The user account that is used to install and run Quality Center must have full permission on the Quality Center installation folder and on an existing Quality Center repository folder.
-

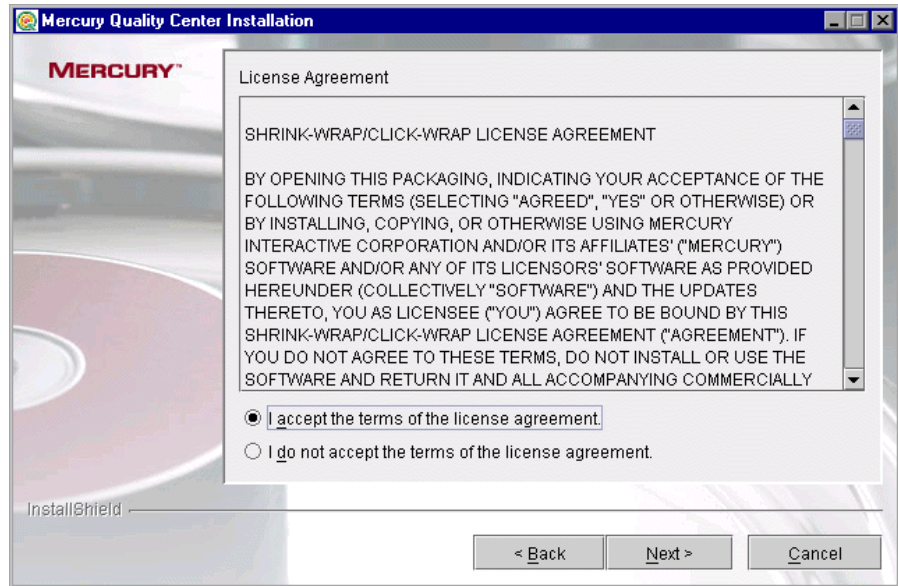
**To install Quality Center:**

- 1** Log in to the Quality Center server machine with the appropriate privileges:
  - On a Windows machine, log in with administrator privileges.
  - On other operating systems, log in as a user that has read, write, and execute privileges for the installation directory and the file repository.
- 2** If Quality Center is installed on the machine, uninstall it. For more information, see Chapter 8, “Uninstalling Quality Center”.
- 3** Insert the appropriate Quality Center 9.0 installation CD into the CD drive and run the appropriate file.

Platform	To install:
Windows	Run the <b>setup.exe</b> file.
Solaris or Linux (console mode)	<ul style="list-style-type: none"> <li>• To install on a Solaris platform, type: <b>./setupSolaris.bin -console</b></li> <li>• To install on a Linux platform, type: <b>./setupLinux.bin -console</b></li> </ul>
Solaris or Linux (UI mode)	<p>Make sure that the DISPLAY environment variable is properly configured on the Quality Center host machine, and that the machine from which you are installing is running an X-server (for example, Exceed).</p> <p>To install on a Solaris platform, type: <b>./setupSolaris.bin</b></p> <p>To install on a Linux platform, type: <b>./setupLinux.bin</b></p>

- 4** The Welcome dialog box opens. Click **Next**.

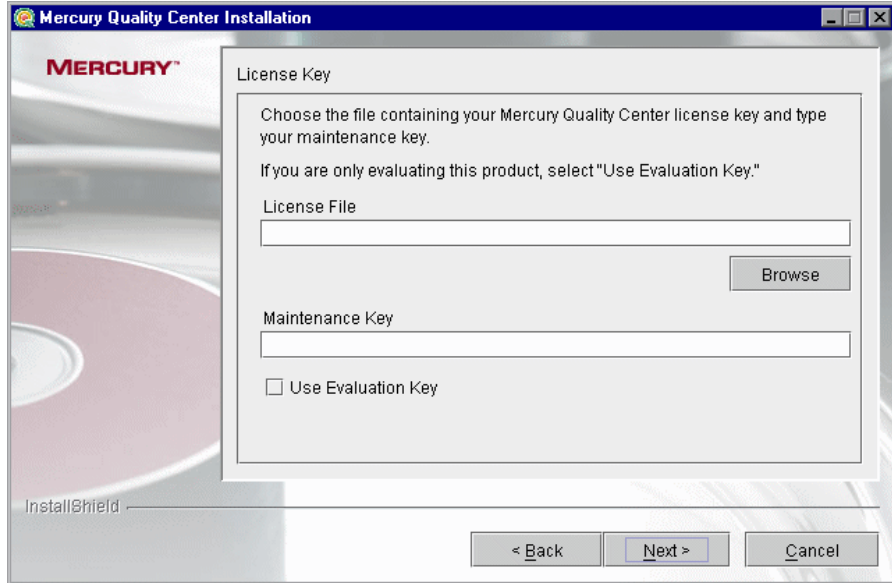


**5** The License Agreement dialog box opens.

Read the license agreement. To accept the terms of the license agreement, select **I accept the terms of the license agreement**.

Click **Next**.

6 The License Key dialog box opens.

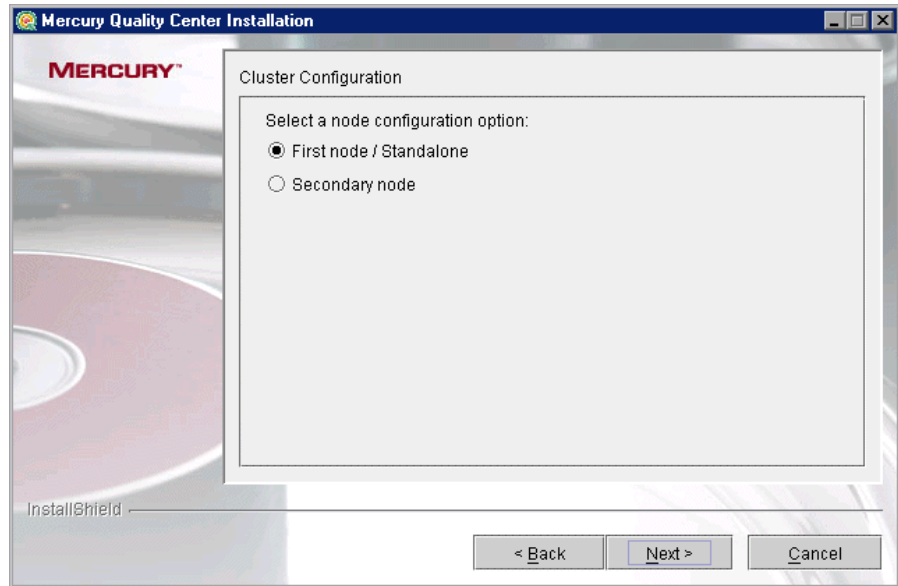


**License File.** Select the Quality Center license file path.

**Maintenance Key.** Type the maintenance number supplied to you when you purchased Quality Center.

**Use Evaluation Key.** If you do not have a license file, select this option for a 30-day trial version of Quality Center Starter Edition. For more information on installing Quality Center Starter Edition, see Chapter 3, "Installing Quality Center Starter Edition."

Click **Next**.

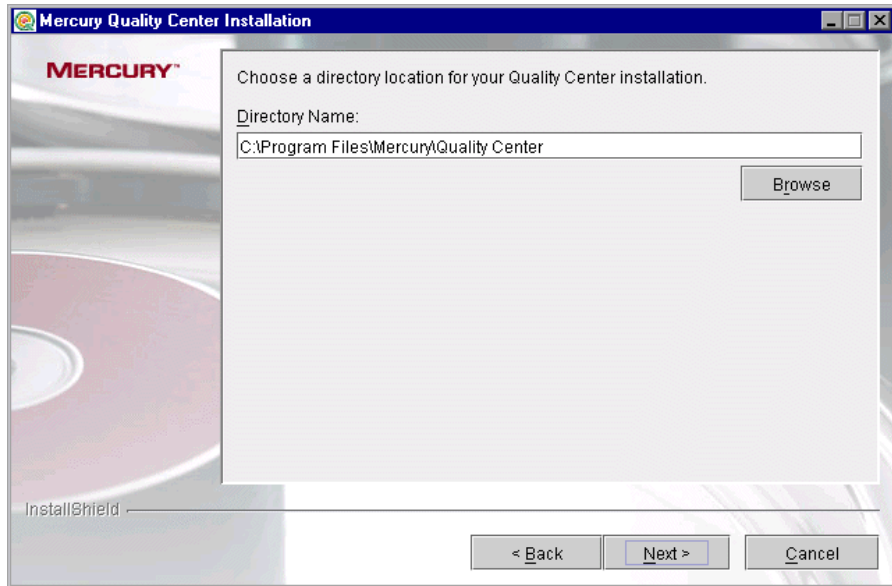
**7** The Cluster Configuration dialog box opens.

Select a node configuration option:

- **First node/Stand-alone.** If you are installing Quality Center on the first node of a cluster or as a stand-alone application.
- **Secondary node.** If you have an existing node and you want to install Quality Center on another node.

Click **Next**.

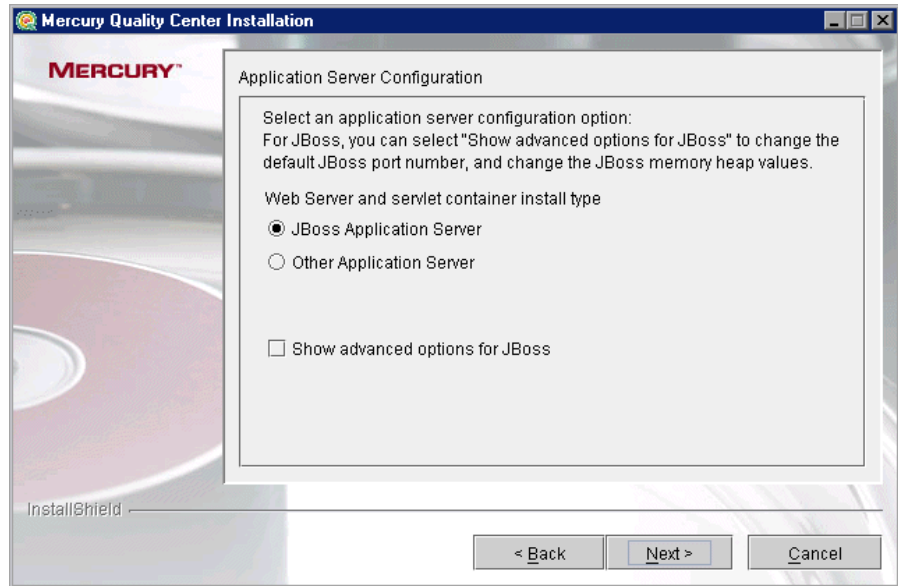
8 The Choose a Directory Location dialog box opens.



Specify the location where you want to install Quality Center. You can click the browse button, choose a subdirectory, and click **OK**.

Click **Next**.

- 9 The Application Server Configuration dialog box opens.



Select one of the following application server configuration options:

- **JBoss Application Server.** Select this option to work with JBoss.

To change the default JBoss port number or change the JBoss memory heap values, select **Show advanced options for JBoss**.

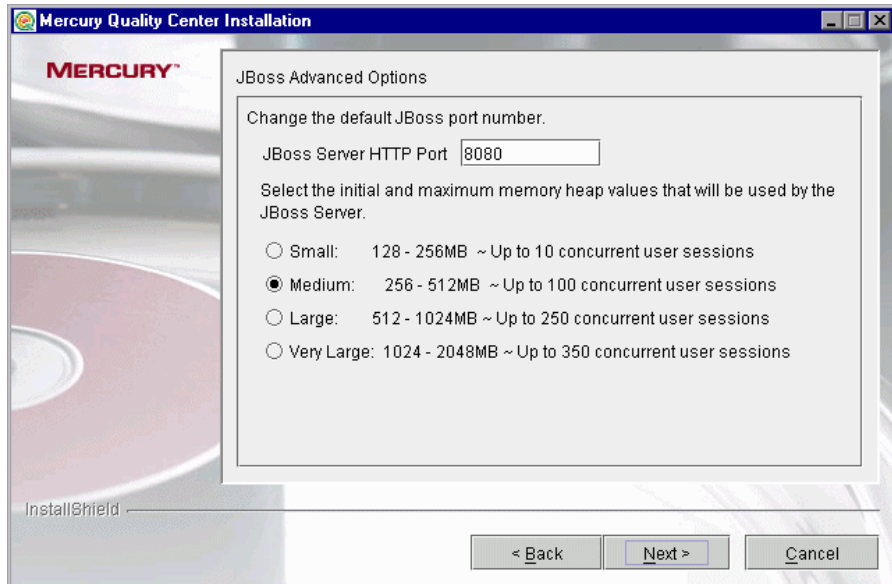
- **Other Application Server.** Select this option to work with WebLogic or WebSphere.

Click **Next**.

- 10** If you selected **JBoss Application Server**, proceed to step 11 on page 24.  
If you selected **Other Application Server**, proceed to step 16 on page 29.

- 11** If you did not select **Show advanced options for JBoss**, proceed to step 12 on page 25.

If you selected **Show advanced options for JBoss** or if the default HTTP port is not free, the JBoss Advanced Options dialog box opens.



In the **JBoss Server HTTP Port** box, you can change the JBoss port number. The default port is 8080.

Select the initial and maximum memory heap values that will be used by the JBoss server.

Option	Initial Heap Size	Maximum Heap Size	Estimated Number of Users
Small	128 MB	256 MB	Up to 10 concurrent user sessions
Medium	256 MB	512 MB	Up to 100 concurrent user sessions
Large	512 MB	1024 MB	Up to 250 concurrent user sessions
Very Large	1024 MB	2048 MB	Up to 350 concurrent user sessions

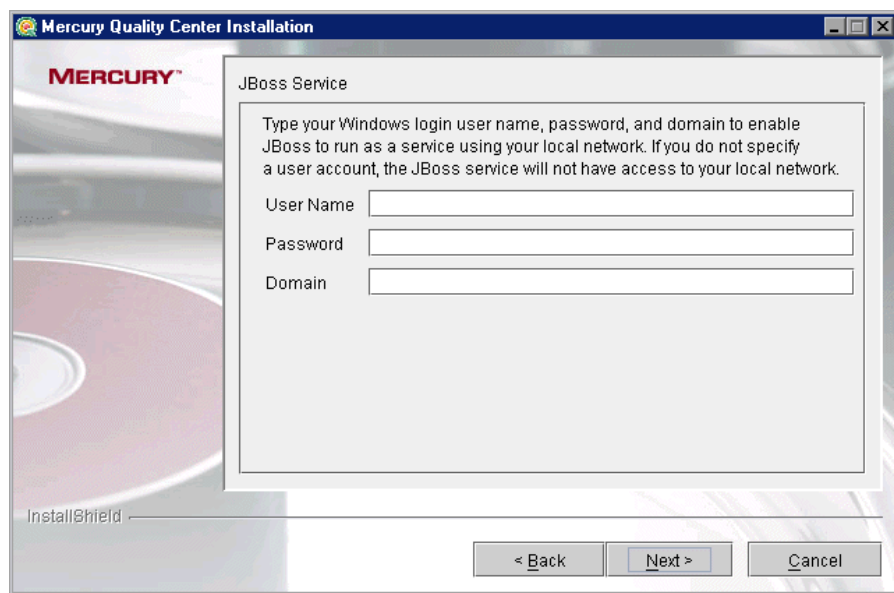
---

**Notes:**

- ▶ For information on how to change the JBoss heap size after you have installed Quality Center, refer to the Mercury Support Knowledge Base (<http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp>), select **TestDirector for Quality Center**, and search for Article Number 41914.
  - ▶ For more information on JBoss performance tuning, refer to the JBoss documentation.
- 

Click **Next**.

- 12** If you selected **JBoss Application Server**, the JBoss Service dialog box opens.



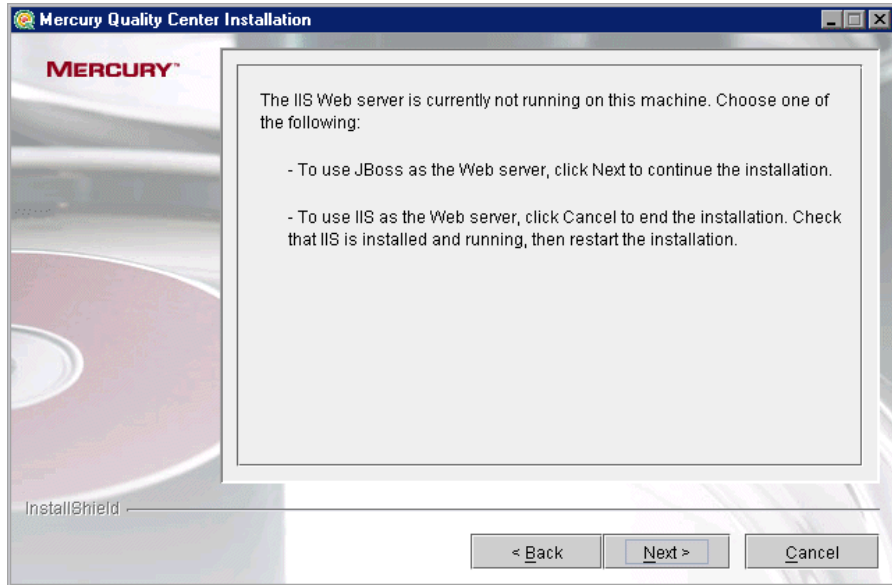
Type the **User Name**, **Password**, and **Domain** to be used to run JBoss as a service. This enables the JBoss service to access your local network.

If you leave this blank, the local system account will be used to run the JBoss service, and the JBoss service will not have access to your local network.

Click **Next**.

- 13** If the IIS Web server is installed on your machine, proceed to step 14 on page 27.

If the IIS Web server is not installed on your machine, the following dialog box opens.



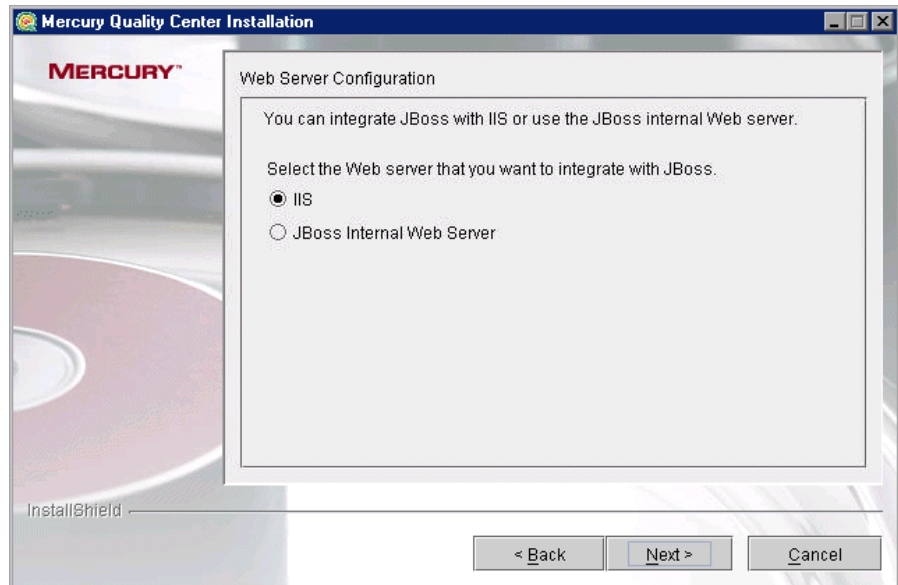
Quality Center can integrate JBoss with the IIS Web server or with the JBoss Web server. By default, Quality Center integrates JBoss with the IIS Web server.

Choose one of the following options:

- To use JBoss as the Web server, click **Next** to continue the installation. Proceed to step 16 on page 29.
- To use IIS as the Web server, click **Cancel** to end the installation. Check that IIS is installed and running, then restart the installation.



- 14** If the IIS Web server is installed on your machine, the Web Server Configuration dialog box opens.



Select the Web server that you want to integrate with JBoss.

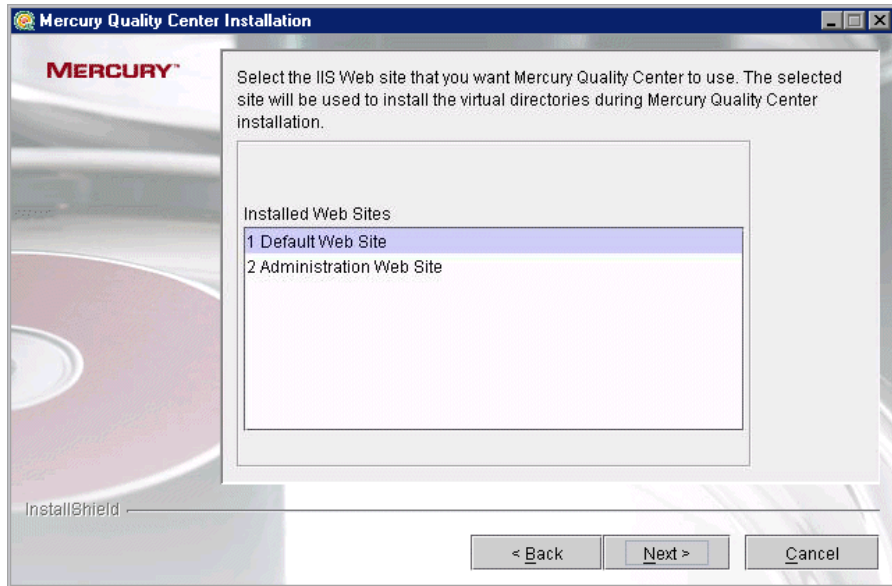
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**Note:** For information on how to redirect requests to JBoss from an IIS server on a remote machine, refer to the Mercury Support Knowledge Base (<http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp>), select **TestDirector for Quality Center**, and search for Article Number 37817.

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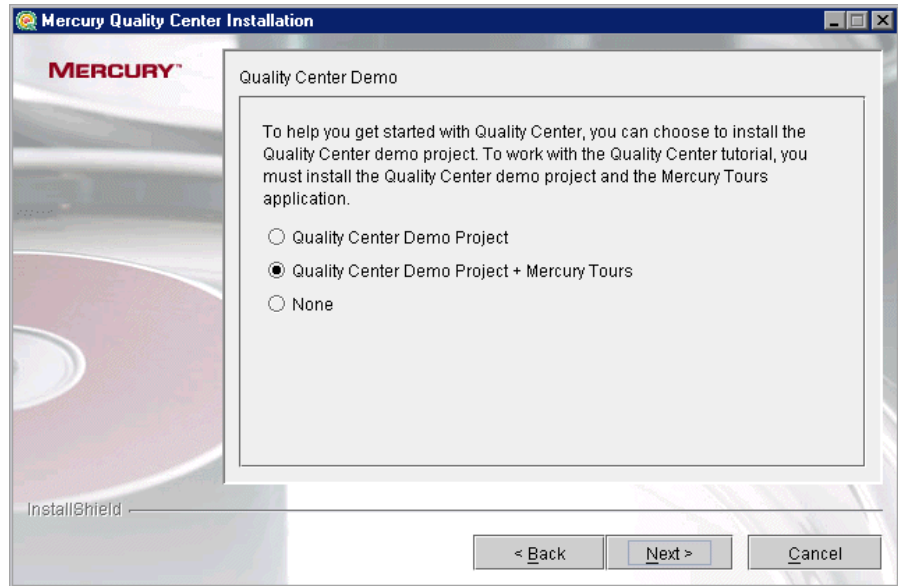
Click **Next**.

- 15** If you selected **JBoss Internal Web Server**, proceed to step 16 on page 29.  
If you selected **IIS**, the IIS Web Site dialog box opens.



Select the IIS Web site that you want Quality Center to use. It is recommended that you use the **Default Web Site**.

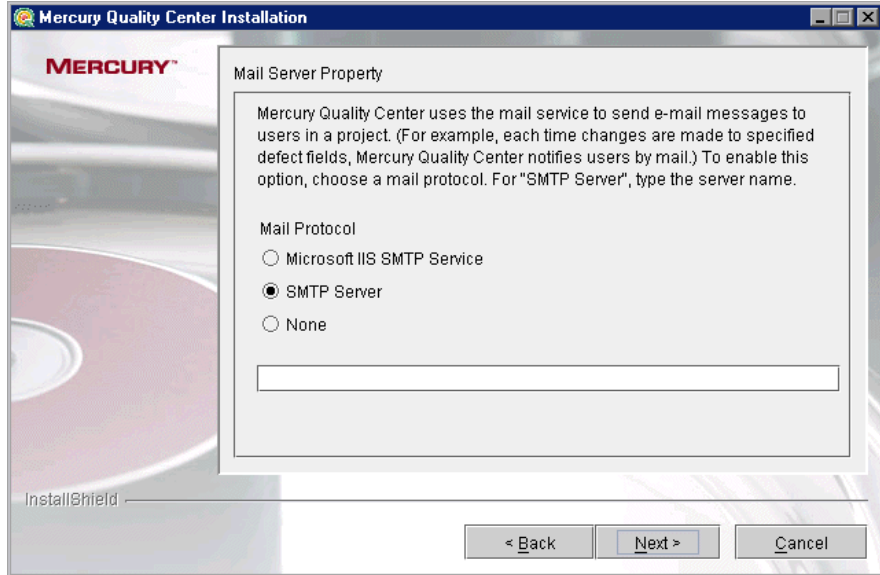
Click **Next**.

**16** The Quality Center Demo dialog box opens.

To help you get started with Quality Center, you can choose to install the Quality Center demo project. To work with the Quality Center Tutorial, you must install the Quality Center demo project and its accompanying sample Web-based travel reservation application.

Click **Next**.

**17** The Mail Server Property dialog box opens.



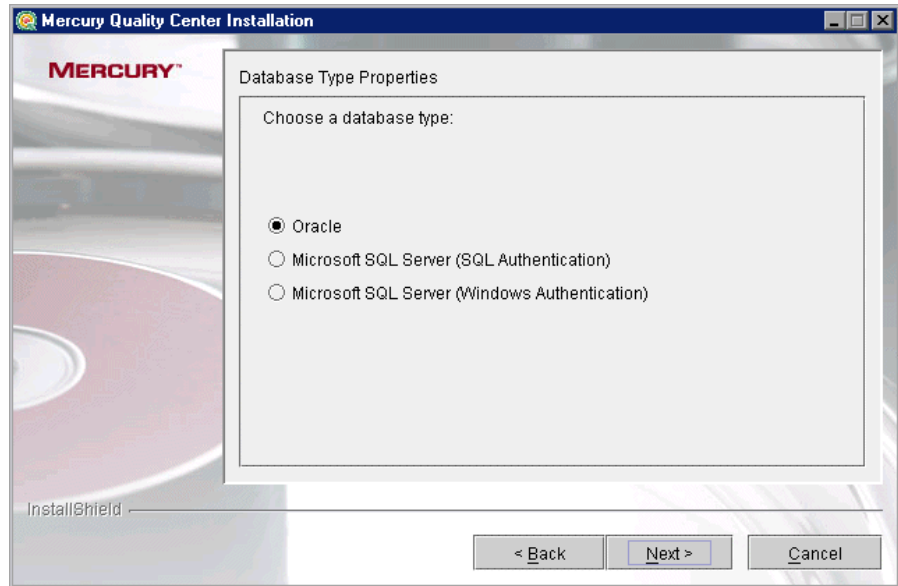
To enable Quality Center to send e-mails to users in a Quality Center project, choose a mail protocol. For **SMTP Server**, type the server name. Click **Next**.

---

**Note:** To work with Microsoft IIS SMTP Service, perform the following steps:

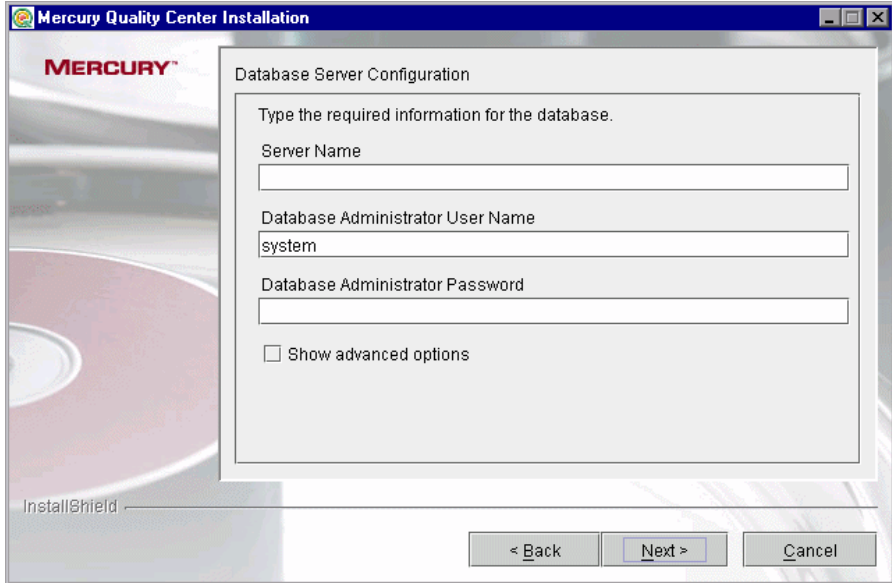
- ▶ Open the Internet Information Services (IIS) Manager window.
  - ▶ In the Tree pane, right-click **Default SMTP Virtual Server** and choose **Properties**. The Default SMTP Virtual Server Properties dialog box opens.
  - ▶ In the Access tab, click the **Connection** button. The Connection dialog box opens. Choose **All except the list below** and click **OK**.
  - ▶ Click the **Relay** button. The Relay Restrictions dialog box opens. Choose **All except the list below** and click **OK**.
  - ▶ Click **OK** to close the Default SMTP Virtual Server Properties dialog box.
-

**18** The Database Type Properties dialog box opens.



Select a database type. Click **Next**.

19 The Database Server Configuration dialog box opens.



- **Server Name.** Type the database server name.
- **Database Administrator User Name.** Type the database administrator user name. Not applicable for **Microsoft SQL Server (Windows Authentication)**.
- **Database Administrator Password.** Type the database administrator password. Not applicable for **Microsoft SQL Server (Windows Authentication)**.
- **Show advanced options.** Select this option to define advanced options for your database type.

Click **Next**.

**20** If you did not select **Show advanced options**, proceed to step 21 on page 34.

If you selected **Show advanced options**, the Advanced Database Server Configuration dialog box opens.

The screenshot shows a window titled "Mercury Quality Center Installation" with a sub-dialog titled "Advanced Database Server Configuration". The sub-dialog contains the following fields and values:

- Site Administrator Database Schema Name: qcsiteadmin\_db
- Database Server Port: 1521
- Quality Center User Password: \*\*\*\*\*
- Oracle SID: royalty

At the bottom of the sub-dialog are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted. The background of the main window shows the Mercury logo and a CD-ROM.

**Site Administrator Database Schema Name.** Type a Site Administration database schema name.

**Database Server Port.** Type the database server port number.

**Quality Center User Password.** Type the Quality Center user password for accessing the database schema, or accept the default password. Not applicable for **Microsoft SQL Server (Windows Authentication)**.

**Oracle SID.** Type the Oracle system ID. Not applicable for **Microsoft SQL Server**.

Click **Next**.

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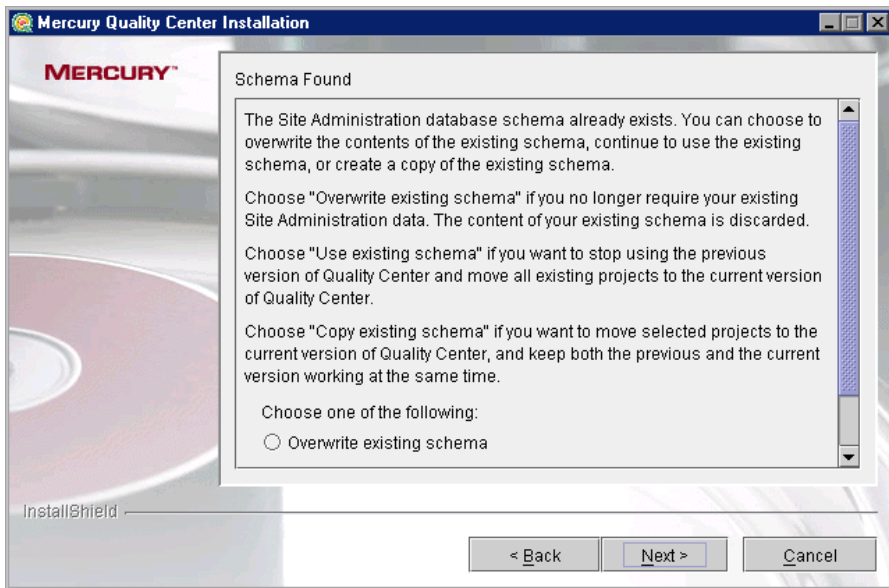
**Note:** For information on Oracle permissions required by Quality Center, refer to the Mercury Support Knowledge Base (<http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp>), select **TestDirector for Quality Center**, and search for Article Number 32903.

---

- 21** For **Oracle**, if the Site Administration database does not exist, proceed to step 23 on page 37.

For **Microsoft SQL Server**, if the Site Administration database does not exist, proceed to step 24 on page 39.

If the Site Administration database already exists, the Schema Found dialog box opens.





Choose one of the following options:

- ▶ **Overwrite existing schema.** Creates a new Site Administration database. Choose this option if you want to discard the content of your existing schema.
- ▶ **Use existing schema.** Uses the existing Site Administration database. Choose this option if you want to stop using the previous version of Quality Center and move all existing projects to Quality Center 9.0.
- ▶ **Copy existing schema.** Creates a copy of the existing Site Administration database and saves it with an incremental number suffix (for example, qcsiteadmin\_db0). Choose this option if you want to move selected projects to Quality Center 9.0, and keep both the previous and the current version working at the same time.

---

**Note:**

If you choose **Copy existing schema**, consider the following limitations:

- ▶ **Project upgrade:** Before you upgrade a project to Quality Center 9.0, you must disable the project and remove it from the projects list in your previous version of Site Administration.
- ▶ **Quality Center users:** After you install Quality Center 9.0, if you add or delete users, or update user details in your previous version of Quality Center, you must make the same changes in Quality Center 9.0.
- ▶ **Quality Center configuration parameters:** After you install Quality Center 9.0, if you modify configuration parameters in your previous version of Quality Center, you must make the same changes in Quality Center 9.0.
- ▶ **Server node configuration:** If you are working with server nodes, in the **Servers** tab in Site Administration for Quality Center 9.0, you must reconfigure the settings for the Quality Center server log file and the maximum number of database connections.
- ▶ **Quality Center repository path:** The repository path in your previous version must be defined as a network path.

- ▶ **DATACONST table:** The following constants must be set as network paths in the **DATACONST** table: `db_directory`, `tests_directory`, `unix_db_directory`, and `unix_tests_directory`.
  - ▶ **Operating System:** Quality Center 9.0 must be installed on the same operating system as your previous version of Quality Center.
  - ▶ **Version control:** You must check in all tests before you upgrade a version control project.
  - ▶ **Version control:** If version control is enabled in your previous version of Quality Center, you must also install the same version control add-in on the Quality Center 9.0 server.
- 

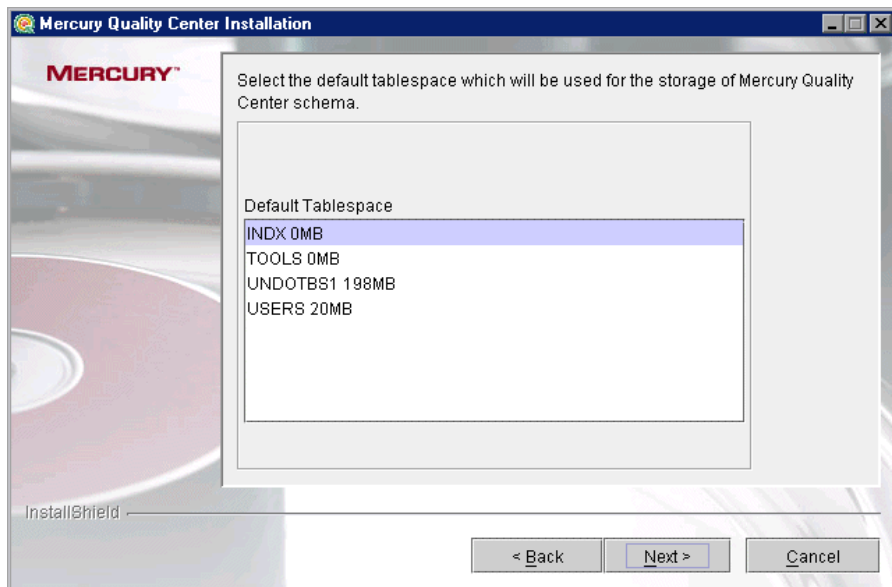
Click **Next**.

**22** If you selected **Overwrite existing schema**, proceed to step 23 on page 37.

If you selected **Use existing schema** or **Copy existing schema**, proceed to step 24 on page 39.

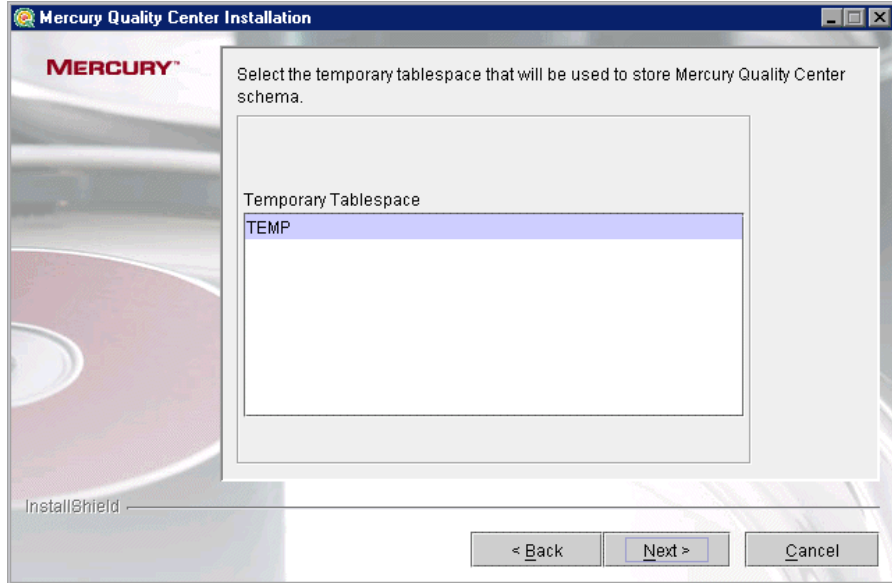
**23** For **Microsoft SQL Server**, proceed to step 24 on page 39.

For **Oracle**, the Oracle Tablespace dialog box opens.



Under **Default Tablespace**, select a default storage location from the list.

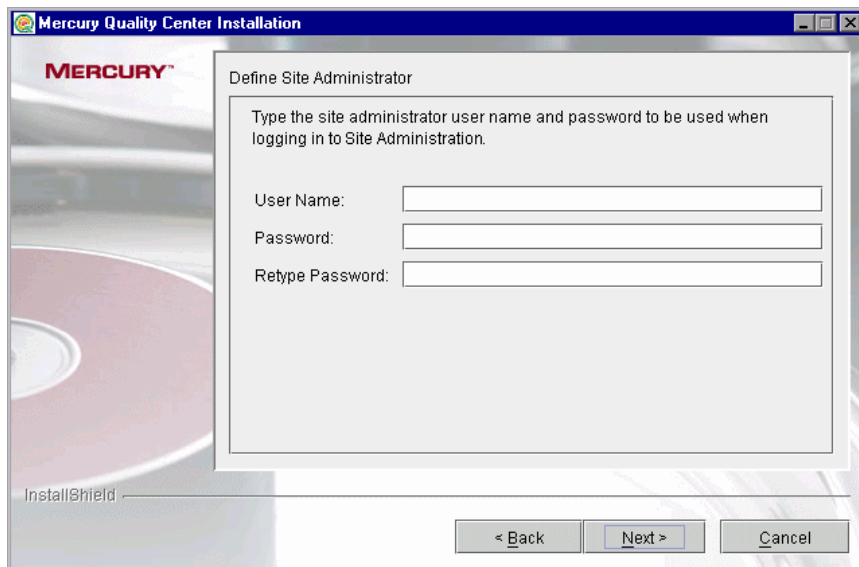
Click **Next**. The Oracle Temporary Tablespaces dialog box opens.



Under **Temporary Tablespace**, select a temporary storage location from the list.

Click **Next**.

- 24** The Define Site Administrator dialog box opens. Note that if you chose **Use existing schema** or **Copy existing schema** (step 21 on page 34), a different version of this dialog box opens.



You use the site administrator name and password that you define in this dialog box to log in to Site Administration for the first time. You can change the site administrator or add other site administrators at a later time in Site Administration.

- **User Name.** Type a site administrator user name.
- **Password.** Type a site administrator password. Applicable only if you chose **Overwrite existing schema**.
- **Retype Password.** Retype the site administrator password. Applicable only if you chose **Overwrite existing schema**.

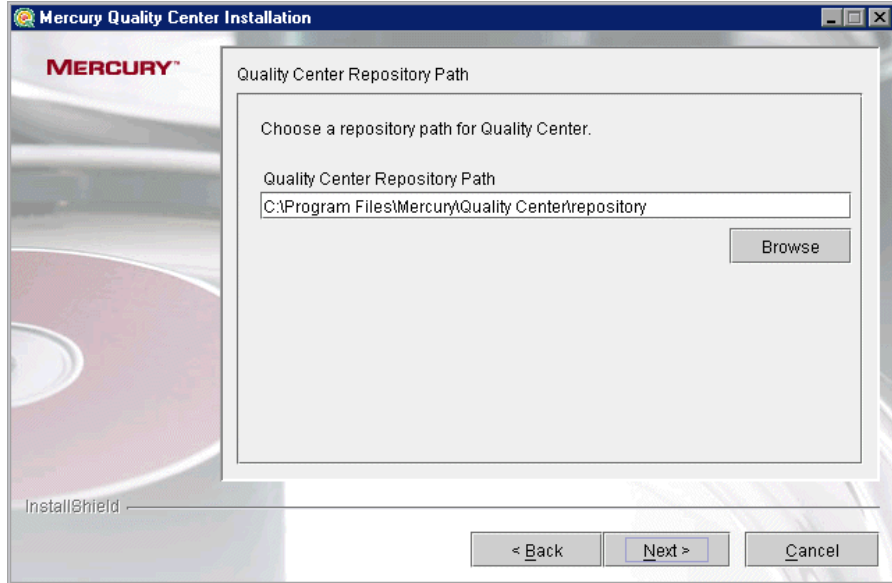
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**Note:** It is important that you remember the site administrator user name and password as otherwise you will not be able to log in to Site Administration.

---

Click **Next**.

**25** The Quality Center Repository Path dialog box opens.



In the **Mercury Quality Center Repository Path** box, click the browse button to choose a repository path.

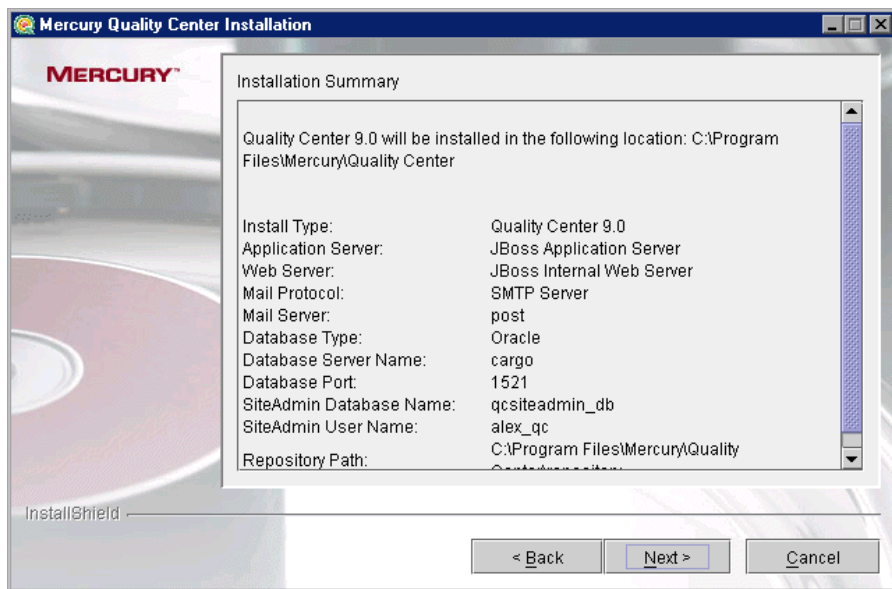
Note that if you chose **Copy existing schema** (step 21 on page 34), the specified repository path cannot be identical to the existing path. You must specify a different path.

---

**Note:** To work with cluster nodes, make sure that all nodes have access to this path.

---

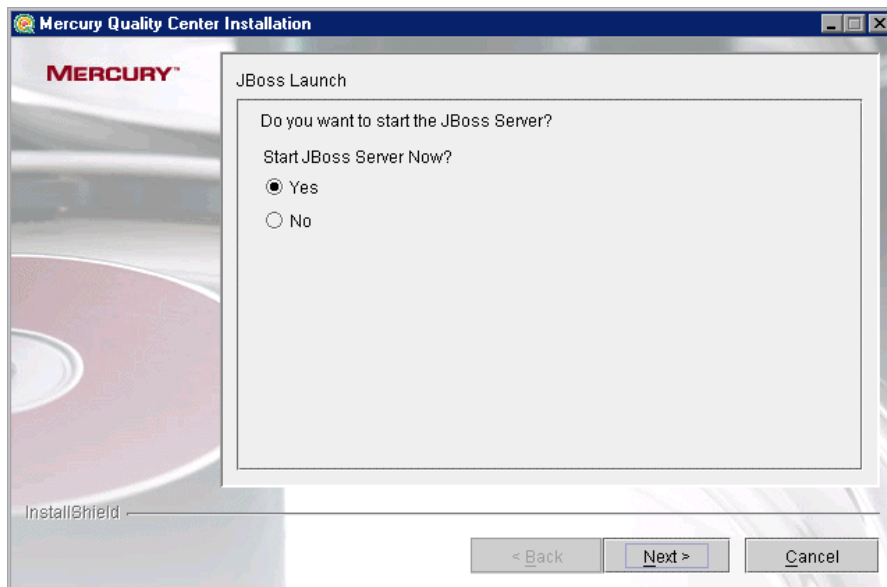
Click **Next**.

**26** The Installation Summary dialog box opens.

To review or change any settings, click **Back**.

To accept the settings and start the installation process, click **Next**. The installation process starts.

- 27** If your application server is other than JBoss, proceed to step 28.  
If your application server is JBoss, the JBoss Launch dialog box opens.



Choose one of the following options:

- ▶ **Yes.** To start the JBoss server now.
- ▶ **No.** To manually start the JBoss server later.

Click **Next**.



- 28** When the installation process completes, the Installation Complete dialog box opens. Click **Finish**.
- 

**Note:** If you are using JBoss, Quality Center is automatically deployed on your application server. If you are using another application server, you must deploy Quality Center manually. For more information on manual deployment, refer to the Mercury Support Knowledge Base (<http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp>) and select **TestDirector for Quality Center**. For WebLogic, search for Article Number 35712. For WebSphere, search for Article Number 38493.

---

- 29** If you are prompted to restart your computer, you can chose to restart your computer at a later time, but you must restart your computer before you configure or use Quality Center. You must also restart your computer before you install any Quality Center related files, such as integration add-ins.
- 

**Note:** If you are prompted to restart, it is strongly recommended that you restart your computer as soon as possible.

---

- 30** You can use the Quality Center Checker to verify that the main Quality Center server components have been successfully installed. For more information, refer to the *Mercury Quality Center Administrator's Guide*.



# 3

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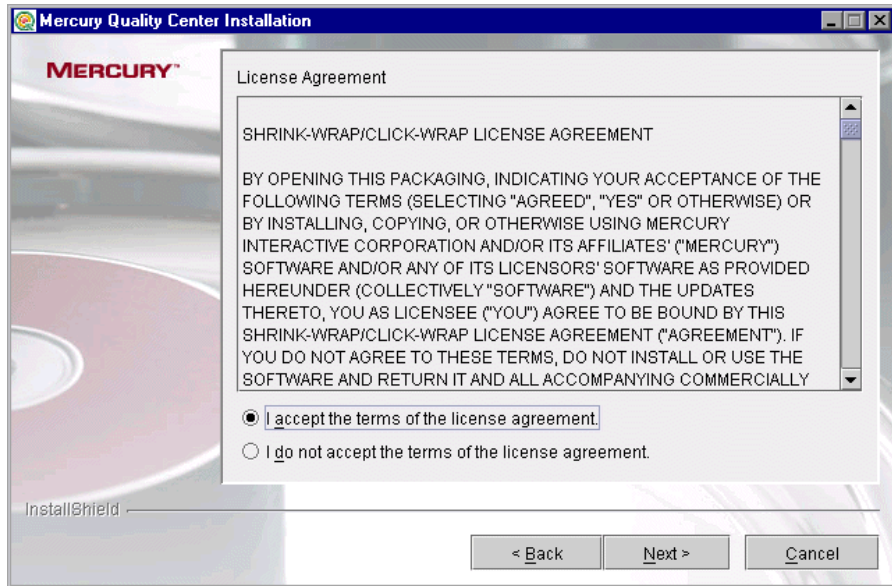
## Installing Quality Center Starter Edition

This chapter describes how to install Quality Center Starter Edition on Windows. You can perform a typical or a custom installation. *Typical* installation installs Quality Center with the most common options and is recommended for most users. *Custom* installation enables you to choose the options you want to install and is recommended for advanced users.

### To install Quality Center Starter Edition:

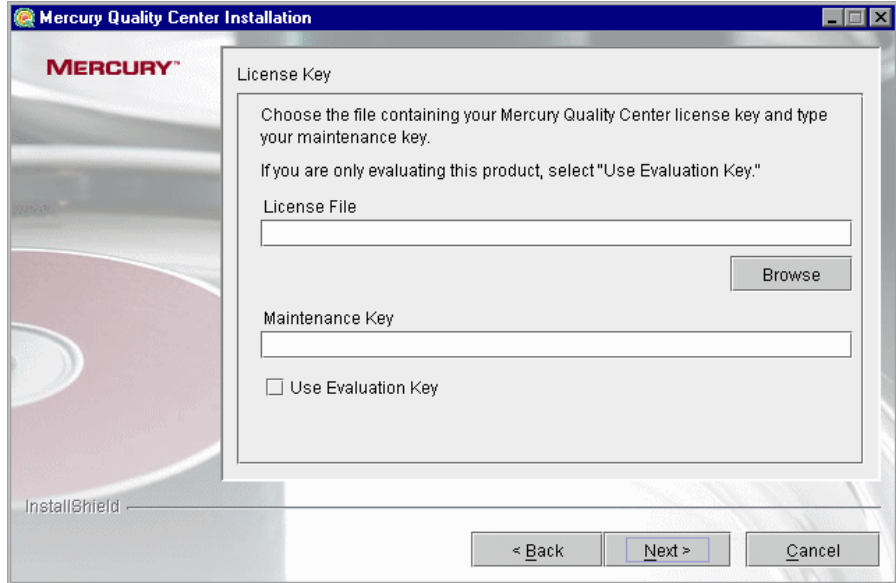
- 1** On a Windows machine, log in with administrator privileges.
- 2** Insert the installation CD into the CD drive and run the **setup.exe** file.
- 3** The Welcome dialog box opens. Click **Next**.

4 The License Agreement dialog box opens.



Read the license agreement. To accept the terms of the license agreement, select **I accept the terms of the license agreement**.

Click **Next**.

**5** The License Key dialog box opens.

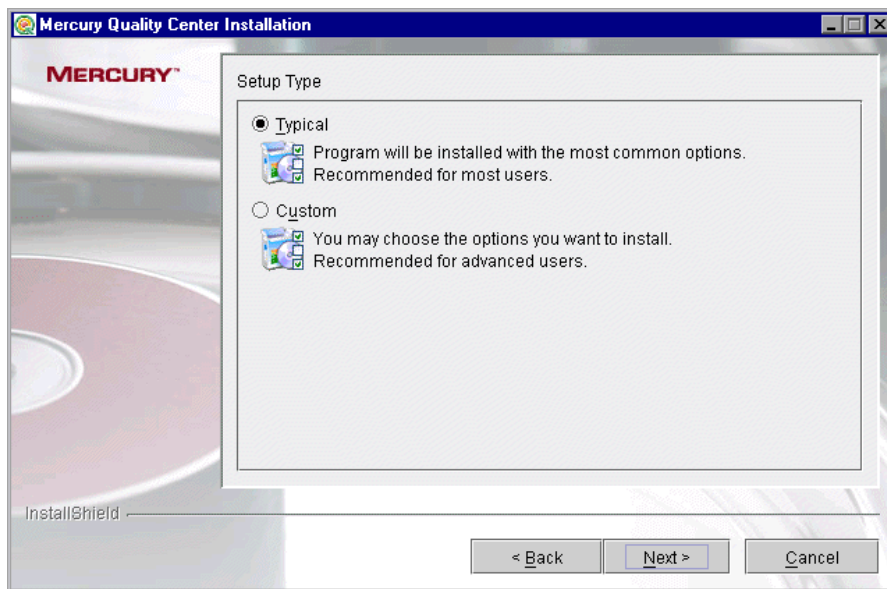
**License File.** If you have a Quality Center Starter Edition license, specify the path to your license file.

**Maintenance Key.** Type the maintenance key supplied to you when you purchased Quality Center Starter Edition.

**Use Evaluation Key.** If you do not have a license file, select this option for a 30-day trial version of Quality Center Starter Edition.

Click **Next**.

6 The Setup Type dialog box opens.

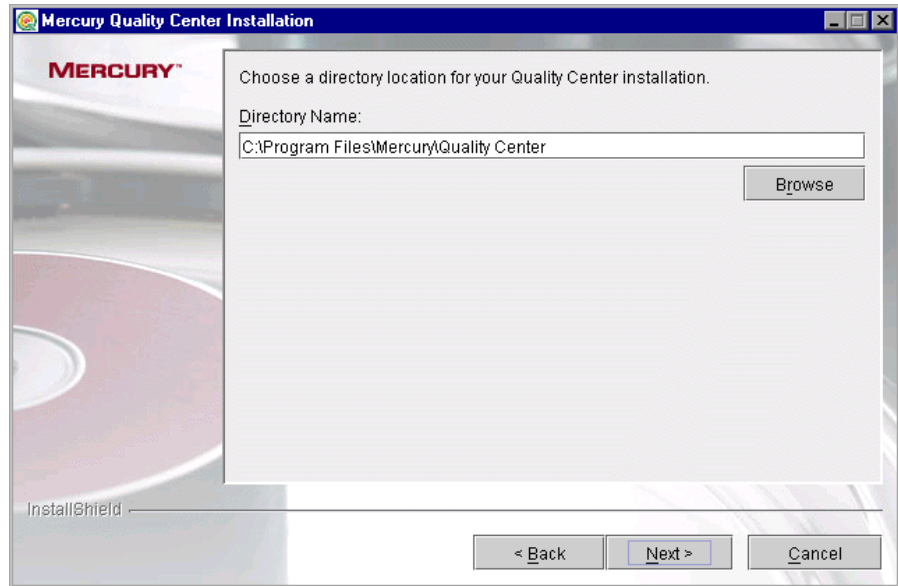


Select one of the following installation setup options:

- **Typical.** Installs the program with the most common options. Recommended for most users.
- **Custom.** Enables you to choose the options you want to install. Recommended for advanced users.

Click **Next**.

7 The Directory Name dialog box opens.

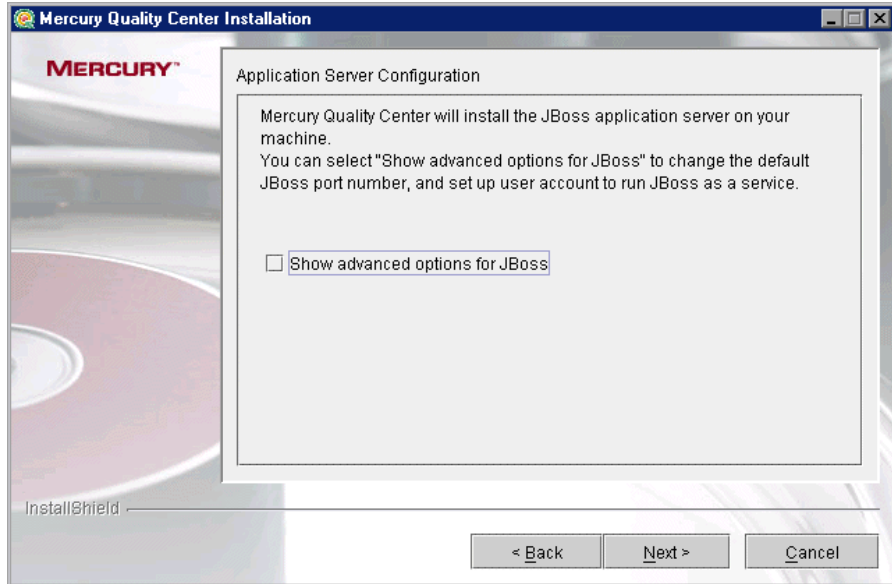


Specify the location where you want to install Quality Center Starter Edition. You can click the browse button, choose a path, and click **OK**.

Click **Next**.

8 If you selected **Typical**, proceed to step 11 on page 53.

If you selected **Custom**, the Application Server Configuration dialog box opens.



For the Starter Edition, Quality Center will install the JBoss application server on your machine.

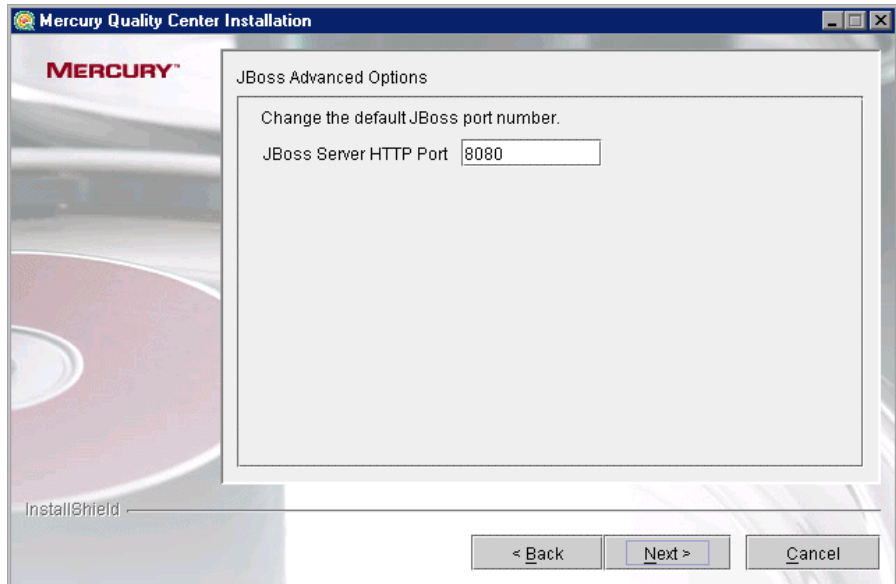
You can select **Show advanced options for JBoss** to change the default JBoss port number and set up JBoss to run as a service.

Click **Next**.



- 9 If you did not select **Show advanced options for JBoss**, proceed to step 11 on page 53.

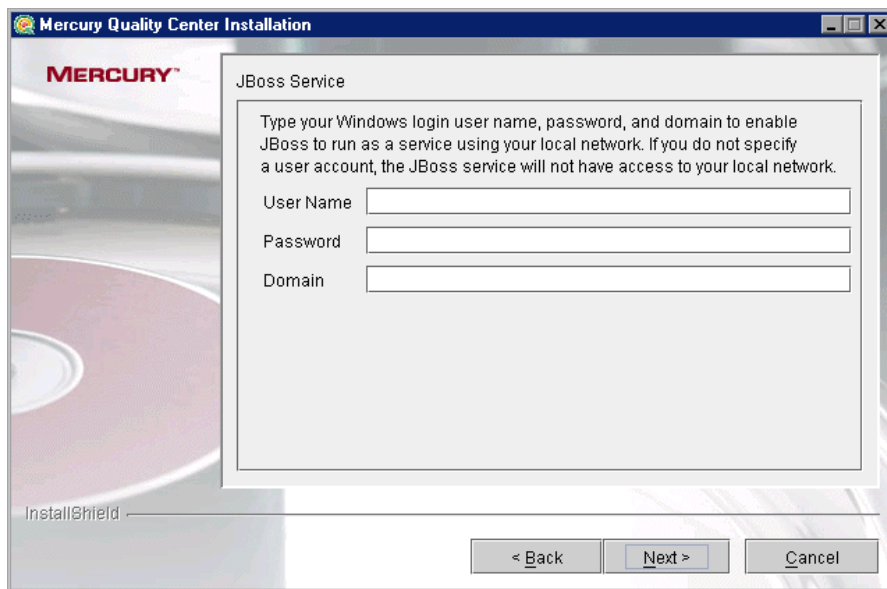
If you selected **Show advanced options for JBoss** or if the default JBoss port is already in use, the JBoss Advanced Options dialog box opens.



In the **JBoss Server HTTP Port** box, you can change the JBoss port number. The default port is 8080.

Click **Next**.

**10** The JBoss Service dialog box opens.

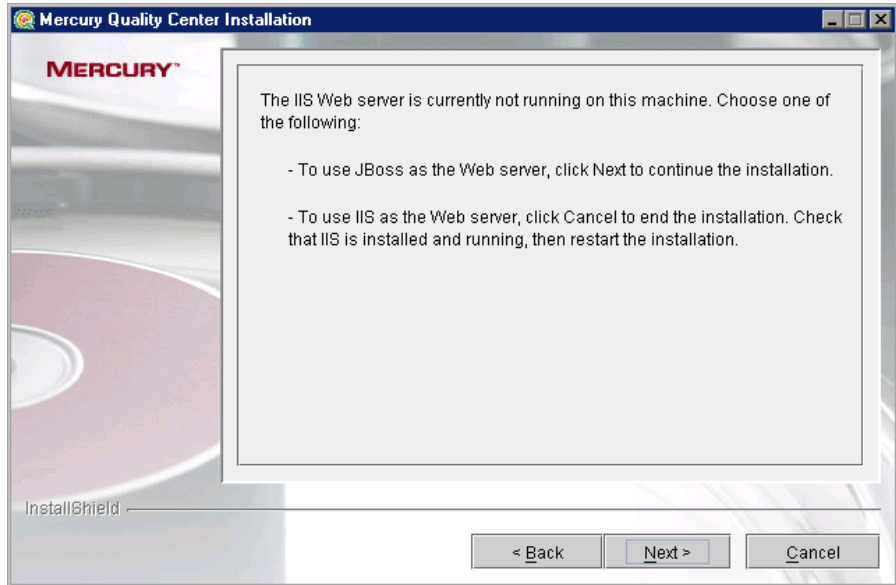


Type your Windows login **User Name**, **Password**, and **Domain** to enable JBoss to run as a service using your local network. If you do not specify a user account, the JBoss service will not have access to your local network.

Click **Next**.

- 11** If the IIS Web server is installed on your machine, proceed to step 12 on page 54.

If the IIS Web server is not installed on your machine, the following dialog box opens.

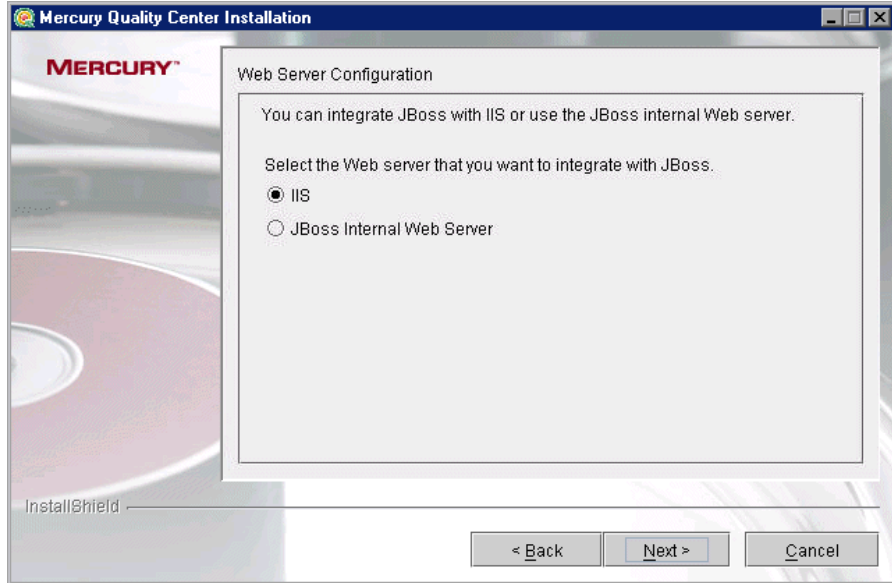


Quality Center can integrate JBoss with the IIS Web server or with the JBoss Web server. By default, Quality Center integrates JBoss with the IIS Web server.

Choose one of the following options:

- To use JBoss as the Web server, click **Next** to continue the installation.  
If you are running a custom installation, proceed to step 14 on page 56.  
If you are running a typical installation, proceed to step 15 on page 57.
- To use IIS as the Web server, click **Cancel** to end the installation. Check that IIS is installed and running, then restart the installation.

**12** The Web Server Configuration dialog box opens.



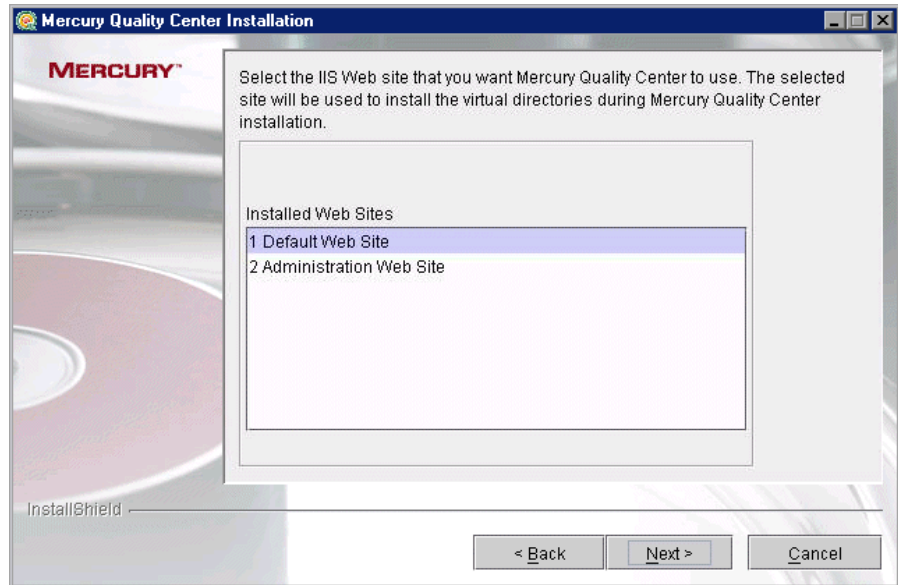
Select the Web server that you want to integrate with JBoss.

Click **Next**.

**13** If you are running a typical installation, proceed to step 15 on page 57.

If you are running a custom installation, and you selected **JBoss Internal Web Server**, proceed to step 14 on page 56.

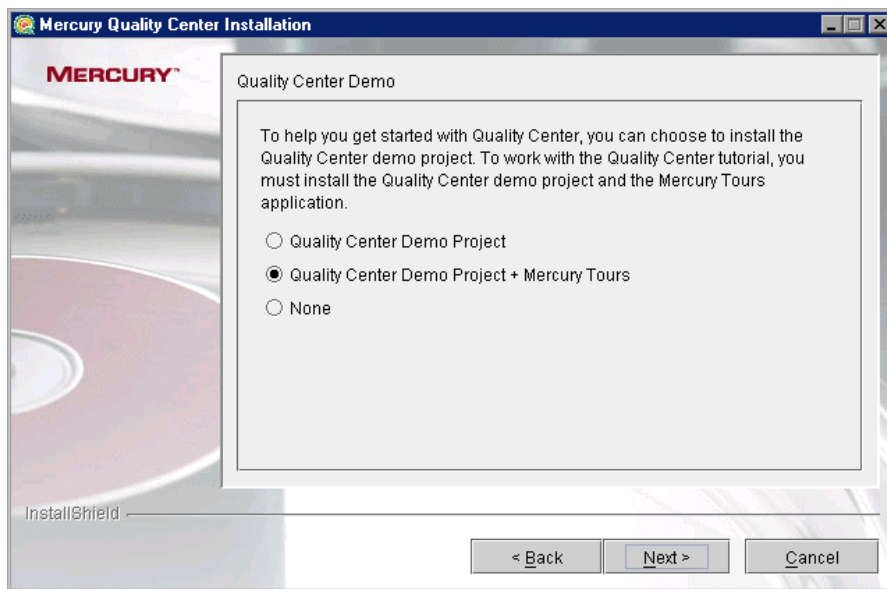
If you are running a custom installation, and you selected **IIS**, the IIS Web Site dialog box opens.



Select the IIS Web site that you want Quality Center to use. It is recommended that you use the **Default Web Site**.

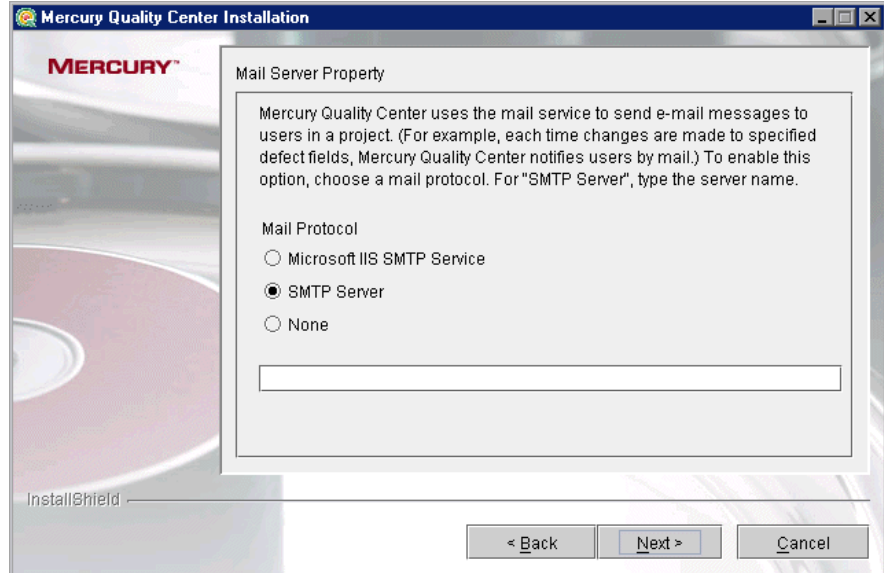
Click **Next**.

**14** The Quality Center Demo dialog box opens.



To help you get started with Quality Center, you can choose to install the Quality Center demo project. To work with the Quality Center Tutorial, you must install the Quality Center demo project and its accompanying sample Web-based travel reservation application.

Click **Next**.

**15** The Mail Server Property dialog box opens.

To enable Quality Center to send e-mails to users in a Quality Center project, choose a mail protocol. For **SMTP Server**, type the server name.

Click **Next**.

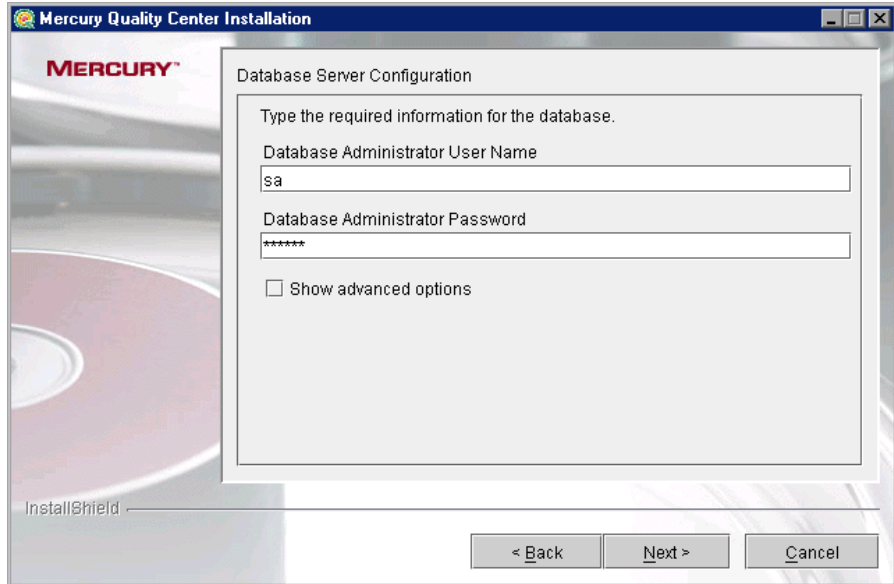
---

**Note:** To work with Microsoft IIS SMTP Service, perform the following steps:

- Open the Internet Information Services (IIS) Manager window.
  - In the Tree pane, right-click **Default SMTP Virtual Server** and choose **Properties**. The Default SMTP Virtual Server Properties dialog box opens.
  - In the Access tab, click the **Connection** button. The Connection dialog box opens. Choose **All except the list below** and click **OK**.
  - Click the **Relay** button. The Relay Restrictions dialog box opens. Choose **All except the list below** and click **OK**.
  - Click **OK** to close the Default SMTP Virtual Server Properties dialog box.
-

**16** If MSDE is not installed on your machine, proceed to step 18 on page 60.

If MSDE is installed on your machine, the Database Server Configuration dialog box opens.



**Database Administrator User name.** Type the database administrator user name.

**Database Administrator Password.** Type the database administrator password.

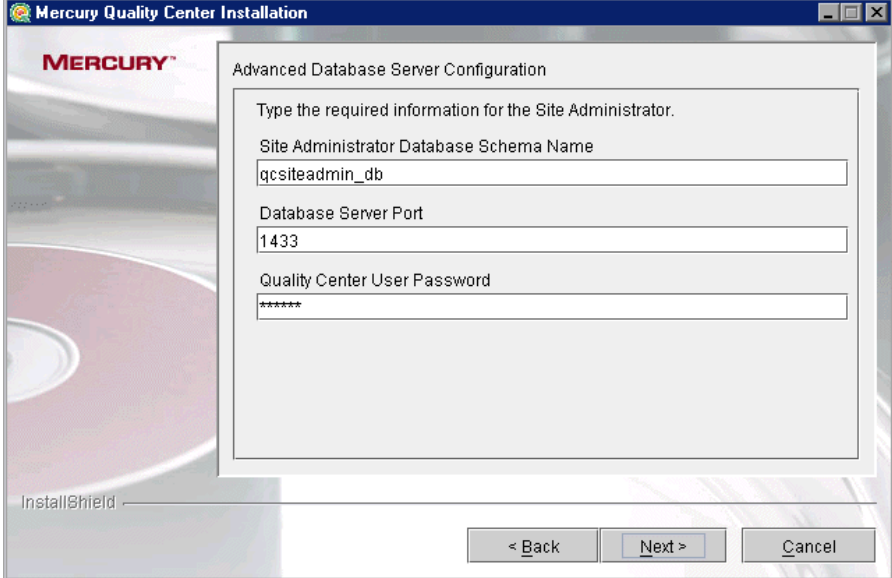
**Show advanced options.** Select this option to change the Site Administration database name, Microsoft SQL port number, and the Quality Center password.

Click **Next**.



**17** If you did not select **Show advanced options**, proceed to step 18 on page 60.

If you selected **Show advanced options**, the Advanced Database Server Configuration dialog box opens:



The screenshot shows a window titled "Mercury Quality Center Installation" with a sub-dialog titled "Advanced Database Server Configuration". The sub-dialog contains the following text and fields:

- Text: "Type the required information for the Site Administrator."
- Text: "Site Administrator Database Schema Name"
- Text input field: "qcsiteadmin\_db"
- Text: "Database Server Port"
- Text input field: "1433"
- Text: "Quality Center User Password"
- Text input field: "\*\*\*\*\*"

At the bottom of the sub-dialog are three buttons: "< Back", "Next >", and "Cancel". The "Mercury" logo is visible in the top left of the sub-dialog, and "InstallShield" is visible in the bottom left of the main window.

**Site Administrator Database Schema Name.** Type a Site Administration database schema name.

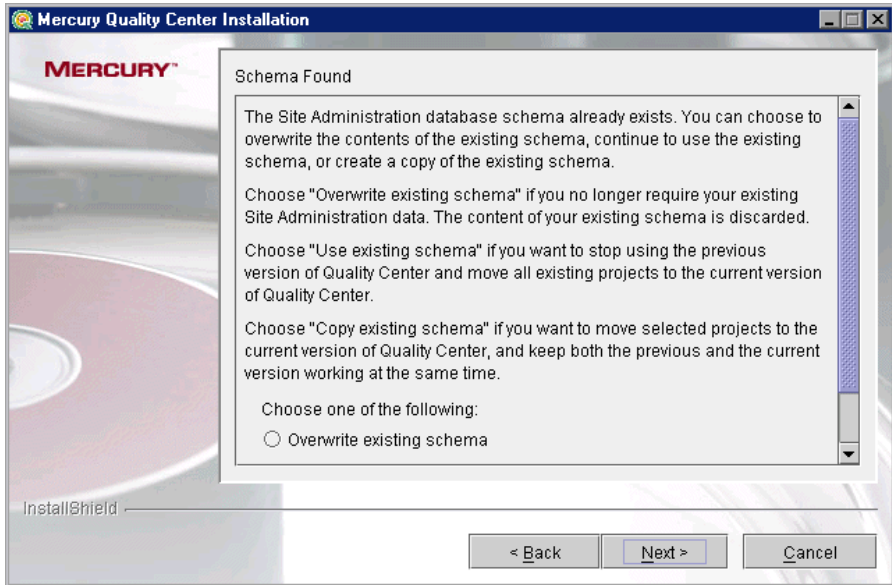
**Database Server Port.** Type the Microsoft SQL port number.

**Quality Center User Password.** Type the Quality Center user password for accessing the database schema, or accept the default password.

Click **Next**.

- 18** If the Site Administration database does not exist, proceed to step 19 on page 62.

If the Site Administration database already exists, the Schema Found dialog box opens.



Choose one of the following options:

- ▶ **Overwrite existing schema.** Creates a new Site Administration database. Choose this option if you want to discard the content of your existing schema.
- ▶ **Use existing schema.** Uses the existing Site Administration database. Choose this option if you want to stop using the previous version of Quality Center and move all existing projects to Quality Center 9.0.
- ▶ **Copy existing schema.** Creates a copy of the existing Site Administration database and saves it with an incremental number suffix (for example, qcsiteadmin\_db0). Choose this option if you want to move selected projects to Quality Center 9.0, and keep both the previous and the current version working at the same time.

**Note:**

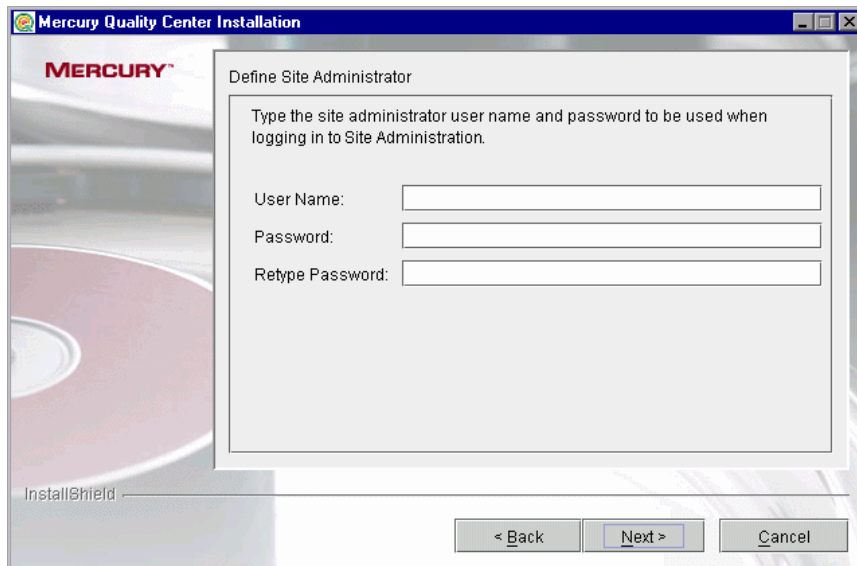
If you choose **Copy existing schema**, consider the following limitations:

- ▶ **Project upgrade:** Before you upgrade a project to Quality Center 9.0, you must disable the project and remove it from the projects list in your previous version of Site Administration.
- ▶ **Quality Center users:** After you install Quality Center 9.0, if you add or delete users, or update user details in your previous version of Quality Center, you must make the same changes in Quality Center 9.0.
- ▶ **Quality Center configuration parameters:** After you install Quality Center 9.0, if you modify configuration parameters in your previous version of Quality Center, you must make the same changes in Quality Center 9.0.
- ▶ **Server node configuration:** If you are working with server nodes, in the **Servers** tab in Site Administration for Quality Center 9.0, you must reconfigure the settings for the Quality Center server log file and the maximum number of database connections.
- ▶ **Quality Center repository path:** The repository path in your previous version must be defined as a network path.
- ▶ **DATACONST table:** The following constants must be set as network paths in the **DATACONST** table: `db_directory`, `tests_directory`, `unix_db_directory`, and `unix_tests_directory`.
- ▶ **Operating System:** Quality Center 9.0 must be installed on the same operating system as your previous version of Quality Center.
- ▶ **Version control:** You must check in all tests before you upgrade a version control project.
- ▶ **Version control:** If version control is enabled in your previous version of Quality Center, you must also install the same version control add-in on the Quality Center 9.0 server.

---

Click **Next**.

- 19** The Define Site Administrator dialog box opens. Note that if you chose **Use existing schema** or **Copy existing schema** (step 18 on page 60), a different version of this dialog box opens.



You use the site administrator name and password that you define in this dialog box to log in to Site Administration the first time. You can change the site administrator or add other site administrators at a later time in Site Administration.

- **User Name.** Type a site administrator user name.
- **Password.** Type a site administrator password. Applicable only if you chose **Overwrite existing schema**.
- **Retype Password.** Retype the site administrator password. Applicable only if you chose **Overwrite existing schema**.

---

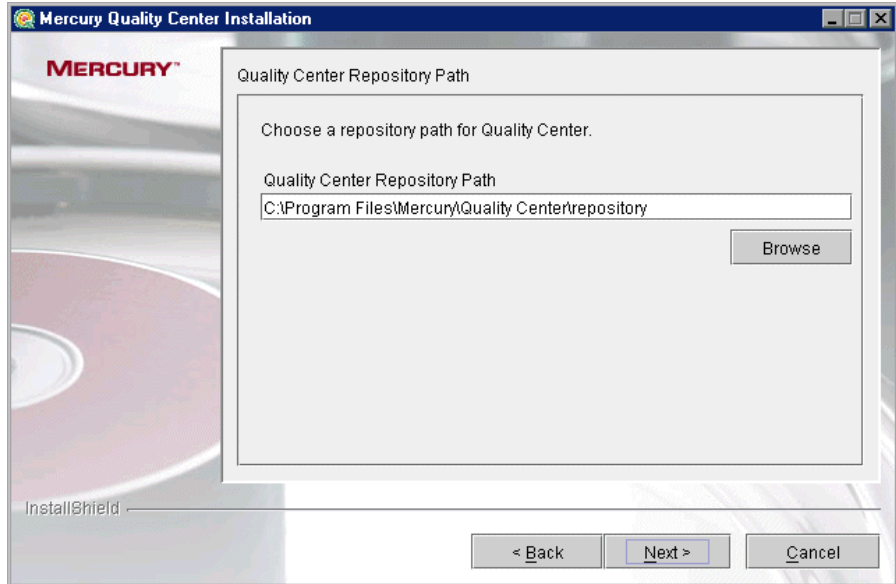
**Note:** It is important that you remember the site administrator user name and password as otherwise you will not be able to log in to Site Administration.

---

Click **Next**.

**20** If you are running a typical installation, proceed to step 21 on page 64.

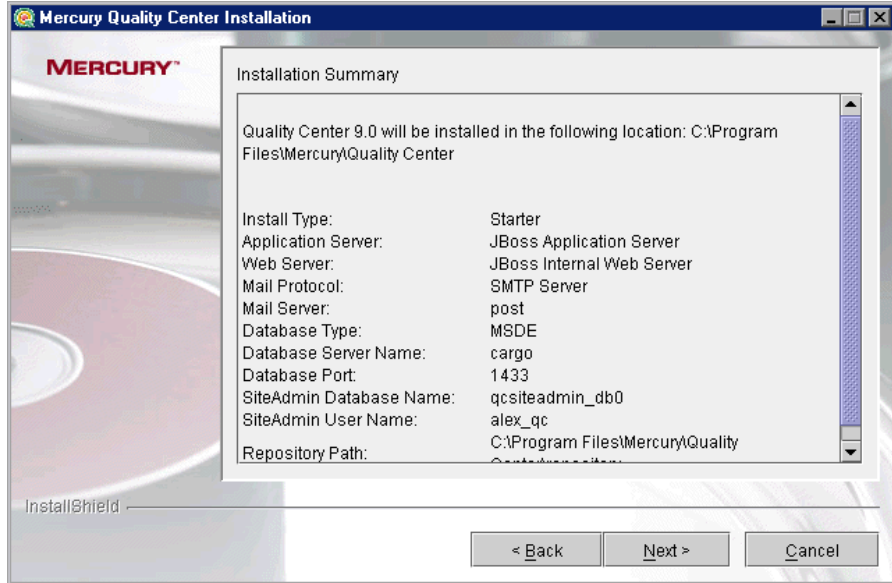
If you are running a custom installation, the Mercury Quality Center Repository Path dialog box opens.



Specify the location for the Quality Center repository path. You can click the browse button, choose a repository path, and click **OK**.

Click **Next**.

**21** The Installation Summary dialog box opens.

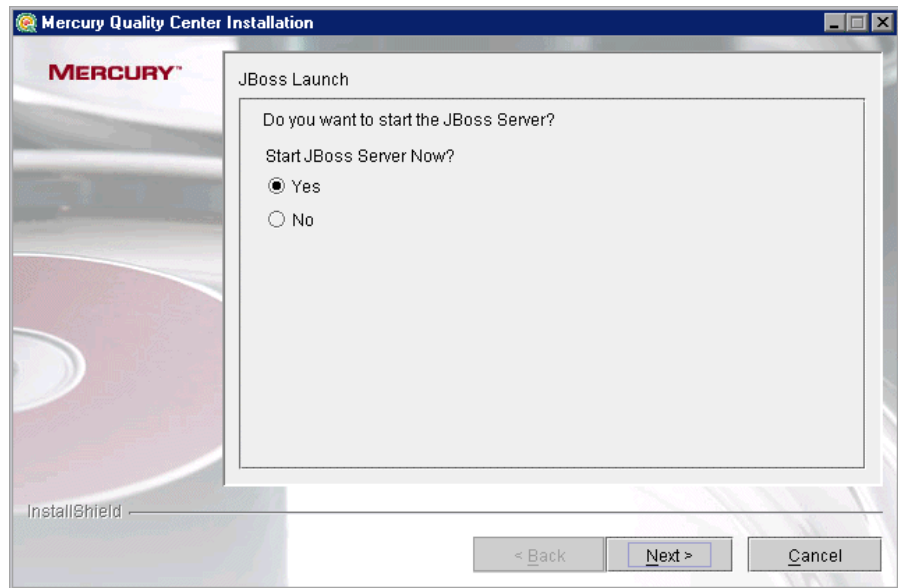


To review or change any settings, click **Back**.

To accept the settings and start the installation process, click **Next**. The installation process starts.

**22** If you are running a typical installation, proceed to step 23.

If you are running a custom installation, the JBoss Launch dialog box opens.



Choose one of the following options:

- ▶ **Yes.** To start the JBoss server now.
- ▶ **No.** To manually start the JBoss server later.

Click **Next**.

**23** When the installation process completes, the Installation Complete dialog box opens. Click **Finish**.

- 24** If you are prompted to restart your computer, you can choose to restart your computer at a later time, but you must restart your computer before you configure or use Quality Center, or before you install any Quality Center related files, such as integration add-ins.

---

**Note:** If you are prompted to restart, it is strongly recommended that you restart your computer as soon as possible.

---

- 25** You can use the Quality Center Checker to verify that the main Quality Center server components have been successfully installed. For more information, refer to the *Mercury Quality Center Administrator's Guide*.



# 4

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## Getting Started

This chapter introduces Quality Center options and resources. It also explains how to start Quality Center.

This chapter describes:	On page:
Browsing the Quality Center Program Folder	67
Starting and Stopping Quality Center Services	69
Starting Quality Center	70

### Browsing the Quality Center Program Folder

In Windows, after the Quality Center setup process is complete, the following items are added to your Quality Center program folder (**Start > Programs > Mercury Quality Center**):

Option	Description
<b>Mercury Quality Center</b>	Opens the Quality Center application. For more information, refer to the <i>Mercury Quality Center User's Guide</i> .
<b>Mercury Tours Demo</b>	Opens a sample flight reservation Web application. This Web application is used as a basis for the Quality Center Tutorial. For more information, refer to the <i>Mercury Quality Center Tutorial</i> .
<b>Readme</b>	Opens the Quality Center Readme, which provides the latest news and information about Quality Center.

Option	Description
<b>Documentation Library</b>	Opens an online help system that provides access to Quality Center guides and references that are available online, in PDF format, or both.
<b>Quality Center Checker</b>	A diagnostic tool that tests many of the Quality Center server components used by Quality Center. Running the Quality Center Checker can pinpoint the cause of many server side problems associated with accessing Quality Center. For more information, refer to the <i>Mercury Quality Center Administrator's Guide</i> .
<b>Site Administration</b>	Opens the Site Administration application. For more information, refer to the <i>Mercury Quality Center Administrator's Guide</i> .

## Starting and Stopping Quality Center Services

This section describes how to start or stop Quality Center services from Windows, Linux, and Solaris.

### To start or stop Quality Center services from Windows:



In the system tray, right-click the Quality Center icon and choose **Start Quality Center** or **Stop Quality Center**.

### To start or stop Quality Center services from Linux or Solaris:

- If you are working with JBoss, run the following commands:

<b>To start:</b>	<QC installation folder>/jboss/bin/run.sh
<b>To stop:</b>	Use one of the following options: <ul style="list-style-type: none"> <li>• &lt;QC installation folder&gt;/jboss/bin/shutdown.sh (or Ctrl-C in console)</li> <li>• kill &lt;jboss process ID&gt;</li> </ul>

- If you are working with WebLogic, run the following commands:

<b>To start:</b>	<WebLogic installation folder>/user_projects/domains/ <QC domain name>/startWeblogic.sh
<b>To stop:</b>	Use one of the following options: <ul style="list-style-type: none"> <li>• &lt;WebLogic installation folder&gt;/user_projects/domains/ &lt;QC domain name&gt;/stopWeblogic.sh</li> <li>• kill &lt;weblogic process ID&gt;</li> </ul>

- If you are working with WebSphere, run the following commands:

<b>To start:</b>	<WebSphere installation folder>/WebSphere/AppServer/bin/startServer.sh <WebSphere server name>
<b>To stop:</b>	<WebSphere installation folder>/WebSphere/AppServer/bin/stoptServer.sh<WebSphere server name>

## Starting Quality Center

You launch Quality Center on your workstation from your Web browser.

---

**Note:** Multiple instances of Quality Center using the same browser process are unsupported. To open another instance of Quality Center, you must launch a new browser process.

---

### To start Quality Center:

- 1 Open your Web browser and type your Quality Center URL `http://<Quality Center server name>[:<port number>]/qcbn`.

The Mercury Quality Center Options window opens.



The Mercury Quality Center Options window contains the following links:

Option	Description
<b>Quality Center</b>	Opens the Quality Center application. For more information, refer to the <i>Mercury Quality Center User's Guide</i> .
<b>Site Administration</b>	Opens the Site Administration application. For more information, refer to the <i>Mercury Quality Center Administrator's Guide</i> .
<b>Add-ins Page</b>	Opens the Mercury Quality Center Add-ins page. For more information, see "Installing Quality Center Add-ins" on page 75.
<b>Readme</b>	Opens the Quality Center Readme, which provides the latest news and information about Quality Center.

- 2** Click the **Quality Center** link. The first time you run Quality Center, the following files are downloaded to your computer:

File Name	Description
<b>American.adm &amp; Roget.adt</b>	Enables spell checking and thesaurus capabilities.
<b>comp_type.ini</b>	Enables the various types of tests included in the Business Components module.
<b>MerResourceLogger.dll</b>	Enables a common view for log files.
<b>OTAClient.dll</b>	Contains the Open Test Architecture API for Quality Center projects.
<b>OTAXml.dll &amp; OTaReport.dll</b>	Enables reporting capabilities.
<b>QCClientUI.ocx</b>	Contains the Quality Center user interface.
<b>SRunner.ocx</b>	Enables VAPI-XP.
<b>TdComandProtocol.exe</b>	Enables the connection between the mail service and Quality Center.

File Name	Description
TDTmplt.tcf	The template for the Document Generator.
test_type.ini	Enables the various types of tests included in the Test Plan module.
WebClient.dll	Contains a gate for Quality Center client/server communication.
wexectl.exe	Enables automated test execution.
XGO.ocx	Enables the Execution Flow tab in the Test Lab module.

Each time Quality Center is run, it carries out a version check. If it detects a newer version, it downloads the necessary files to your machine.

After the Quality Center version has been checked and files have been updated if necessary, the Mercury Quality Center Login window opens.



- 3** In the **User Name** box, type your user name.
- 4** In the **Password** box, type the password.
- 5** Select the **Automatically log in to my last domain and project on this machine** check box if you want Quality Center to automatically log in to the last project in which you were working.
- 6** Click **Authenticate**. Quality Center verifies your user name and password and determines which domains and projects you can access. If you specified automatic login, Quality Center opens.

If authentication fails, check your user name and password are correct and try again.

- 7** In the **Domain** list, select a domain. By default, the last domain in which you were working is displayed.
- 8** In the **Project** list, select a project. By default, the last project in which you were working is displayed.

If the demonstration project was installed on the Quality Center server, you can select the **QualityCenter\_Demo** project (make sure that you select **DEFAULT** in the **Domain** list). The project helps introduce you to Quality Center and includes sample requirements, tests, test sets, test runs, and defects. For more information, refer to the *Mercury Quality Center Tutorial*.

- 9** Click **Login**. Quality Center opens and displays the module (Requirements, Test Plan, Test Lab, or Defects) in which you last worked during your previous session.





# 5

## Installing Quality Center Add-ins

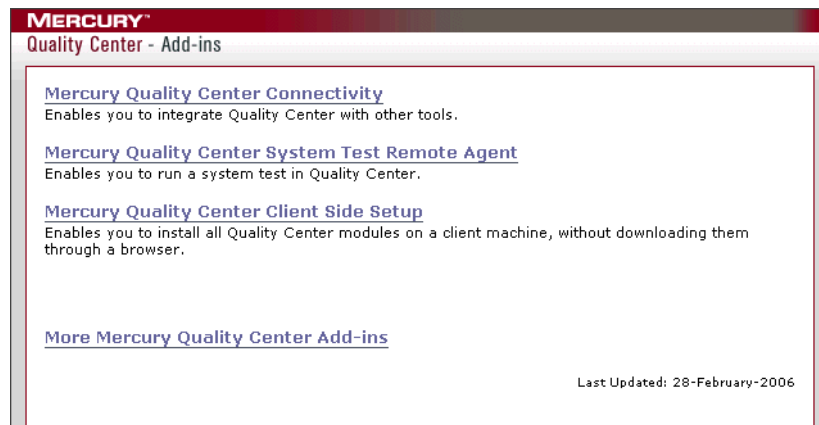
Quality Center offers integrations with Mercury testing tools as well as third-party, synchronization, and version control tools. To integrate Quality Center with other tools, you may need to install appropriate add-ins from the Mercury Quality Center Add-ins page.

**Note:** If you are integrating Quality Center with another tool, you can verify that you are using a supported version. On the Add-ins page, click the **More Mercury Quality Center Add-ins** link, and choose the appropriate Quality Center integrations matrix.

### To install a Quality Center add-in:

HELP ▾

- 1 Click **Add-ins Page** in the Mercury Quality Center Options window or choose **Help > Add-ins Page** in the Quality Center main window. The Add-ins page opens.



The following Quality Center add-ins are available:

- ▶ **Mercury Quality Center Connectivity.** Enables you to integrate Quality Center with other tools.
  - ▶ **Mercury Quality Center System Test Remote Agent.** Enables you to run a system test on a machine. You can run a system test to retrieve a machine's system information, view a captured desktop image of a test run on a machine, or restart a machine.
  - ▶ **Mercury Quality Center Client Side Setup.** Enables you to install all Quality Center modules on a client machine, without downloading them through a browser.
  - ▶ **More Mercury Quality Center Add-ins.** Enables you to install additional add-ins. This page is continuously updated by Mercury. The add-ins include integrations with Mercury tools and third-party tools.
- 2** Click an add-in link. A page with additional information about the add-in opens. If you click the More Quality Center Add-ins link, the More Quality Center Add-ins page opens, enabling you to select additional add-ins.
  - 3** Click the add-in guide link (where applicable) for instructions on using the add-in.
  - 4** Click the **Download Add-in** link to download and install the add-in. Follow the instructions on your screen.

# 6

---

## Verifying the IIS Configuration

After you install Quality Center on Windows, if you encounter a problem in the Internet Information Server (IIS) component, check the following settings:

This chapter describes:	On page:
IIS Account Settings	77
Quality Center Virtual Directory Settings	79

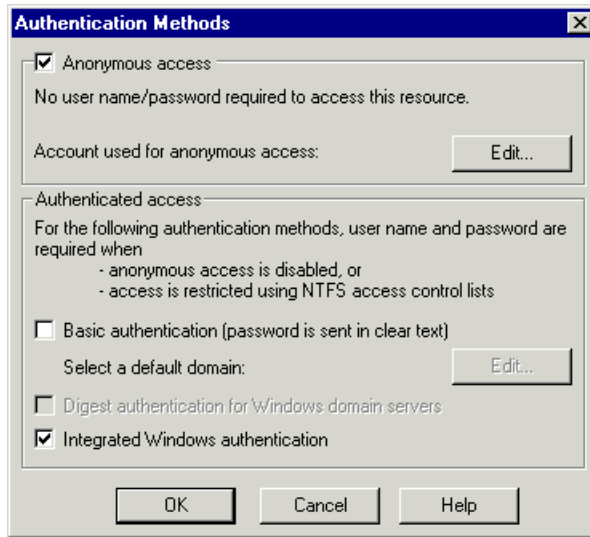
### IIS Account Settings

The Quality Center installation creates the IUSR\_<COMPUTER NAME> account. IIS uses this account to redirect users from IIS to Quality Center when they open Quality Center.

**To check the IIS account:**

- 1 Open the Internet Information Services Manager:
  - If you have IIS 5.0, from the **Start** menu, choose **Programs > Administrative Tools > Internet Services Manager**. The Internet Information Services window opens.
  - If you have IIS 6.0, from the **Start** menu, choose **Programs > Administrative Tools > Internet Information Services (IIS) Manager**. The Internet Information Services (IIS) Manager window opens.
- 2 Expand the tree in the left pane, if needed, and select the directory in which your Quality Center virtual directory is located. This is the IIS Web site that was selected during the Quality Center installation (for example, **Default Web Site**). For more information, see Chapter 2, “Installing Quality Center.”

- 3 Right-click the Quality Center virtual directory (by default, **quality\_center**) and choose **Properties**. The quality\_center Properties dialog box opens.
- 4 Click the **Directory Security** tab.
- 5 In the Anonymous Access and Authentication Control section, click the **Edit** button. The Authentication Methods dialog box opens.



The Authentication Methods dialog box contains three methods for setting up the user account used by IIS to authenticate user access: anonymous access, basic authentication, and integrated Windows authentication.

► **Anonymous Access Authentication.**

If **Anonymous access** is selected, when a user logs on to <Quality Center server>/qcbn or <Quality Center server>/sabin, IIS redirects the connection from IIS to Quality Center.

To check or change this account, click the Anonymous Access **Edit** button. The user account for IIS anonymous access is IUSR\_<COMPUTER NAME>.

► **Basic Authentication.**

If **Basic authentication** is selected, when a user logs on to <Quality Center server>/qcbn or <Quality Center server>/sabin, IIS authenticates the user according to the Windows domain.

To check the Windows domain for basic authentication, select the **Basic authentication** check box and click **Yes** to confirm. Then, click the Basic Authentication **Edit** button. The Basic Authentication Domain dialog box opens. If a domain is defined in the **Domain Name** box, the client can access IIS with any user account from that domain. If no domain is defined, the local domain is used, and the client can access IIS with any local user account.

Note that when basic authentication is selected, the Web browser transmits user accounts across the network in an unencrypted form.

► **Integrated Windows Authentication.**

The Integrated Windows Authentication method is best suited for an intranet environment. IIS uses the current Windows user information on the client machine to authenticate the user according to the Windows domain.

## Quality Center Virtual Directory Settings

Verify that the default virtual directory (by default, **quality\_center**) is configured properly.

**To check the configuration for the Quality Center virtual folders:**

- 1 Open the Internet Information Services Manager:
  - If you have IIS 5.0, from the **Start** menu, choose **Programs > Administrative Tools > Internet Services Manager**. The Internet Information Services window opens.
  - If you have IIS 6.0, from the **Start** menu, choose **Programs > Administrative Tools > Internet Information Services (IIS) Manager**. The Internet Information Services (IIS) Manager window opens.

- 2 Expand the tree in the left pane, if needed, and select the directory in which your Quality Center virtual directory is located. This is the IIS Web site that was selected during the Quality Center installation (for example, **Default Web Site**). For more information, see Chapter 2, “Installing Quality Center.”
- 3 Right-click the Quality Center virtual directory (by default, **quality\_center**) and choose **Properties**. The **quality\_center** Properties dialog box opens. In the **Virtual Directory** tab, verify that the following options are set:

Settings for IIS 5.0:	Settings for IIS 6.0:
<ul style="list-style-type: none"><li>• <b>Read</b> is selected.</li><li>• <b>Script source access</b>, <b>Write</b>, and <b>Directory browsing</b> are cleared.</li><li>• The <b>Application name</b> box is enabled and the <b>Remove</b> button is visible.</li><li>• <b>Scripts and Executables</b> is selected in the <b>Execute Permissions</b> list.</li><li>• <b>Medium (Pooled)</b> is selected in the <b>Application Protection</b> list.</li></ul>	<ul style="list-style-type: none"><li>• <b>Read</b> is selected.</li><li>• <b>Script source access</b>, <b>Write</b>, and <b>Directory browsing</b> are cleared.</li><li>• The <b>Application name</b> box is enabled and the <b>Remove</b> button is visible.</li><li>• <b>Scripts and Executables</b> is selected in the <b>Execute Permissions</b> list.</li><li>• <b>DefaultAppPool</b> is selected in the <b>Application Protection</b> list.</li></ul>

- 4 Click **OK** to close the **quality\_center** Properties dialog box.

# 7

---

## Customizing Quality Center

You can customize the names of the Quality Center modules, and the Tools and Help menus by modifying the **setup\_a.ini** file on your Quality Center server machine.

### To customize Quality Center:

- 1 On your server machine, open the **setup\_a.ini** file. This file is located:
  - **JBoss:** In the [Install Dir]\[Server]\server\default\deploy\20qcbn.war file.
  - **Other deployments:** Initially in the application folder. From this folder, you can move the file to an alternative location.
- 2 Locate the [File\_ 2] section in the file.
- 3 To change the names of the Quality Center modules, delete them, or rearrange their order, change the default names listed in the param\_RegisteredPages= line. The following is the syntax of an entry in the param\_RegisteredPages= line:

```
<Component_Name>, <CLSID>[!<Component_Name>,<CLSID>...]
```

---

**Note:** You can also customize the name of the Defects module by adding the **REPLACE\_TITLE** parameter in the **Site Configuration** tab in Site Administration. For more information, refer to the *Mercury Quality Center Administrator's Guide*.

---

- 4 To change, delete, or rearrange the list of items in the Tools menu, change the default names listed in the param\_RegisteredTools= line. The following is the syntax of an entry in the param\_RegisteredTools= line:

```
<Tool_Name>, <CLSID>[!<Tool_Name>,<CLSID>...]
```

- 5 To change, delete, or rearrange the list of items in the Help menu, change the default names and URLs listed in the `param_RegisteredHelp=` line. The following is the syntax of an entry in the `param_RegisteredHelp=` line:

```
<Help_Name>, <URL>[!<Help_Name>,<URL>...]
```

To create a separator line between two items in the Help menu, use the following syntax:

```
<Help_Name>, <URL>!-,!<Help_Name>,<URL>
```

---

**Note:** The first two menu items in the Help menu, **Help on this page** and **Documentation Library**, and the last Help menu item, **About Mercury Quality Center**, cannot be moved or changed. They do not have corresponding entries in the `setup_a.ini` file. The above step only affects the menu items between them.

---

- 6 Rebuild the war file.
- 7 Redeploy the war file. During the redeployment you will not be able to use Quality Center.



# 8

---

## Uninstalling Quality Center

You can uninstall Quality Center from your server machine. When uninstalling Quality Center, projects will not be deleted. You can also uninstall Quality Center components from a workstation that has been used to access Quality Center.

This chapter describes:	On page:
Uninstalling Quality Center from Windows	83
Uninstalling Quality Center from Linux or Solaris	84
Uninstalling Quality Center Components from a Workstation	84

### Uninstalling Quality Center from Windows

This section describes how to uninstall Quality Center from your Windows server machine.

#### To uninstall Quality Center from Windows:

- 1 Make sure that the application server is running.
- 2 To open the Mercury Quality Center Uninstall Wizard, you can:
  - ▶ Choose **Start > Settings > Control Panel > Add/Remove Programs** and follow the instructions on your screen.
  - ▶ Locate the Quality Center home directory ([drive]:\Mercury Interactive\Quality Center). In the **\_uninst** subdirectory, double-click **uninstall.exe**.
- 3 Click **Next**. Follow the instructions on your screen.

## Uninstalling Quality Center from Linux or Solaris

This section describes how to uninstall Quality Center from your Linux or Solaris server machine.

---

**Note:** To uninstall Quality Center, you must be the root user.

---

**To uninstall Quality Center from Linux or Solaris:**

- 1 Make sure that the application server is running.
- 2 Type the following command at the system prompt:  
`/[directory]/[Quality_Center_directory]/_uninst/uninstall.bin`  
The Mercury Quality Center Uninstall wizard opens.
- 3 Click **Next**. Follow the instructions on your screen.

## Uninstalling Quality Center Components from a Workstation

When you run Quality Center on your client computer, client components are downloaded to your workstation. You can use the client uninstall utility to remove all Quality Center client components, including files and registry keys. To download the utility, refer to the Mercury Support Knowledge Base (<http://support.mercury.com/cgi-bin/portal/CSO/kbBrowse.jsp>), select **TestDirector for Quality Center**, and search for Article Number 41804.

If the workstation is used to access Quality Center after the utility has been run, all necessary components are downloaded from the Quality Center server.