

SilkCentral Administration Module 12.0



Help

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SilkCentral Administration Module 12.0

Welcome to SilkCentral Administration Module 12.0.

The SilkCentral suite of products includes the applications SilkCentral Issue Manager (Issue Manager) and SilkCentral Test Manager (Test Manager). SilkCentral products, used individually or in combination, support the continuous and efficient quality assurance of your software development process. The Web-based products Issue Manager and Test Manager work together to deliver the information you require to make informed decisions about product readiness for shipment and live posting. They provide information on:

- Test coverage and results versus defined requirements
- Component- and system-level risk-assessment metrics
- Defect tracking and closure data

This information is vital for any person or group of people who are responsible for bringing a product or system into production.

- Borland has contracted for support of this product to be provided by its strategic partner Micro Focus. For support visit <http://support.microfocus.com/>.
- To contact Borland visit <http://www.borland.com>

Getting Started

This section provides overview information on how to work with SilkCentral.

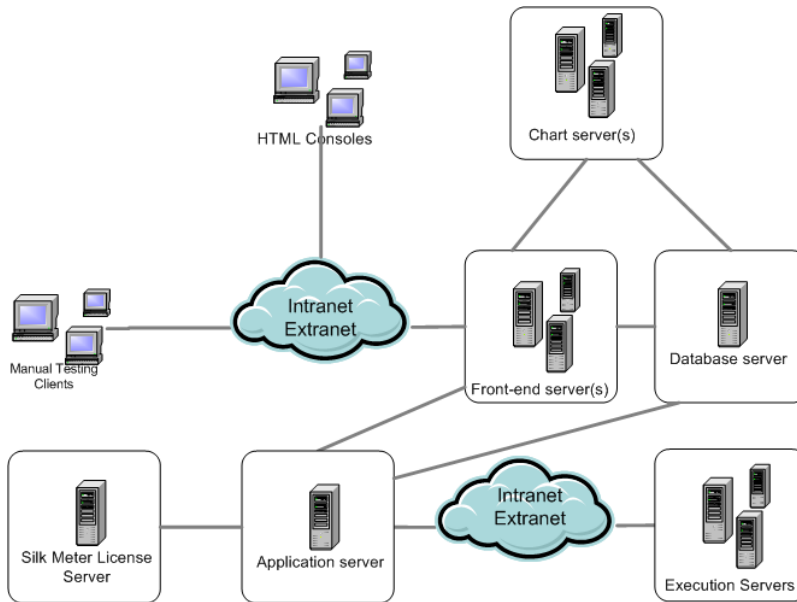
SilkCentral Architecture

SilkCentral products are based on SilkCentral Architecture, which allows for common administration of Web-based products.

The following sections describe the SilkCentral components.

- Overview
- Front-End Server
- Application Server
- Execution Server
- Chart Server
- Database Server
- SilkMeter License Server
- Manual Testing Client

Overview



Front-End Server

The front-end server is responsible for the graphical user interface. This server is based on HTML and is accessible from any Web browser, such as Internet Explorer or Firefox. A user sends an appropriate HTTP request to the front-end server and receives a login page for authentication. After successful login, the user can use the corresponding application based on the respective user rights. The front-end server can operate as a stand-alone HTTP server, or it can be attached to a Web server, such as IIS via ISAPI filter. The front-end server uses port 19120. For secure connections with SSL, the server also uses port 443.

Application Server

The application server synchronizes tasks such as the distribution of schedules, control of execution servers, and management of database configuration. These tasks require a centralized agency to ensure the consistent, reliable behavior of the application. The application server also evaluates results, saves them to the database, and sends alerts based on success conditions. The application server uses port 19122.

Execution Server

The execution server executes automated tests that are scheduled by authorized users. Users are responsible for the proper configuration of execution servers and additional resources that are required for test executions. The system allows for the installation and configuration of multiple execution servers working independently of one another. The execution server uses port 19124. For secure connections with SSL, the server also uses port 19125.

Chart Server

The chart server is used to generate charts that are viewed in reports. The system allows for the configuration of a pool of chart servers. A built-in load balancing mechanism uses the pool to distribute chart generation. The chart server is also used to generate reports and deliver them directly to the end-user for viewing within a browser. The chart server uses port 19126.

Database Server

System persistency is implemented using a RDBMS (Relational Database Management System). The database server uses ports 1433 and 1521.

SilkMeter License Server

SilkMeter, the licensing software that accompanies Silk products, determines the SilkCentral-application functionality that you may access. For more information on licensing, refer to the installation guide of the respective product. SilkMeter uses port 5461.

Manual Testing Client

The Manual Testing Client enables testers to manage their tests and track results without the need of an Internet connection. The Manual Testing Client offers the core, manual-test execution functionality that Test Manager provides, but through a Windows-based client tool.

Agent Computers

SilkPerformer and SilkTest Classic agent computers are assigned to particular SilkPerformer or SilkTest Classic projects from the pool of agent computers that are available to the controller computer. In combination with Test Manager, the controller computer acts as an execution server.

SilkPerformer Agents

SilkPerformer agent computers host the virtual users that are run during load tests. As many agent computers as necessary can be added to a SilkPerformer project so that the required quantity of virtual users can be run. Configuration of agents is done through SilkPerformer. Refer to the SilkPerformer documentation for details on configuring agents.

SilkTest Classic Agents

The same rules that apply to SilkPerformer agents apply to SilkTest Classic agents, except SilkTest Classic agents host SilkTest Classic tests.

SilkCentral Test Manager 12.0

SilkCentral® Test Manager™ (Test Manager) is a powerful, all-inclusive, software test-management tool. Test Manager builds quality and productivity into your testing process, speeding the delivery of successful

software projects while minimizing the risks of application failures. It consolidates all the critical software-testing phases within a single, scalable, Web-based testing system, enabling your local and distributed software-development teams to share experiences, resources, and critical information.

SilkCentral Issue Manager

SilkCentral Issue Manager (Issue Manager), the issue-tracking tool of SilkCentral, is fully integrated with Test Manager, enabling you to correlate issues with system requirements and executed tests.

Test issues can be added and managed in the menu through **Tests > Details View > Issues**. For more information, refer to the Issue Manager documentation.



Note: StarTeam and IBM Rational ClearQuest are also supported by Test Manager “out of the box”. Additional issue tracking systems can be configured by installing a custom plug-in. For more information, refer to the *Test Manager API Help*.

Access and Licensing

SilkMeter, the licensing software that accompanies Silk products, determines the SilkCentral-application functionality that you may access. For more information on licensing, see the respective product’s installation instructions.

Configuring the Application Server

After installing a SilkCentral application, there are a number of initial steps that must be performed by the system administrator before you can begin working with the software. The topics in this section describe each of the necessary steps.



Note: You must login as an administrator to perform the actions outlined in this section.

Configuring Secure Connections with Microsoft IIS

To use SilkCentral with Secure Sockets Layer (SSL), you must first obtain a certificate from a *Certificate Authority* and then apply the certificate to Internet Information Services (IIS).

Applying for a Certificate to use SSL

To apply for a certificate to use SSL:

1. Open the **Internet Information Services** dialog box by navigating to **Start > Programs > Administrative Tools > Internet Services Manager (Start > Programs > Administrative Tools > Internet Information Services (IIS) Manager** in Windows 2003).



Tip: If the **Administrative Tools** menu is not available, navigate to **Start > Settings > Control Panel** and double-click the **Administrative Tools** icon. Double-click the **Internet Information Services** icon (**Internet Information Services (IIS) Manager** in Windows 2003). Here you will find the name of your host computer and an expandable tree view.

2. Click the plus (+) symbol next to your computer’s name to expand the tree file.
3. On the **Internet Information Services** dialog box, right-click **Default Web Site** and select **Properties**.



Tip: If you are running Windows XP or Windows 2003, expand the **Web Sites** tree. Then right-click **Default Web Site** and select **Properties**.

The **Default Web Site Properties** dialog box displays.

4. Click the **Directory Security** tab.
5. Click **Server Certificate** next to the key graphic at the bottom of the **Default Security** dialog box. The **Welcome to the Web Server Certificate Wizard** displays.
6. Click **Next**.
The **IIS Certificate Wizard** displays with options for assigning a certificate to a Web site.
7. Choose **Create a new certificate** and click **Next**.



Note: If you already have a certificate installed, this dialog box will prompt you with the question What do you want to do with the currently installed certificate? If this dialog box displays, skip the remainder of this section.

8. Create a new certificate.
For more information, see *Creating a New Certificate to Use SSL*.

Creating a New Certificate to Use SSL



Note: To create a new certificate, you first have to perform the steps described in *Applying for a Certificate to use SSL*.

To create a new certificate:

1. Click **Next** in the **IIS Certificate Wizard / Delayed or Immediate Request** dialog box, or choose when to send your request. The **IIS Certificate Wizard / Name and Security Settings** dialog box displays.
2. Type a name of your choice in the **Name** text box.
This is usually the name of the computer for which you are requesting a certificate.
3. Choose a **Bit length** in the appropriate text box.
You may leave the default length of **512** or choose the **1024** list box option. Choosing a higher bit length increases security, but can also affect performance.
4. Click **Next**. The **IIS Certificate Wizard / Organization Information** dialog box displays.
5. Type the name of your **Organization** and the **Organizational unit**, for example QA, to which your computer belongs.
6. Click **Next**. The **IIS Certificate Wizard / Your Site's Common Name** dialog box displays.
7. Type the name of your site or computer and click **Next**. The **IIS Certificate Wizard / Geographical Information** dialog box displays.
8. Enter geographical information relevant to the location of your computer or organization and click **Next**. The **IIS Certificate Wizard / Certificate Request File Name** dialog box displays.
9. Type the name of the file in which your certificate is to be located and click **Next**. The **IIS Certificate Wizard / Request File Summary** dialog box displays. All of the information you have entered is displayed here.
10. If the information is incorrect, click **Back** to return and change the information. If the information is correct, click **Next** to continue. The **IIS Certificate Wizard Completion** dialog box displays, informing you that you have completed the wizard. This dialog box provides instructions regarding what you must do with the file to obtain a certificate. Follow the instructions in the dialog box or ask your system administrator for assistance.

Applying the Certificate to IIS

Once you have received a response to your certificate query and have the file in which you have stored the certificate, you may apply the certificate to IIS. For additional information, see *Applying for a Certificate to use SSL*.

To apply the certificate to the IIS:

1. Navigate to **Start > Programs > Administrative Tools > Internet Services Manager (Start > Programs > Administrative Tools > Internet Information Services (IIS) Manager** in Windows 2003).



Tip: If the **Administrative Tools** menu is not available, navigate to **Start > Settings > Control Panel** and double-click the **Administrative Tools** icon. Double-click the **Internet Information Services** icon (**Internet Information Services (IIS) Manager** in Windows 2003).

2. Expand the tree until **Default Web Site** is displayed.
3. Right-click **Default Web Site** and select **Properties**. The **Default Web Site Properties** dialog box opens.
4. Click the **Directory Security** tab in the **Default Web Site Properties** dialog box.
5. Click the **Server Certificate** option next to the key icon at the bottom of the dialog box. The **Welcome to the Web Server Certificate Wizard** displays.
6. Click **Next**. The **IIS Certificate Wizard** displays with options for proceeding with a pending request.
7. Select **Process the pending request** and install the certificate. Click **Next**. The **IIS Certificate Wizard / Process the pending request** dialog box displays.
8. Type the location of the Certificate Authority's response, which is the certificate that they sent you directly or that you received from your system administrator. Click **Next**.
The **IIS Certificate Wizard / Certificate Summary** dialog box displays with information about the certificate.
9. Click **Next** to install the certificate. The **IIS Certificate Wizard / Completing the Web Server Certificate Wizard** displays.
10. Click **Finish** to complete the process.
11. Close the **Authentication** by clicking **OK**. You may also close the **Default Web Site Properties** dialog box by clicking **OK**.

You have now completed IIS configuration for SSL and can use SSL for secure connections to SilkCentral.

Application Server Location

The application server synchronizes tasks such as the distribution of schedules, control of execution servers, and management of database configuration. Before you can start working with SilkCentral applications, you need to specify the location of the application server.

Specifying a Location for the Application Server

When you use the `Standard Setup` option for installing a SilkCentral application, you do not need to specify an application server location. Setup automatically configures the localhost to be the application server. In this case you can skip this procedure. For additional information on setup options, see the application's installation instructions.

To specify a location for the application server:

1. Once you have installed the SilkCentral software, connect to SilkCentral using a Web browser.



Tip: If you installed ISAPI Web Server, use `http://<Web-server-name>/login` as the URL. If you installed the stand-alone Web Server, use `http://<Web-server-name>:19120/login` as the URL. The stand-alone Web server uses port 19120 by default.

You will receive a confirmation stating that the application server connection has not yet been defined.

2. Enter the **Host** or **IP address** and the **Port** of the application server.

The application server is the computer where you installed SilkCentral's application server component. The default port is 19122.

3. Click **Login** to proceed. If your specifications are correct and the respective computer is running with the installed software, you will be returned to the login page with the message
Application server connected successfully

The **Database Administration** page displays.


SilkCentral Repositories

The terms “database” and “repository” are sometimes used interchangeably, but generally a repository is defined as a central place in which an aggregation of data is kept and maintained. The conceptual model for SilkCentral is that of a data repository that contains the application data.


A repository is a database used by SilkCentral products to store, maintain, and analyze data. You must first choose which database system you want to use for your repository and take the necessary steps in the SilkCentral GUI to access the repository. You must be connected to a repository to work with SilkCentral products.

You may set up multiple repositories, though only one repository at a time may be active.

To connect to a new SilkCentral database, you must first disconnect from the current database.

 **Note:** You will receive error messages if you try to work with SilkCentral while the database is disconnected.


We recommend to perform administrative tasks that require the database to be disconnected during off-hours. If this is not possible, make sure to inform the users about the system-outage and its duration.

 **Note:** If you are not planning on using LDAP authentication, user accounts will be stored in the repository. If you plan to use multiple repositories, you will have to maintain separate user accounts for each repository.

Creating a New Repository

 **Note:** If you are currently connected to a SilkCentral repository, you must disconnect from the repository before you can create a new repository.

To create a new repository:

1. If you have already set up your SilkCentral application server, the **Database Administration** page will display in a browser window, and you can proceed to step 3 of this procedure.
 **Tip:** Alternatively, you can browse to your SilkCentral site with a Web browser. The default URL is `http://<computer name>:<port>/login`. When you use the *Standard Setup* option for installing SilkCentral, the **Database Administration** page displays immediately after you connect to the application. On the computer where the front-end server is installed, you can also select **Start > Programs > Silk > SilkCentral > Test Manager 12.0 > Test Manager Home Page** .
2. If not already logged in, log in.
admin is the default value for both the **username** and the **password**.
3. In the menu, click **Administration > System Settings**.
4. Click the **Database** tab.
5. Enter the information for the new database, then click **Connect**.

You can create a database on the locally installed Microsoft SQL Server 2008 Express, a locally installed Microsoft SQL Server or Oracle installation, or on a network server that has MS SQL Server or Oracle installed. SilkCentral supports:

- Microsoft SQL Server 2005 Service Pack 3
- Microsoft SQL Server 2005 Service Pack 2
- Microsoft SQL Server 2008 R2
- Oracle 10g (version 10.2.0.5)
- Oracle 11g (version 11.2.0.2)



Tip: For detailed information on the individual connection settings, see the *Database Settings Page*.

The **Create Database** dialog box displays.

6. To create a new database, provide the database administrator credentials.

If you installed SilkCentral using the evaluation setup package, type `sa` in the **Username** text box and `SilkCentral12!34` in the **Password** text box, then click **OK**.



Tip: If you are creating a local or network Microsoft SQL Server or Oracle database, enter the login information provided to you by your database administrator, then click **OK**.



Note: This process can take up to a few minutes.

7. Type a unique repository ID into the **ALM Repository ID** text box in the **Create ALM Repository ID** dialog box and click **OK**.
8. A **Messages** dialog box may display, informing you of servers that were found on the local computer and have automatically been added to the system configuration. Confirm this dialog box by clicking **OK**. If you receive a warning message stating `Couldn't define localhost as Execution Server`, you need to configure your execution servers manually.
9. You will be notified that the repository has been created successfully. Confirm the message by clicking **OK**. The login page displays.
10. Log in using your standard **username** and **password**.

The default is `admin/admin`. Do not log in as a database administrator. Information about the currently connected database is displayed in **Administration > System Settings > Database**, but other available databases are not displayed anywhere in the SilkCentral user interface. You must make a note of the database name for future reference.

Your system is now ready for use.

Accessing an Existing Repository

To access an existing repository:

1. In the menu, click **Administration > System Settings**.
 2. Click the **Database** tab.
 3. If you are already connected to a repository, click **Disconnect**. A confirmation dialog box displays, asking you if you really want to disconnect from the current repository. Click **Yes** to disconnect.
 4. Type or confirm the information for the database, then click **Connect**.
- For detailed information on the individual connection settings, see *Database Settings Page*.
5. If the repository has no ALM repository ID, the **Create ALM Repository ID** dialog box displays. Enter a unique repository ID into the **ALM Repository ID** text box and click **OK**.
 6. After the database connection is established, a confirmation message displays. Confirm the message by clicking **OK**. The SilkCentral login page displays.
 7. Log in to SilkCentral. After you log in, you should have access to SilkCentral.

The default value for both the **username** and **password** is `admin`.

Repository IDs

Each Test Manager repository must have a unique repository ID. This ID is used in ALM URIs to uniquely identify Test Manager requirements and tests across multiple Test Manager repositories. The repository ID must be unique within your company's Test Manager installations. The supplied repository ID will be part of the ALM URI. For additional information on ALM URIs, see *ALM URIs*. It is good practice to use a descriptive ID, for example `USCA01`, for USA, California, repository #01 or `GEBE02`, for Germany, Berlin,

repository #02. Allowed characters are letters, numbers, period (.), and minus (-). IDs must have a length of 1 to 20 characters.



Caution: Once a repository ID has been set, it cannot be changed.

ALM URIs

Repository IDs are incorporated into Application Lifecycle Management Uniform Resource Identifiers (ALM URIs). ALM URIs offer a means of addressing elements across ALM Server platform and the ability to distinguish and track elements between applications. Among other things, ALM URIs are used to uniquely identify Test Manager requirements and tests across multiple Test Manager repositories.

The ALM element URI syntax is as follows:

```
<ALM URI> = alm://<source project>/<source element path>[?<source version>]
<source project> = <source type>!<project identity>
```

For Test Manager, <source type> = sctm. For Issue Manager, <source type> = scim.

Project identity is built as follows:

```
<project identity> = <repository ID>_<project ID>
```

<repository ID> is a unique identifier for each Test Manager and Issue Manager repository. Each repository generates a unique identifier that is stored inside the repository. Uniqueness is guaranteed across all repositories that you may have installed. <project ID> is an identifier for a Test Manager or Issue Manager project. This identifier is unique in the context of each repository.

Source Element Path:

For Test Manager and Issue Manager, the following syntax for referencing artifacts is used:

Test Manager native requirements, which are requirements that are not linked with an external requirement management system, use the following syntax:

```
<source element path> = /<requirement ID>;ns=requirement
```

Test Manager tests use the following syntax:

```
<source element path> = /<test ID>;ns=test
```

Test Manager and Issue Manager issues use the following syntax:

```
<source element path> = /<issue ID>;ns=issue
```

Example ALM URI:

```
alm://sctm!USCA01_23/602;ns=test
```

Test Manager repository USCA01, project ID 23, element ID 602, element type test.

Enabling the TCP/IP Protocol for Microsoft SQL Server 2005

If you are using Microsoft SQL Server 2005, you need to configure the SQL Server to use the TCP/IP protocol. If you are using a different database system, skip this procedure.

Before you enable the TCP/IP protocol, verify the following settings on the computer hosting the SQL Server installation:

- The **SQL Server Browser** service must run on Windows. We recommend that you change the properties of this service to **Startup type: Automatic**. Windows Services settings can be found in **Start > Settings > Control Panel > Administrative Tools > Services**.
- The SQL Server must use the TCP/IP protocol.

To enable the TCP/IP protocol for Microsoft SQL Server 2005:

1. Run the **SQL Server Configuration Manager** tool that comes with Microsoft SQL Server 2005.
2. In the displayed tree, select **SQL Server 2005 Network Configuration > Protocols for MSSQLSERVER**.
3. In the pane to the right of the tree view, right-click **TCP/IP** and choose **Enable**.
4. Back in the tree view pane, select **SQL Server 2005 Services**.
5. In the pane to the right of the tree view, right-click **SQL Server (MSSQLSERVER)** and select **Restart** from the context menu.

Disconnecting from a SilkCentral Repository




To disconnect from a repository:


1. Browse to your SilkCentral site with a Web browser.
The default URL is `http://<computer name>/login`.
2. Log in.
The default value for both the **username** and **password** is `admin`.
3. In the menu, click **Administration > System Settings**.
4. Click the **Database** tab.
5. Click **Disconnect** to disconnect from the current database.

Database Settings Page


Administration > System Settings > Database

Use the **Database Settings** page to configure access to a database. The page includes the following items:

Item	Description								
DBMS hostname or IP address	The computer name or IP address of the computer hosting the database management system (DBMS) in the format <code><computer name>\<instance name></code> .								
	<table border="0"> <thead> <tr> <th>Database System</th> <th>Hostname Description</th> </tr> </thead> <tbody> <tr> <td>Microsoft SQL Server 2005 or Microsoft SQL Server 2008 R2</td> <td> <code><computer name>\<instance name></code>, for example <code>localhost</code>.  Note: An instance name only needs to be provided if the DBMS was installed using an instance. </td> </tr> <tr> <td>Microsoft SQL Server 2008 Express</td> <td><code><computer name>\<instance name></code>. The default MS SQL Server Express instance is <code>localhost\SQLExpress</code>.</td> </tr> <tr> <td>Oracle Server</td> <td><code><computer name></code>, for example <code>MyDBMSHost</code>. If you plan on creating custom reports with direct database access, define a DBMS hostname or IP address that is available throughout the network.</td> </tr> </tbody> </table>	Database System	Hostname Description	Microsoft SQL Server 2005 or Microsoft SQL Server 2008 R2	<code><computer name>\<instance name></code> , for example <code>localhost</code> .  Note: An instance name only needs to be provided if the DBMS was installed using an instance.	Microsoft SQL Server 2008 Express	<code><computer name>\<instance name></code> . The default MS SQL Server Express instance is <code>localhost\SQLExpress</code> .	Oracle Server	<code><computer name></code> , for example <code>MyDBMSHost</code> . If you plan on creating custom reports with direct database access, define a DBMS hostname or IP address that is available throughout the network.
Database System	Hostname Description								
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Item	Description						
DBMS type	The type of DBMS you want to access, <code>MSSQL Server</code> or <code>Oracle</code> .						
Port	The port on which the DBMS listens. The default port for Microsoft SQL Server, including Express, is 1433. The default port for Oracle is 1521.						
Database / SID	<p>MSSQL Server database name or Oracle SID provided by your Oracle administrator.</p> <p><i>For Oracle database administrators:</i> Configure the Oracle SID to use the UTF8 character set.</p>						
Username	<p>Database user with sufficient credentials. The default Microsoft SQL Server user, including Microsoft SQL Express, is <code>sa</code>, if not changed by your database administrator. For Oracle Server, enter the database user provided by your Oracle administrator.</p> <p> Important: For Oracle Servers, the database username cannot contain periods (.).</p>						
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Oracle Server	Password for the database user. Ask your Oracle administrator for the correct login credentials if you are not sure.						
Read-only Username (optional)	An optional database user with read-only rights on all tables and views in the specified database. Defining a read-only user enhances database security. If your DBMS is Microsoft SQL Server, SilkCentral automatically creates this user if you specify a name and password. If your DBMS is Oracle, your database administrator needs to create the user in Oracle and your SilkCentral administrator needs to add that user to SilkCentral.						
Read-only Password (optional)	Valid password for the specified Read-only Username (optional) .						
Status	Displays the status of the SilkCentral connection to the DBMS.						
DBMS version info	Displays DBMS and operating system version information.						
ALM Repository ID	Displays the ALM URI of the repository.						

Item	Description
Connect / Disconnect	Depending on the current connection status, use this button to connect to or disconnect from a DBMS.

 **Note:** When you connect to the database and the version of an execution server is an invalid older version, but later than or equal to version SilkCentral Test Manager 2009 SP1, the execution server is automatically upgraded to the current Test Manager version. Test Manager shows a message concerning the upgrade in the **Information** column in the list of execution servers. As long as the upgrade procedure is not complete, the upgrading execution servers are not used.

Configuring the System

This section describes how to make the initial configurations that are required to work with SilkCentral. These configurations must be performed by an administrator.

Using the Overview Page

The **Overview** page displays important configuration items in a single location. The items displayed in the page are bundled into tasks. Use this page to easily configure all the settings you need for a specific task.

Overview Page

Administration > Overview

The **Overview** page provides quick access to important configuration items. The page includes the following sections:

Section	Description
System	Basic system settings.
Project Management	Provides quick access to the Projects page.
Cross-Project Assets	Provides access to configurations that are independent of the current project.
User Management	Provides access to Administration > User Management .
Automated Testing Settings	Settings commonly used during setup of automated tests.
Logs	Provides access to the log pages in Administration > Log Files .
Help	Provides access to the product documentation, the downloadable client tools, and the about page.

Secure Web Server Connections with SSL

If you intend to work using a secure connection and have opted to install the ISAPI Web Server, then you must configure Microsoft Internet Information Services (IIS) to use the Secure Sockets Layer (SSL). You must first obtain a certificate from a Certificate Authority to gain access to the Secure Sockets Layer.

The SilkCentral default standalone Web server (Tomcat) can also be configured to use SSL (Secure Sockets Layer).

Configuring Secure Connections with Microsoft IIS

To use SilkCentral with Secure Sockets Layer (SSL), you must first obtain a certificate from a *Certificate Authority* and then apply the certificate to Internet Information Services (IIS).

Applying for a Certificate to use SSL

To apply for a certificate to use SSL:

1. Open the **Internet Information Services** dialog box by navigating to **Start > Programs > Administrative Tools > Internet Services Manager** (**Start > Programs > Administrative Tools > Internet Information Services (IIS) Manager** in Windows 2003).



Tip: If the **Administrative Tools** menu is not available, navigate to **Start > Settings > Control Panel** and double-click the **Administrative Tools** icon. Double-click the **Internet Information Services** icon (**Internet Information Services (IIS) Manager** in Windows 2003). Here you will find the name of your host computer and an expandable tree view.

2. Click the plus (+) symbol next to your computer's name to expand the tree file.
3. On the **Internet Information Services** dialog box, right-click **Default Web Site** and select **Properties**.



Tip: If you are running Windows XP or Windows 2003, expand the **Web Sites** tree. Then right-click **Default Web Site** and select **Properties**.

The **Default Web Site Properties** dialog box displays.

4. Click the **Directory Security** tab.
5. Click **Server Certificate** next to the key graphic at the bottom of the **Default Security** dialog box. The **Welcome to the Web Server Certificate Wizard** displays.
6. Click **Next**.

The **IIS Certificate Wizard** displays with options for assigning a certificate to a Web site.

7. Choose **Create a new certificate** and click **Next**.



Note: If you already have a certificate installed, this dialog box will prompt you with the question **What do you want to do with the currently installed certificate?** If this dialog box displays, skip the remainder of this section.

8. Create a new certificate.

For more information, see *Creating a New Certificate to Use SSL*.

Creating a New Certificate to Use SSL



Note: To create a new certificate, you first have to perform the steps described in *Applying for a Certificate to use SSL*.

To create a new certificate:

1. Click **Next** in the **IIS Certificate Wizard / Delayed or Immediate Request** dialog box, or choose when to send your request. The **IIS Certificate Wizard / Name and Security Settings** dialog box displays.
2. Type a name of your choice in the **Name** text box.
This is usually the name of the computer for which you are requesting a certificate.
3. Choose a **Bit length** in the appropriate text box.
You may leave the default length of **512** or choose the **1024** list box option. Choosing a higher bit length increases security, but can also affect performance.
4. Click **Next**. The **IIS Certificate Wizard / Organization Information** dialog box displays.
5. Type the name of your **Organization** and the **Organizational unit**, for example **QA**, to which your computer belongs.
6. Click **Next**. The **IIS Certificate Wizard / Your Site's Common Name** dialog box displays.
7. Type the name of your site or computer and click **Next**. The **IIS Certificate Wizard / Geographical Information** dialog box displays.
8. Enter geographical information relevant to the location of your computer or organization and click **Next**. The **IIS Certificate Wizard / Certificate Request File Name** dialog box displays.
9. Type the name of the file in which your certificate is to be located and click **Next**. The **IIS Certificate Wizard / Request File Summary** dialog box displays. All of the information you have entered is displayed here.
10. If the information is incorrect, click **Back** to return and change the information. If the information is correct, click **Next** to continue. The **IIS Certificate Wizard Completion** dialog box displays, informing

you that you have completed the wizard. This dialog box provides instructions regarding what you must do with the file to obtain a certificate. Follow the instructions in the dialog box or ask your system administrator for assistance.

Applying the Certificate to IIS

Once you have received a response to your certificate query and have the file in which you have stored the certificate, you may apply the certificate to IIS. For additional information, see *Applying for a Certificate to use SSL*.

To apply the certificate to the IIS:

1. Navigate to **Start > Programs > Administrative Tools > Internet Services Manager (Start > Programs > Administrative Tools > Internet Information Services (IIS) Manager** in Windows 2003).



Tip: If the **Administrative Tools** menu is not available, navigate to **Start > Settings > Control Panel** and double-click the **Administrative Tools** icon. Double-click the **Internet Information Services** icon (**Internet Information Services (IIS) Manager** in Windows 2003).

2. Expand the tree until **Default Web Site** is displayed.
3. Right-click **Default Web Site** and select **Properties**. The **Default Web Site Properties** dialog box opens.
4. Click the **Directory Security** tab in the **Default Web Site Properties** dialog box.
5. Click the **Server Certificate** option next to the key icon at the bottom of the dialog box. The **Welcome to the Web Server Certificate Wizard** displays.
6. Click **Next**. The **IIS Certificate Wizard** displays with options for proceeding with a pending request.
7. Select **Process the pending request** and install the certificate. Click **Next**. The **IIS Certificate Wizard / Process the pending request** dialog box displays.
8. Type the location of the Certificate Authority's response, which is the certificate that they sent you directly or that you received from your system administrator. Click **Next**.
The **IIS Certificate Wizard / Certificate Summary** dialog box displays with information about the certificate.
9. Click **Next** to install the certificate. The **IIS Certificate Wizard / Completing the Web Server Certificate Wizard** displays.
10. Click **Finish** to complete the process.
11. Close the **Authentication** by clicking **OK**. You may also close the **Default Web Site Properties** dialog box by clicking **OK**.

You have now completed IIS configuration for SSL and can use SSL for secure connections to SilkCentral.

Configuring Secure Connections with Tomcat Web Server

You need to be familiar with Tomcat and SSL configuration to perform this task.

Set up the SilkCentral default standalone Web server (Tomcat) to use SSL (Secure Sockets Layer).

To enable secure communication with SilkCentral:

1. Log on to the SilkCentral server as an Administrator.
2. Stop all SilkCentral services (application, chart, execution, and front-end servers).
3. To generate a unique certificate for your Tomcat Web server, execute the following command in the SilkCentral Java directory: `C:\Program Files\Silk\SC Test Manager 12.0\lib\jre\bin\keytool -genkey -alias tomcat -keyalg RSA`.
4. Specify a keystore password value of `changeit`.
If you desire to use a unique password, specify it here.

5. The keystore command prompt sequence will be similar to the following. Respond accordingly.

```
What is your first and last name?
[Unknown]: hostname.domain.com
What is the name of your organizational unit?
[Unknown]: IT Department (if that is the group creating the certificate)
What is the name of your organization?
[Unknown]: Company Name
What is the name of your City or Locality?
[Unknown]: City
What is the name of your State or Province?
[Unknown]: State
What is the two-letter country code for this unit?
[Unknown]: US
Is CN=xxxx, OU=xxxxxxx, O=xxxxxxx, L=xxxxxxxxxx, ST=xxxxx, C=xx correct?
[no]: Yes (These values will reflect what you entered previously)
Enter key password for <tomcat> same as keystore password
(RETURN if same as keystore password):
```

A file named `.keystore` is generated in the profile folder of the user you are logged in with, for example `C:\Users\Administrator`.



Note: By default Tomcat will look for your Keystore with the file name `.keystore` in the home directory with the default password `changeit`. The home directory is generally `/home/user_name/` on Unix and Linux systems, and `C:\Documents and Settings\user_name\` or `C:\Users\user_name\` on Microsoft Windows systems.

6. Move the `.keystore` file to a safe location of your choice.



Note: On some operating systems, Tomcat may encounter problems if you use a location that contains space characters.

7. Edit the Tomcat configuration file:

Locate the `server.xml` file in the `conf\frontendserver\conf` subdirectory of the directory where SilkCentral is installed.

8. Open the file in a text editor such as Notepad. Comment out the current `Connector` entry and add the following text:

```
<!-- Define a SSL Coyote HTTP/1.1 Connector on port 8443 -->
<Connector port="8443" minSpareThreads="25" URIEncoding="UTF-8"
compression="on"
compressableMimeType="text/html,text/xml,text/plain,text/css,text/
javascript,application/xml"
debug="0" scheme="https" secure="true" SSLEnabled="true" clientAuth="false"
sslProtocol="TLS" keystorePass="changeit" keystoreFile="C:\<file location>
\keystore"/>
```



Note: Make sure that the path specified in the `keystoreFile` parameter matches the location that you copied the `.keystore` file to. If you choose to use a different password other than `changeit`, you will need to add the `keystorePass` parameter to the `server.xml` file entry:

```
<Connector port="8443" minSpareThreads="25" URIEncoding="UTF-8"
compression="on"
compressableMimeType="text/html,text/xml,text/plain,text/css,text/
javascript,application/xml"
debug="0" scheme="https" secure="true" SSLEnabled="true"
clientAuth="false"
sslProtocol="TLS" keystorePass="changeit" keystoreFile="C:\<file
location>\keystore"
keystorePass="newpassword"/>
```

For more information, visit the [Apache Tomcat 7 Documentation](#).

9. *Optional:* Change the **Port** of the front-end server in the `<Connector>` tag from 19120 to the desired port.

10. To enable BIRT reports on SSL environments, edit the registry key of the chart server in `HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Procrun 2.0\SCCChartServer\Parameters\Java\Options`. Add the following text to the key:

```
-Djavax.net.ssl.trustStore=C:\<file location>\.keystore  
-Djavax.net.ssl.trustStorePassword=<Password>
```

The `<Password>` is the `keystorePass` you have defined.

11. Save the file and close the editor.
12. Restart all services that were stopped at the beginning of this procedure.
13. Log on to your SilkCentral server using HTTPS: `https://hostname:8443/login`.

Application Server Location

The application server synchronizes tasks such as the distribution of schedules, control of execution servers, and management of database configuration. Before you can start working with SilkCentral applications, you need to specify the location of the application server.

Specifying a Location for the Application Server

When you use the `Standard Setup` option for installing a SilkCentral application, you do not need to specify an application server location. Setup automatically configures the localhost to be the application server. In this case you can skip this procedure. For additional information on setup options, see the application's installation instructions.

To specify a location for the application server:

1. Once you have installed the SilkCentral software, connect to SilkCentral using a Web browser.



Tip: If you installed ISAPI Web Server, use `http://<Web-server-name>/login` as the URL. If you installed the stand-alone Web Server, use `http://<Web-server-name>:19120/login` as the URL. The stand-alone Web server uses port 19120 by default.

You will receive a confirmation stating that the application server connection has not yet been defined.

2. Enter the **Host** or **IP address** and the **Port** of the application server.

The application server is the computer where you installed SilkCentral's application server component. The default port is 19122.

3. Click **Login** to proceed. If your specifications are correct and the respective computer is running with the installed software, you will be returned to the login page with the message `Application server connected successfully`

The **Database Administration** page displays.


SilkCentral Repositories

The terms "database" and "repository" are sometimes used interchangeably, but generally a repository is defined as a central place in which an aggregation of data is kept and maintained. The conceptual model for SilkCentral is that of a data repository that contains the application data.


A repository is a database used by SilkCentral products to store, maintain, and analyze data. You must first choose which database system you want to use for your repository and take the necessary steps in the SilkCentral GUI to access the repository. You must be connected to a repository to work with SilkCentral products.

You may set up multiple repositories, though only one repository at a time may be active.


To connect to a new SilkCentral database, you must first disconnect from the current database.

 **Note:** You will receive error messages if you try to work with SilkCentral while the database is disconnected.

We recommend to perform administrative tasks that require the database to be disconnected during off-hours. If this is not possible, make sure to inform the users about the system-outage and its duration.


 **Note:** If you are not planning on using LDAP authentication, user accounts will be stored in the repository. If you plan to use multiple repositories, you will have to maintain separate user accounts for each repository.

Creating a New Repository

 **Note:** If you are currently connected to a SilkCentral repository, you must disconnect from the repository before you can create a new repository.

To create a new repository:

1. If you have already set up your SilkCentral application server, the **Database Administration** page will display in a browser window, and you can proceed to step 3 of this procedure.

 **Tip:** Alternatively, you can browse to your SilkCentral site with a Web browser. The default URL is `http://<computer name>:<port>/login`. When you use the *Standard Setup* option for installing SilkCentral, the **Database Administration** page displays immediately after you connect to the application. On the computer where the front-end server is installed, you can also select **Start > Programs > Silk > SilkCentral > Test Manager 12.0 > Test Manager Home Page**.

2. If not already logged in, log in.

`admin` is the default value for both the **username** and the **password**.


3. In the menu, click **Administration > System Settings**.

4. Click the **Database** tab.

5. Enter the information for the new database, then click **Connect**.

You can create a database on the locally installed Microsoft SQL Server 2008 Express, a locally installed Microsoft SQL Server or Oracle installation, or on a network server that has MS SQL Server or Oracle installed. SilkCentral supports:


- Microsoft SQL Server 2005 Service Pack 3
- Microsoft SQL Server 2005 Service Pack 2
- Microsoft SQL Server 2008 R2
- Oracle 10g (version 10.2.0.5)
- Oracle 11g (version 11.2.0.2)


 **Tip:** For detailed information on the individual connection settings, see the *Database Settings Page*.

The **Create Database** dialog box displays.

6. To create a new database, provide the database administrator credentials.

If you installed SilkCentral using the evaluation setup package, type `sa` in the **Username** text box and `SilkCentral12!34` in the **Password** text box, then click **OK**.

 **Tip:** If you are creating a local or network Microsoft SQL Server or Oracle database, enter the login information provided to you by your database administrator, then click **OK**.

 **Note:** This process can take up to a few minutes.

7. Type a unique repository ID into the **ALM Repository ID** text box in the **Create ALM Repository ID** dialog box and click **OK**.

8. A **Messages** dialog box may display, informing you of servers that were found on the local computer and have automatically been added to the system configuration. Confirm this dialog box by clicking **OK**.

If you receive a warning message stating `Couldn't define localhost as Execution Server`, you need to configure your execution servers manually.

9. You will be notified that the repository has been created successfully. Confirm the message by clicking **OK**. The login page displays.
10. Log in using your standard **username** and **password**.
The default is `admin/admin`. Do not log in as a database administrator. Information about the currently connected database is displayed in **Administration > System Settings > Database**, but other available databases are not displayed anywhere in the SilkCentral user interface. You must make a note of the database name for future reference.

Your system is now ready for use.

Accessing an Existing Repository

To access an existing repository:

1. In the menu, click **Administration > System Settings**.
2. Click the **Database** tab.
3. If you are already connected to a repository, click **Disconnect**. A confirmation dialog box displays, asking you if you really want to disconnect from the current repository. Click **Yes** to disconnect.
4. Type or confirm the information for the database, then click **Connect**.
For detailed information on the individual connection settings, see *Database Settings Page*.
5. If the repository has no ALM repository ID, the **Create ALM Repository ID** dialog box displays. Enter a unique repository ID into the **ALM Repository ID** text box and click **OK**.
6. After the database connection is established, a confirmation message displays. Confirm the message by clicking **OK**. The SilkCentral login page displays.
7. Log in to SilkCentral. After you log in, you should have access to SilkCentral.
The default value for both the **username** and **password** is `admin`.

Repository IDs

Each Test Manager repository must have a unique repository ID. This ID is used in ALM URIs to uniquely identify Test Manager requirements and tests across multiple Test Manager repositories. The repository ID must be unique within your company's Test Manager installations. The supplied repository ID will be part of the ALM URI. For additional information on ALM URIs, see *ALM URIs*. It is good practice to use a descriptive ID, for example `USCA01`, for USA, California, repository #01 or `GEBE02`, for Germany, Berlin, repository #02. Allowed characters are letters, numbers, period (`.`), and minus (`-`). IDs must have a length of 1 to 20 characters.



Caution: Once a repository ID has been set, it cannot be changed.

ALM URIs

Repository IDs are incorporated into Application Lifecycle Management Uniform Resource Identifiers (ALM URIs). ALM URIs offer a means of addressing elements across ALM Server platform and the ability to distinguish and track elements between applications. Among other things, ALM URIs are used to uniquely identify Test Manager requirements and tests across multiple Test Manager repositories.

The ALM element URI syntax is as follows:

```
<ALM URI> = alm://<source project>/<source element path>[?<source version>]  
<source project> = <source type>!<project identity>
```

For Test Manager, `<source type> = sctm`. For Issue Manager, `<source type> = scim`.

Project identity is built as follows:

```
<project identity> = <repository ID>_<project ID>
```

<repository ID> is a unique identifier for each Test Manager and Issue Manager repository. Each repository generates a unique identifier that is stored inside the repository. Uniqueness is guaranteed across all repositories that you may have installed. <project ID> is an identifier for a Test Manager or Issue Manager project. This identifier is unique in the context of each repository.

Source Element Path:

For Test Manager and Issue Manager, the following syntax for referencing artifacts is used:

Test Manager native requirements, which are requirements that are not linked with an external requirement management system, use the following syntax:

```
<source element path> = /<requirement ID>;ns=requirement
```

Test Manager tests use the following syntax:

```
<source element path> = /<test ID>;ns=test
```

Test Manager and Issue Manager issues use the following syntax:

```
<source element path> = /<issue ID>;ns=issue
```

Example ALM URI:

```
alm://sctm!USCA01_23/602;ns=test
```

Test Manager repository USCA01, project ID 23, element ID 602, element type test.

Enabling the TCP/IP Protocol for Microsoft SQL Server 2005

If you are using Microsoft SQL Server 2005, you need to configure the SQL Server to use the TCP/IP protocol. If you are using a different database system, skip this procedure.

Before you enable the TCP/IP protocol, verify the following settings on the computer hosting the SQL Server installation:

- The **SQL Server Browser** service must run on Windows. We recommend that you change the properties of this service to **Startup type: Automatic**. Windows Services settings can be found in **Start > Settings > Control Panel > Administrative Tools > Services**.
- The SQL Server must use the TCP/IP protocol.

To enable the TCP/IP protocol for Microsoft SQL Server 2005:

1. Run the **SQL Server Configuration Manager** tool that comes with Microsoft SQL Server 2005.
2. In the displayed tree, select **SQL Server 2005 Network Configuration > Protocols for MSSQLSERVER**.
3. In the pane to the right of the tree view, right-click **TCP/IP** and choose **Enable**.
4. Back in the tree view pane, select **SQL Server 2005 Services**.
5. In the pane to the right of the tree view, right-click **SQL Server (MSSQLSERVER)** and select **Restart** from the context menu.

Disconnecting from a SilkCentral Repository

To disconnect from a repository:

1. Browse to your SilkCentral site with a Web browser.
The default URL is `http://<computer name>/login`.
2. Log in.




The default value for both the **username** and **password** is `admin`.


3. In the menu, click **Administration > System Settings**.
4. Click the **Database** tab.
5. Click **Disconnect** to disconnect from the current database.

Database Settings Page

Administration > System Settings > Database

Use the **Database Settings** page to configure access to a database. The page includes the following items:

Item	Description								
DBMS hostname or IP address	<p>The computer name or IP address of the computer hosting the database management system (DBMS) in the format <code><computer name>\<instance name></code>.</p> <table border="1"> <thead> <tr> <th>Database System</th> <th>Hostname Description</th> </tr> </thead> <tbody> <tr> <td>Microsoft SQL Server 2005 or Microsoft SQL Server 2008 R2</td> <td> <p><code><computer name>\<instance name></code>, for example <code>localhost</code>.</p> <p> Note: An instance name only needs to be provided if the DBMS was installed using an instance.</p> </td> </tr> <tr> <td>Microsoft SQL Server 2008 Express</td> <td> <p><code><computer name>\<instance name></code>. The default MS SQL Server Express instance is <code>localhost\SQLExpress</code>.</p> </td> </tr> <tr> <td>Oracle Server</td> <td> <p><code><computer name></code>, for example <code>MyDBMSHost</code>. If you plan on creating custom reports with direct database access, define a DBMS hostname or IP address that is available throughout the network.</p> </td> </tr> </tbody> </table>	Database System	Hostname Description	Microsoft SQL Server 2005 or Microsoft SQL Server 2008 R2	<p><code><computer name>\<instance name></code>, for example <code>localhost</code>.</p> <p> Note: An instance name only needs to be provided if the DBMS was installed using an instance.</p>	Microsoft SQL Server 2008 Express	<p><code><computer name>\<instance name></code>. The default MS SQL Server Express instance is <code>localhost\SQLExpress</code>.</p>	Oracle Server	<p><code><computer name></code>, for example <code>MyDBMSHost</code>. If you plan on creating custom reports with direct database access, define a DBMS hostname or IP address that is available throughout the network.</p>
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DBMS type	The type of DBMS you want to access, <code>MSSQL Server</code> or <code>Oracle</code> .								
Port	The port on which the DBMS listens. The default port for Microsoft SQL Server, including Express, is 1433. The default port for Oracle is 1521.								
Database / SID	<p>MSSQL Server database name or Oracle SID provided by your Oracle administrator.</p> <p><i>For Oracle database administrators:</i> Configure the Oracle SID to use the UTF8 character set.</p>								
Username	Database user with sufficient credentials. The default Microsoft SQL Server user, including Microsoft SQL Express, is <code>sa</code> , if not changed by your database								

Item	Description						
	<p>administrator. For Oracle Server, enter the database user provided by your Oracle administrator.</p> <p> Important: For Oracle Servers, the database username cannot contain periods (.).</p>						
Password	<p>Valid password for the specified Username.</p> <table border="1"> <thead> <tr> <th>Database System</th> <th>Password</th> </tr> </thead> <tbody> <tr> <td>Microsoft SQL Server, including Express</td> <td>These databases enforce password usage. Ask your database administrator for the correct login credentials if you are not sure.</td> </tr> <tr> <td>Oracle Server</td> <td>Password for the database user. Ask your Oracle administrator for the correct login credentials if you are not sure.</td> </tr> </tbody> </table>	Database System	Password	Microsoft SQL Server, including Express	These databases enforce password usage. Ask your database administrator for the correct login credentials if you are not sure.	Oracle Server	Password for the database user. Ask your Oracle administrator for the correct login credentials if you are not sure.
Database System	Password						
Microsoft SQL Server, including Express	These databases enforce password usage. Ask your database administrator for the correct login credentials if you are not sure.						
Oracle Server	Password for the database user. Ask your Oracle administrator for the correct login credentials if you are not sure.						
Read-only Username (optional)	An optional database user with read-only rights on all tables and views in the specified database. Defining a read-only user enhances database security. If your DBMS is Microsoft SQL Server, SilkCentral automatically creates this user if you specify a name and password. If your DBMS is Oracle, your database administrator needs to create the user in Oracle and your SilkCentral administrator needs to add that user to SilkCentral.						
Read-only Password (optional)	Valid password for the specified Read-only Username (optional) .						
Status	Displays the status of the SilkCentral connection to the DBMS.						
DBMS version info	Displays DBMS and operating system version information.						
ALM Repository ID	Displays the ALM URI of the repository.						
Connect / Disconnect	Depending on the current connection status, use this button to connect to or disconnect from a DBMS.						



Note: When you connect to the database and the version of an execution server is an invalid older version, but later than or equal to version SilkCentral Test Manager 2009 SP1, the execution server is automatically upgraded to the current Test Manager version. Test Manager shows a message concerning the upgrade in the **Information** column in the list of execution servers. As long as the upgrade procedure is not complete, the upgrading execution servers are not used.

Initial Login

Once connected to a repository, you are ready to login using the default system administrator account.



Caution: Because the *SuperUser* account `admin` has all administrative privileges, you should immediately designate a new password for this user to prevent unlimited access to these privileges.

For more information on changing the password, see **Changing the Password of the System Administrator Account**.

Logging in for the First Time

Once connected to a repository, you are ready to login using the default system administrator account.

To login to SilkCentral for the first time:

1. Type `admin` in the **Username** text box and `admin` in the **Password** text box.
2. Click **Login**.



Caution: Because the *SuperUser* account `admin` has all administrative privileges, you should immediately designate a new password for this user to prevent unlimited access to these privileges. For more information on changing the password, see **Changing the Password of the System Administrator Account**.

Login Page

Use this page to connect to SilkCentral. The page displays the following items:

Item	Description
Username	Type your LDAP or SilkCentral username. The default username for the SuperUser is <code>admin</code> .
Password	Enter a valid password for the Username that you entered.
Remember login	If you check the Remember login check box, you will not have to log in again after being automatically logged out by the application. You are logged out when you are idle for more than 30 minutes.
Standard	Enables a non-secure login to SilkCentral.
Secure	Enables a secure (SSL) login to SilkCentral. This option only works if SilkCentral is configured for secure connections. For more information, see <i>Configuring Secure Connections with Microsoft IIS</i> .
Login	Logs you in to SilkCentral, if the entered credentials are valid.

System Administrator Accounts

Adding user accounts allows different users to create projects and have access rights to work with them.

By default, the *SuperUser* account `admin` is available in the set-up installation with the password `admin`. For information on the other user types and their capabilities, see *User Roles and Permissions*.



Caution: Because the *SuperUser* account `admin` has all administrative privileges, you should immediately designate a new password for this user to prevent unlimited access to these privileges. For more information on changing the password, see **Changing the Password of the System Administrator Account**.

Changing the Password of the System Administrator Account

Describes how to change the password of the default *SuperUser* account.

To designate a new password for the default *SuperUser*:

1. In the menu, click **Administration > User Management**.
2. Click the **Accounts** tab.
The page displays all available user accounts. When you access this page for the first time, the *SuperUser* account `admin` is the only user listed.
3. Click the name of the `admin` user.
The **Configure existing user account** page displays.
4. Enter a password of your choice.
Click **OK**.
5. Enter the password again to confirm it.
6. Click **OK**.

You are returned to the **User accounts** page and notified that the update was successful.

Chart Server Location

A chart server is a service that computes data and produces graphs. These graphs are viewable within the SilkCentral application. This service can be installed with the SilkCentral setup on a computer of your choice. You must specify the location of your chart server in order to display graphs.



Note: You can define as many chart servers as you want; SilkCentral automatically implements a load balancing mechanism for chart generation.

Adding Chart Servers

Describes how to add a chart server.



Note: You can only add a chart server if the respective *chart server service* is installed on the computer you want to add to the list of available chart servers. For more information, refer to the installation instructions of your SilkCentral application.

To add a new chart server:

1. In the menu, click **Administration > System Settings**.
2. Click the **Chart Servers** tab.
3. If a chart server was installed with the application server on the same computer, Setup will have already defined `localhost` as the chart server.
4. Click **New Chart Server**. The **Configure chart server** page displays.
5. On this page you are asked to specify the hostname or IP address, the port, and the URL where the charting service has been installed. The only change you will have to make to the default settings is the name of the computer on which the server is located. The default port is `19126` and the default URL is `ChartServer`.
6. After inserting the appropriate information, click **Check** to establish a test connection to the chart server.

If the test is successful, a test image will be displayed. If the test is not successful and no chart is displayed, an error message will appear. In such a case you should check the hostname or IP address

of the chart server and verify that a chart server is actually installed on the target machine. Then repeat the steps outlined above.

7. Click **Back** to return to the chart server configuration. If the test connection was successful, check the status check box and click **Save**.
8. You will be returned to the list of chart servers, which now includes the chart server you have just added.

You can click **New Chart Server** to add more chart servers.

Editing Chart Servers

Describes how to edit a chart server.

To modify the settings of a chart server:

1. In the menu, click **Administration > System Settings**.
2. Click the **Chart Servers** tab.
3. Click the chart server you want to modify. The **Configure chart server** page displays.
4. On this page you can modify the hostname or IP address, the port, and the URL where the charting service has been installed. You can also activate/deactivate the chart server by checking/un-checking the **Active** check box. If you only want to activate or de-activate the chart server, please proceed with step 5.
5. After inserting the appropriate information, click **Check** to establish a test connection to the chart server.

If the test is successful, a test image will be displayed. If the test is not successful and no chart is displayed, an error message will appear. In such a case you should check the hostname or IP address of the chart server and verify that a chart server is actually installed on the target machine. Then repeat the steps outlined above.

6. Click **Back** to return to the chart server configuration. Since the test connection was successful, set the status check box to active.
7. Click **Save**. You will be returned to the list of chart servers.

Removing Chart Servers

Describes how to remove a chart server.



Note: Removing a chart server does not remove the installation of the service; it only removes the availability of the service to the application. To reconnect to the service at a later time, see *Adding Chart Servers*.

To remove a chart server:

1. In the menu, click **Administration > System Settings**.
2. Click the **Chart Servers** tab.
3. Click the **Chart Server URL** of the chart server that you want to remove.
4. Uncheck the **Active** check box and click save. You are returned to the **Chart Servers** page.
5. Click **X** in the **Actions** column of the chart server you want to remove.
6. A confirmation dialog box displays, where you can confirm the deletion by clicking **Yes**.

Chart Servers Page

Administration > System Settings > Chart Servers

Use this page to manage your chart servers. The page displays the following columns for each listed chart server:

Column	Description
Actions	Perform a trial connection to the chart server by receiving a sample chart, or delete a chart server connection.
Chart Server URL	The URL to connect to the chart server. Syntax: <code>http://<computer name or IP address>:<port>/ChartServer</code> . The default port is 19126.
Status	Displays whether the connection to the chart server is active or inactive.
Created On	Date when the chart server connection was created.
Created By	The user who created the chart server connection.
Changed On	Date when the chart server connection was modified.
Changed By	The user who modified the chart server connection.

LDAP Authentication

Configure LDAP authentication to enable SilkCentral logins through an LDAP server.

Lightweight Directory Access Protocol (LDAP) is an open network protocol standard that is designed to provide access to directory services. LDAP provides a mechanism for querying and modifying information that resides in a directory information tree (DIT). A directory information tree typically contains a broad range of information about different types of network objects including users, printers, applications, and other network resources.

SilkCentral LDAP integration

The most important aspect of LDAP integration in SilkCentral is user authentication. In most directories it is not possible to retrieve a user's password, so LDAP must be accessed each time a user needs to be authenticated.


SilkCentral LDAP integration supports plain-text authentication and SSL authentication. The directory service must either allow anonymous queries or a user with read rights on the directory must be provided.

The following properties must be provided for LDAP servers:

- LDAP server URL
- LDAP port
- Base DN (root node, base distinguished name)
- *Optional*: username and password
- Filter, for querying user (object)

LDAP Authentication Logic

Standard mode authentication means that a user can only authenticate against LDAP, if an LDAP server is defined and active. Mixed mode authentication means that a user can login with either LDAP or local credentials.

 **Note:** For either authentication mode, a user can only be logged in when their username exists in the SilkCentral database.

Standard Mode Authentication

Standard mode authentication is enabled when at least one LDAP server is active. When no LDAP server is defined, users will only be able to login with local credentials. Each defined LDAP server is checked to determine if a user (with specific username and password) can be authenticated. Access is granted when authentication succeeds on one of the servers.

Mixed Mode Authentication

When no LDAP server is defined, users will only be able to login with local credentials. If at least one LDAP server is active and a user account is set to use mixed mode authentication, each defined LDAP server is checked to determine if a user (with specific username and password) can be authenticated. If the user is unknown on all defined LDAP servers, then local database authentication is attempted. Access is denied when a user is also unknown based on local credentials. If a user is known on an LDAP server, but the credentials are incorrect, access is denied.

Adding LDAP Servers

Describes how to configure an LDAP server for usage with SilkCentral.

To add a new LDAP server:

1. In the menu, click **Administration > System Settings**.
2. Click the **LDAP Servers** tab.
3. Click **New LDAP Server**. The **New LDAP Server** dialog box displays.
4. Type a **Name** for the server and optionally a **Description**.
5. Check the **Active** check box to activate the server for use with SilkCentral.
6. Type the **Hostname** or IP-address of the LDAP server and the **Port** used for the LDAP service.
7. Check the **Use SSL** check box to connect to the server through SSL.
8. *Optional:* In the **Bind DN** text box, type the domain name of the user who is to be used to bind to the LDAP service. Type the **Password** of the user defined by **Bind DN**.
9. Type the **Base DN** root for LDAP queries and the **Filter** that is to be used for querying LDAP.
10. Click **Test** to perform a test connection to the LDAP server.

For additional information, see *Testing LDAP Servers*.

11. Click **OK** to save your settings.

Editing LDAP Servers

Describes how to edit an LDAP server profile.

To edit an LDAP server profile:

1. In the menu, click **Administration > System Settings**.
2. Click the **LDAP Servers** tab.
3. Click the name of the LDAP server profile you want to edit. The **Edit LDAP Server** dialog box displays.
4. Edit the **Name** and **Description** of the server as required.
5. Check the **Active** check box to activate the server for use with SilkCentral.
6. Edit the **Hostname** or IP-address of the LDAP server and the **Port** used for the LDAP service as required.
7. Check the **Use SSL** check box to connect to the server through SSL.
8. *Optional:* In the **Bind DN** field, modify the domain name of the user who is to be used to bind to the LDAP service as required. Enter the **Password** of the user defined by **Bind DN**.
9. Edit the **Base DN** root for LDAP queries and the **Filter** that is to be used for querying LDAP as required.
10. Click **Test** to perform a test connection to the LDAP server.

For additional information, see *Testing LDAP Servers*.

11. Click **OK** to save your settings.

Testing LDAP Servers

Describes how to test the connection to an LDAP server.

To test the connection to an LDAP server:

1. When adding or editing an LDAP server profile in SilkCentral, the **Add LDAP Server** dialog box, respectively the **Edit LDAP Server** dialog box display a **Test** button.
2. Click **Test** to display the **Test LDAP Configuration** dialog box.
3. In the **Test username** text box, enter a username to be used for testing LDAP authentication.
4. Fill in the **Test password** associated with the user who is to be used for testing LDAP authentication.
5. Click **Test** to execute an authentication test.



Note: LDAP error codes are included when tests are unsuccessful. A list of LDAP error codes and their meaning is available at <http://ldapwiki.willeke.com/wiki/LDAPResultCodes>.

You will be presented with a dialog box stating whether or not the test was successful.

6. Click **Close** to return to the **Add LDAP Server** dialog box, respectively the **Edit LDAP Server** dialog box. If the test connection was not successful, edit your settings or ask your system administrator for assistance, then start over at step 2 again.

Deleting LDAP Servers

Describes how to remove an LDAP server profile.

To delete an LDAP server:

1. In the menu, click **Administration > System Settings**.
2. Click the **LDAP Servers** tab.
3. If the LDAP server is active, you need to deactivate it before you can delete it. Click the name of the LDAP server profile that you want to delete. The **Edit LDAP Server** dialog box displays.
4. Uncheck the **Active** check box to deactivate the server and click **OK**.
5. Click **X** in the **Actions** column of the LDAP server you want to delete.
6. Click **Yes** on the subsequent dialog box to confirm the deletion.

LDAP Servers Page

Administration > System > LDAP Servers

The **LDAP Servers** page lists all previously configured LDAP servers. Use this page to manage your LDAP servers.

In this page you can perform the following actions:

- Click **New LDAP Server** to configure a new LDAP server.
- Select an existing LDAP server from the list to edit the settings.
- Click **X** in the **Actions** column to remove a deactivated LDAP server.

New LDAP Server Dialog Box



Tip: The **Edit LDAP Server** dialog box contain the same items as the **New LDAP Server** dialog box.

The dialog box includes the following items:

Item	Description
Name	Specifies the name of the LDAP server as it should appear in the SilkCentral GUI. You can define any name for the LDAP server; this text box has no impact on the actual LDAP settings.
Description	A description of the LDAP server. You can enter any text for the description of the LDAP server; this text box has no impact on the actual LDAP settings.
Active	Activates the LDAP server, if checked. If unchecked, the LDAP server's services are not available to SilkCentral.
Hostname	The LDAP server URL.
Port	The LDAP port. The default port is 389. When using SSL, the default LDAP port is 636.
Use SSL	Defines whether SilkCentral connects to the LDAP server through SSL (if checked) or without SSL (if unchecked). This check box is closely related to the settings defined in the Port text box.
Bind DN (optional)	The distinguished name of the user who is to be used to bind to the LDAP service. This user must have read rights on the directory from the given Base DN root. If this text box is left empty, anonymous access will be used, except for LDAP servers that do not support anonymous access.
Password (optional)	The password of the user defined in the Base DN text box. This is not required when anonymous access is allowed.
Base DN	Base Distinguished Name (DN) root node for LDAP queries. For example <code>DC=comp,DC=net</code> .
Filter	<p>The filter that is to be used for querying LDAP. Filters must contain a placeholder enclosed in braces. Additionally to the default placeholder <code>{%username}</code> SilkCentral also supports more complex expressions.</p> <p>Example 1: <code>(sAMAccountName={%username})</code></p> <p>Example 2: <code>(sAMAccountName = {user.firstName.substring(0, 1).toLowerCase()} {user.lastName.toLowerCase()})</code></p> <p>The second example builds the <code>sAMAccountName</code> by appending the lowercase representation of the user's last name to the lowercase representation of the first character of the user's first name.</p>

SilkPerformer Load-Test Agent Clusters

In addition to assigning workload to individual agents, you have the option of assigning SilkPerformer workload to clusters of agents with defined capabilities. SilkPerformer's dynamic workload-assignment functionality matches specific load-test requirements to the replay capabilities of available agent computers at execution time. The capabilities that are defined for test agents in SilkPerformer are used to optimize

workload-to-agent assignment. For example, if a test requires a workload that only an agent computer with a SAPGUI client can deliver, then dynamic workload-assignment functionality can ensure that the test's workload is assigned only to available agents with SAPGUI clients. Additionally, the percentage of required workload or virtual users that can be allocated to each agent can be configured, thereby ensuring that agents are not pushed beyond their capacities.

Upon execution of a SilkPerformer test, a SilkCentral load-test agent-clusters XML file is checked out of the appropriate execution server and used for dynamic workload assignment during execution. You must specify the location of your project's load-test agent-clusters XML file by way of **Administration > System** settings.

An advantage of dynamic assignment of workload to load-test agent clusters is that successful execution of tests is not contingent on maintaining a static test-execution environment. SilkPerformer can dynamically assign an unavailable agent's workload to an available agent in the same cluster that has the same capabilities. This feature is of particular value when SilkPerformer load tests are managed and executed based on predefined schedules in SilkCentral. The manner in which workload is balanced across agents and the health of individual agents are not issues to consider from the SilkCentral perspective.

For details regarding dynamic workload assignment, refer to the *SilkPerformer Help*.

Uploading Load Test Agent Cluster Files

Describes how to add or change your project's load-test agent-clusters file in support of SilkPerformer dynamic workload assignment.

To change your project's agent-clusters file definition:

1. In the menu, click **Administration > System Settings**.
2. Click the **Load Test Agent Clusters** tab.
3. Click **Upload**.
4. On the **Upload Agent Clusters File** dialog box, browse to the location of the agent-cluster file on your local disk.

When you upload the file, it is displayed in the **Load Test Agent Clusters** page.

5. Click **OK** to confirm your selection.

Deleting Load Test Agent Clusters Files

Delete a load-test agent clusters file to remove it from the application server.

To delete a load-test agent clusters file:

1. In the menu, click **Administration > System Settings**.
2. Click the **Load Test Agent Clusters** tab.
3. Click **Delete**.
4. Click **Yes** confirm the deletion of the settings.

Editing Load Test Agent Cluster Files

To edit your project's agent-clusters file definition:

1. In the menu, click **Administration > System Settings**.
2. Click the **Load Test Agent Clusters** tab.
3. Click on the name of the load-test agent-clusters file that you want to change.
4. Download the file.
5. Edit the file with an editor.
6. Upload the file.

For additional information, see *Uploading Load Test Agent Cluster Files*.

Load Test Agent Clusters Page

Administration > System Settings > Load Test Agent Clusters

The **Load Test Agent Clusters** page shows the currently configured load-test agent-clusters XML file. Use this page to manage SilkPerformer load-test agent-cluster files in support of dynamic workload assignment.

From this page you can perform the following actions:

- Click **Upload** to upload a load-test agent-clusters XML file.
- Click **Delete** to remove an existing load-test agent-clusters XML file.
- Click on the name of the load-test agent-cluster file to download the file.

Mail Host Location

To have reports emailed to you to update you about results from your application, you must specify the location of your mail server. You may only configure email settings if you have administrator privileges.



Note: SilkCentral supports basic SMTP authentication (*LOGIN PLAIN*).

Specifying a Location for the Mail Host

Describes how to specify the location of up to three mail servers.

To specify the location of up to three mail servers:

1. In the menu, click **Administration > System Settings**.
2. Click the **Notification** tab.
3. In the **Server 1**, **Server 2** and **Server 3** text boxes, type the mail server hostname or IP address of your email server(s).
4. Type the **Email address of system administrator**, and the **'From' address to use for emails**.
5. To confirm that the configuration is functional, click **Check**. Then verify that the system administrator receives a test email notification from the application.

If you receive an error message, or if you do not receive an email, review your mail settings. Ensure that the hostname of your email server is correct and that the SMTP protocol is running on that computer.

6. If you receive a notification that the test mail has been sent, click **Save**.

Email notification is now ready for use.

Notification Page

Administration > System Settings > Notification

Use this page to configure a mail server for your SilkCentral applications. The page displays the following items:

Item	Description
Email address of system administrator	Specifies the mail address of the SilkCentral system administrator. You must enter an address here to complete the configuration. You may add any valid email address.

Item	Description
'From' address to use for emails	Specifies the name that is to appear in the From field when someone receives an email from the system. This can be any email address, for example <code>System_message@mycompany.com</code> .
Server 1	The names or IP addresses of the servers that send your mail. For many companies, this server is simply called mail. If your mail server uses SMTP authentication (<i>LOGIN PLAIN</i>), you must enter a valid user and password for the mail server. Contact your mail server administrator if you do not know the login credentials.
Server 2	
Server 3	
Check	Sends a test email to the recipient defined in the Email address of system administrator text box.
Reset	Clears all items on this page.
Save	Saves your settings.

System Proxies

Configure a system proxy to enable execution servers of a certain location to communicate with the application server through the proxy. Once you have specified the location of a proxy server, you can select the defined proxy server in your location configuration. Enabling this setting will force all execution servers of the location to communicate with the application server through the defined system proxy.

Configuring a System Proxy

This procedure explains how to configure a system proxy. To use a proxy for your location you must configure a system proxy.

To configure a system proxy:

1. In the menu, click **Administration > System Settings**.
2. Click the **System Proxy** tab.
3. Specify the **Host** and the **Port** of the proxy that should be used.
4. Specify **Username** and **Password** if required by the proxy.
5. To confirm that the configuration has been successful, click **Check**. A message informs you whether or not connection to the proxy server has been successful.
6. If you receive an error message, review your system proxy settings. Make sure that a system proxy is installed and running on the host you specified.
7. Click **Save**.

Your system proxy is now ready for use.

System Proxy Page

Administration > System Settings > System Proxy

Use this page to configure a system proxy. The page displays the following items:

Item	Description
Host	The hostname or IP-address of the computer that is intended to serve as system proxy.
Port	The port number on which the system proxy listens. The default port is 8080.
Username (if required)	Type a valid username if the proxy server requires login credentials.
Password (if required)	A valid password for the specified Username .
Reset	Clears all items on this page.
Check	Tests the connection to the proxy with the credentials you provided.
Save	Saves your settings.

Configuring the Application

This section contains conceptual information about user accounts, projects, locations, and execution servers. It also covers the administration of custom reports and managing uploaded files, and the configuration of other common entities.

Once you have completed the initial configuration of SilkCentral (system configuration), this section will guide you through the steps required to set up user accounts, projects, locations, execution servers, and more. These tasks must be performed by an administrator.

User Roles and Permissions

When working with SilkCentral, tasks are assigned to designated groups of users who have access to assigned projects. Within groups, users are granted specific roles within those projects. User permissions are configured based on user role type and group membership. This topic defines each permission type and details the specific permissions that are associated with each user role.

Each user account can belong to one or multiple groups. A group specifies which roles a user has within that group. Groups are assigned to projects. So the permissions that each individual user has are derived from the group/role assignments that have been defined for them. Defined permissions apply only to the projects that are assigned to the groups in which each user has a group/role assignment.

User Roles

There are seven predefined user roles:

- SuperUser
- Administrator
- Project Manager
- Test Manager
- Tester
- Analyst
- Reporter

These roles cannot be modified or deleted. They can however be copied and thereby used as the basis for customized roles.

SuperUser

The SuperUser role is a special role that is granted all privileges across SilkCentral applications.

Administrator

Administrator tasks include the configuring of application-, Web-, and chart-server locations; setting up and maintaining repositories and notification settings; creating accounts; configuring locations and execution servers, and others.

Administrators are granted all privileges across SilkCentral and Issue Manager.

Project Manager

Project Managers maintain the projects for which they are responsible. Project Managers do not have write access to the SilkCentral Administration Module. Project Managers can only access the projects to which they have been assigned as Project Managers, where they have full write access to all project-related

features. Project Managers also have all Issue Manager permissions for projects that are assigned to them.

Test Manager

Test Manager responsibilities include the planning and execution of tests, including the deletion of tests. Test Managers also have full access to libraries of shared steps and full read access to the **Requirements** area in Test Manager.

Tester

The Tester role relates to Test Manager privileges. The Tester's tasks include the planning and execution of tests—though Testers cannot delete tests. Testers also have full read access to the **Requirements** area, and can view, create, and edit all objects in libraries of shared steps.

Analyst

Analysts analyze the results of projects that have been assigned to them. They cannot modify project settings or schedules and have read-only privileges.

Reporter

In addition to having all the rights of Analysts, Reporters additionally have the right to edit and delete reports in *Advanced mode*. Advanced mode allows reporters to enter, modify, and delete SQL statements for advanced reports. For details on advanced reports, refer to the SilkCentral application Help.

Adding User Roles

To add a user role:

1. In the menu, click **Administration > User Management**.
2. Click the **Roles** tab.
3. Click **New Role**.

The **New Role** page displays.

4. Type a **Name** for the new role.
5. *Optional:* Type a **Description** for the role.
6. In the **Permission Settings** list, check the **Allow** text box for all permissions you want to grant to this role.



Note: Checking a top-level parent task automatically checks all child tasks of that parent. When some but not all child tasks of a parent task are selected, the parent task is checked with a grayed-out check mark, indicating partial permissions in that area.

7. Click **Save** to save your permission settings for this role.

Editing User Roles



Note: Predefined user roles cannot be edited. Custom user roles can be edited.


To edit a user role:

1. In the menu, click **Administration > User Management**.
2. Click the **Roles** tab.
3. Click the name of the role that you want to edit in the **Roles** list.

The **Edit Role** page displays.


4. Edit the **Name** of the role as required.
5. Edit the **Description** of the role as required.

6. In the **Permission Settings** list, check the **Allow** check boxes of all permissions that you want to grant to this role. Uncheck any selected permissions that are not to be granted to this role.

 **Note:** Checking a top-level parent task automatically checks all child tasks of that parent. When some but not all child tasks of a parent task are selected, the parent task is checked with a grayed-out check mark, indicating partial permissions in that area.

7. Click **Save** to save your permission settings for this role.

Copying User Roles


 **Tip:** Copying existing user roles is the first step in creating a custom user role. After copying an existing role, rename it and edit its permissions to meet your needs.

To copy a user role:

1. In the menu, click **Administration > User Management**.
2. Click the **Roles** tab.
3. In the **Actions** column of the user role that you want to copy, click **Duplicate Role**.

The copy of the role then displays in the list of user roles where you can rename it and customize it as required.

Deleting User Roles

 **Note:** Predefined user roles cannot be deleted. Custom user roles can be deleted.



To delete a user role:

1. In the menu, click **Administration > User Management**.
2. Click the **Roles** tab.
3. In the **Actions** column of the user role that you want to remove, click **Delete**. A confirmation dialog box displays.
4. Click **Yes** to confirm the operation; click **No** to abort. If you choose **Yes**, you will be returned to the list of user roles where the deleted role will no longer be listed.

Roles Settings Page

Administration > User Management > Roles

The **Roles Settings** page is used to configure user roles. The page displays the following items:


Item	Description
Actions	Click  to duplicate a role and use it as the basis for a new, custom role. Click  to delete a user role.
Name	The name of the user role as it displays in the GUI.
Allow New Assignment	Click to allow or prevent an existing user role from accepting new user assignments. This is useful when a user role has been discontinued while some user accounts still retain the role.
Description	Description of the user role.

Item	Description
Created On	Date the role was created.
Created By	User who created the role.

Permission Definitions

To display the permissions in Test Manager: In the menu, click **Administration > User Management**. Click the **Roles** tab. Click on a role in the grid. The permissions for that role display.

This section explains the permissions that govern user ability to perform tasks and access secure areas within SilkCentral. There is a separate list for each permission category.

 **Note:** Permissions for predefined roles cannot be edited.

Requirements Permissions

The following permissions are available for requirements:

	Administrator	Project Manager	Analyst	Tester	Test Manager	Reporter
View requirements		X	X	X	X	X
Manage requirements		X				
Delete requirements		X				
Manage requirements management integrations		X			X	
Delete requirements management integrations		X				

Libraries Permissions

The following permissions are available for libraries:

	Administrator	Project Manager	Analyst	Tester	Test Manager	Reporter
View libraries		X	X	X	X	X
Manage libraries				X	X	
Delete libraries					X	

Tests and Executions Permissions

The following permissions are available for tests and executions:

	Administrator	Project Manager	Analyst	Tester	Test Manager	Reporter
View tests and executions		X	X	X	X	X
Manage tests and executions				X	X	
Delete tests and executions					X	
Manage source control integrations		X			X	
Delete source control integrations		X			X	

Manual Execution Planning Permissions

The following permissions are available for manual execution planning:

	Administrator	Project Manager	Analyst	Tester	Test Manager	Reporter
View testing cycles and configurations		X	X	X	X	X
Manage testing cycles and configurations					X	
Delete testing cycles and configurations					X	

Issues Permissions

The following permissions are available for issues:

	Administrator	Project Manager	Analyst	Tester	Test Manager	Reporter
Manage issue tracking integrations		X			X	
Delete issue tracking integrations		X			X	

Quality Goals Permissions

The following permissions are available for quality goals:

	Administrator	Project Manager	Analyst	Tester	Test Manager	Reporter
View quality goals		X	X	X	X	X
Manage quality goals		X			X	
Delete quality goals		X			X	

Reports Permissions

The following permissions are available for reports:

	Administrator	Project Manager	Analyst	Tester	Test Manager	Reporter
View reports		X	X	X	X	X
Manage reports		X		X	X	X
Manage advanced reports						X
Delete reports		X		X	X	X

Projects Permissions

The following permissions are available for projects:

	Administrator	Project Manager	Analyst	Tester	Test Manager	Reporter
Manage projects		X			X	
Delete projects		X			X	

Project Settings Permissions

The following permissions are available for project settings:

	Administrator	Project Manager	Analyst	Tester	Test Manager	Reporter
View project settings		X	X	X	X	X
Manage project settings		X		X	X	
Delete project settings		X			X	
Manage filters		X		X	X	
Delete filters		X		X	X	
Modify private filters of other users		X			X	
Delete private filters of other users		X			X	

Administration Permissions

The following permissions are available for administration:

	Administrator	Project Manager	Analyst	Tester	Test Manager	Reporter
View system settings	X	X			X	X
Manage system settings	X					
View administration settings	X	X			X	X
Manage administration settings	X					
Delete administration settings	X					
View and delete log files	X	X			X	X
Manage execution servers	X					
Delete execution servers	X					

Dashboard Panel Permissions

To view or edit the content of a certain dashboard panel, you need the following permissions:

Panel	Permission
Custom Information	Manage projects required for editing. No permission required for viewing.
Introduction	No permission required.
Issue Life Cycle	View project settings.
Issues Created per Tester	View tests and executions.
Manual Tests Assigned to Me	Manage tests and executions.
Quality Goal Progress	View quality goals.
Requirements Coverage Status	View requirements.
Testing Cycle Progress	View testing cycles and configurations.
Testing Cycle Result Summary	View testing cycles and configurations.
Testing Progress Across Testing Cycles	View testing cycles and configurations.
Volatile Tests	View tests and executions.

User and Group Accounts

A user account must be created for each user working with SilkCentral. One or more groups of users are assigned to specific projects. Only with a user account, a user role, and a group assignment can a user work with a SilkCentral project.

Maintaining User Accounts

User accounts track login data and configuration settings for individual users. They also enable user login. User accounts are typically assigned to group accounts with one or more specific user roles for specific projects. The SuperUser is the only user role that can, among other things, configure the application-, Web-, and chart server locations; and set up and maintain repositories and notification settings.



Caution: Because the *SuperUser* account `admin` has all administrative privileges, you should immediately designate a new password for this user to prevent unlimited access to these privileges. For more information on changing the password, see **Changing the Password of the System Administrator Account**.

Adding User Accounts

To add a user account:

1. In the menu, click **Administration > User Management**.
2. Click the **Accounts** tab.
The page displays all available user accounts. When you access this page for the first time, the *SuperUser* account `admin` is the only user listed.
3. Click **New User**. The **Add new user account** page displays.
4. Type a username and password for the user. Type the password a second time to confirm it.
5. Check the **Mixed mode authentication (LDAP)** check box to enable both LDAP and local-credential based authentication.
6. Set the login to **Locked** if you want to prevent the user from logging in.
7. Type the user's first name, last name and email address.
8. Type the user's local time zone and select a date format, a short date format, and the first day of the week.
9. Type the **Page refresh time** in seconds, the **CSV separator string**, and a **Default execution server**.
10. Select a group and role definition from the respective list boxes.
11. Click **Add Assignment** to add the group and role combination to the user account.
12. Repeat the previous two steps to assign all desired group and role combinations to the user account.
13. To remove a group and role combination from the current user account, click the **Delete** icon in the **Actions** column.
14. Click **Save** to save your settings.

Editing User Accounts

Once a user account is set up you may edit any of the parameters, except the **Login** name.



Note: Changes to a user account become active upon the next login of the changed user account. Please notify the user to logout and login again.

To edit a user account:

1. In the menu, click **Administration > User Management**.
2. Click the **Accounts** tab.
The page displays all available user accounts. When you access this page for the first time, the *SuperUser* account `admin` is the only user listed.
3. Click the **Login** name of the user account that you want to edit. The **Configure existing user** page displays.
4. Edit the password of the user as required. Type the password a second time to confirm it.
5. Check the **Mixed mode authentication (LDAP)** check box to enable both LDAP and local-credential based authentication.
6. Edit other user settings as required.
7. Select a group and role definition from the respective list boxes.
8. Click **Add Assignment** to add the group and role combination to the user account.
9. Repeat the previous two steps to assign all desired group and role combinations to the user account.
10. To remove a group and role combination from the current user account, click **Delete** in the **Actions** column.

11. Click **Save** to save your settings.

Deleting User Accounts



Caution: Deleting a user account is not reversible. You may lock a user account instead, if you want to temporarily make an account unavailable. For additional information about locking user accounts, see *Editing User Accounts*.

To delete a user account:

1. In the menu, click **Administration > User Management**.

2. Click the **Accounts** tab.

The page displays all available user accounts. When you access this page for the first time, the *SuperUser* account `admin` is the only user listed.

3. In the **Actions** column of the user account you want to remove, click **Delete**. A confirmation dialog box displays.

4. Click **Yes** to confirm the operation; click **No** to abort. If you choose **Yes**, you will be returned to the list of user accounts where the deleted account will no longer be listed.

User Settings Page

Administration > User Management > Accounts > New/Edit User

Use the **User Settings** page to configure user accounts. User account settings are closely related to group account settings.

You can click on the name of the user in the menu to access the **User Settings** page for the logged-in user.




Note: You must define at least one group and role assignment to save a user account.

Login Data Item	Description
Login	The username to be stored in the SilkCentral repository. If you check Mixed mode authentication (LDAP) below, the entered username must match the defined LDAP username.
Password	Enter a valid password for the Login that you entered. This password is not related to the LDAP password.
Confirm password	Enter the password again to confirm it.
Mixed mode authentication (LDAP)	Check this check box to enable both LDAP and local-credential based authentication. If an LDAP server exists, not checking this check box results in LDAP-only authentication.
Locked	Check this check box if you want to prevent the user from logging in with the given credentials. This makes the user account inactive.

General Data Item	Description
First name	Type the user's first name. This information does not affect the behavior of SilkCentral; it simply tracks user contact information.

General Data Item	Description
Last name	Type the user's last name. This information does not affect the behavior of SilkCentral; it simply tracks user contact information.
Email	Type the user's email address. This information is used for notification purposes.
Time zone	The user's local time zone. Time zone information is used to display times and dates in the user's local time zone.
Date format	The selected date format is presented to the user in lists, reports, and in the calendar whenever SilkCentral displays a long date format.
Short date format	The selected date format is presented to the user in lists, reports, and in the calendar whenever SilkCentral displays a short date format.
First day of week	The first day of the week determines the weekly view in reports.
Page refresh time	The page refresh time in seconds. This setting determines the time interval at which report pages are refreshed automatically when the selected calendar range is set to <code>last 24 hours</code> . Type 0 (default value) if you do not want reports to refresh automatically. The page refresh time only affects pages that support automatic page refreshing.
CSV separator string	This string is used as a row separator for the user's downloaded CSV-files. Reports can be downloaded as CSV-files.
Default Execution Server	The default execution server is used for try runs of automated tests, and when no available execution server is set for the execution plan.

Group and Role Assignments Item	Description
Group and Role Assignments table	Lists all existing user group/user role assignments of the user. You can also delete group and role assignments by clicking  next to the assignment you want to remove.
Group	Select a group to which the user is to be assigned. This list box lists the user groups that have been defined by a SilkCentral administrator.
User role	Select the user role with which the user is to be assigned to the selected group. The list is populated with the pre-defined system roles and the custom user roles.
Add Assignment	Click this button to create a new user group/user role assignment with the group and user role you selected.

Maintaining Group Accounts

Group accounts define access to specific projects. Each user can be associated with one or more group accounts from which they inherit the access rights to the projects that are defined for the selected group account.



Note: Users can be added to group accounts with multiple roles, allowing advanced user permission configuration.

Adding Group Accounts

To add a group account:

1. In the menu, click **Administration > User Management**.
2. Click the **Groups** tab.
3. Click **New Group**. The **Add new group account** page displays.
4. In the **Group name** text box, type a group name for the new group.
5. In the **Description** text box, enter a description for the new group.
6. Select a user with a role assignment from the respective list boxes, then click **Add Selection** to add the user and role combination to the new group account.



Note: Any user roles that have been defined as not accepting new user assignments are not displayed in this list. These settings are controlled through the **Allow New Assignment** buttons at **Administration > User Management > Roles**.

7. Repeat the previous step to assign all desired user and role combinations to the user account.
8. To remove a user and role combination from the current group account, click **X** in the **Actions** column.
9. In the **Project Assignment(s)** section you can assign any existing projects to this group.
10. Click **Save**. You will be returned to the **User groups** page where the new group is listed.

Editing Group Accounts

To edit a group account:

1. In the menu, click **Administration > User Management**.
2. Click the **Groups** tab.
3. Click the group name of the group account you want to edit. The **Configure existing user group** page displays.
4. In the **Group Name** text box, edit the name as required.
5. In the **Description** text box, edit the group's description as required.
6. Select a user with a role assignment from the respective list boxes, then click **Add Selection** to add the user and role combination to the new group account.




Note: Any user roles that have been defined as not accepting new user assignments are not displayed in this list. These settings are controlled through the **Allow New Assignment** buttons at **Administration > User Management > Roles**.

7. Repeat the previous step to assign all desired user and role combinations to the user account.
8. To remove a user and role combination from the current group account, click **X** in the **Actions** column.
9. In the **Project Assignment(s)** section you can assign any existing projects to this group.
10. Click **Save** to return to the **Groups** page.

Deleting Group Accounts

Describes how to delete a group account.

 **Note:** Before you can delete a group account, you must remove all user and role assignments from the group. For additional information about modifying group accounts, see *Editing Group Accounts*.

To delete a group account:

1. In the menu, click **Administration > User Management**.
2. Click the **Groups** tab.
3. In the **Actions** column of the group account you want to remove, click **X**. A confirmation dialog box displays.
4. Click **Yes** to confirm the operation; click **No** to abort. If you choose **Yes**, you will be returned to the list of user accounts where the deleted account will no longer be listed.

Group Settings Page

Administration > User Management > Groups > New/Edit Group

Use the **Group Settings** page to configure group accounts. Group account settings are closely related to user account settings. The page displays the following items:

Item	Description
Group name	Specifies the name of the group as it should display in the GUI. You can define any name for the group.
Description	A description of the group account. You can enter any text for the description.
Account and Role Assignment(s)	Lists all existing user user/role role assignments of the group. You can also delete user and role assignments by clicking X next to the assignment you want to remove.
User	This list box lists the user accounts that have been defined by an administrator. Select a user to be assigned to the group.
User role	The list is populated with the pre-defined system roles and the custom user roles. Select the user role with which the user is to be assigned to the selected group.
Add Selection	Click to create a new user account and user role assignment with the selected user and user role.
Project Assignment(s)	Lists all existing projects and whether they are assigned to the group account. Check the check box next to a project to assign the project to the group account. If no projects exist, you may assign them later after you have created them.
Select All	Checks the check boxes of all listed projects.
Deselect All	Un-checks the check boxes of all listed projects.

Managing Projects

This topic describes the conceptual background of projects in SilkCentral.

Projects are a prerequisite for beginning work with any SilkCentral application. Projects serve as containers for related sets of tasks and results. Resources such as project managers and analysts are allocated to projects by assigning them to user groups, which have access rights to certain projects.



Note: Projects can be created and maintained by the administrator, project manager, and SuperUser roles.


Adding Projects

To create a project:

1. In the menu, click **Projects > Project List** . The **Projects** page displays, listing all existing projects and project baselines.
2. Click **New Project**. The **Project Settings** page displays.
3. Type a **Project name** and **Description**.
4. Select the **Project Owner**.
5. *Optional:* To create a project based on the Agile project template, choose *Agile Project Template* from the **Project Template** list box.
6. The **Groups** section includes a list of registered user groups. Check the **Assigned** check boxes of the user groups that will work with this project.
7. A list of locations is located at the bottom of the page. Select the location(s) from which this project's tasks are to be executed. Click **Select All** to assign all locations to the project, or click **Deselect All** to select no locations.
8. Click **Save** to save your settings. You are returned to the **Project List** page where the new project is listed.

Editing Projects and Project Baselines

To edit an existing project or project baseline:

1. In the menu, click **Projects > Project List** . The **Projects** page displays, listing all existing projects and project baselines.
2. Click  in the Actions column of the project name of the project or project baseline you want to edit.



Note: The project or project baseline must be inactive.

3. Edit the **Project name** and **Description** as required.
4. Change the **Project Owner** as required.
5. Check the **Active** check box to activate the project or project baseline.
6. The **Groups** section includes a list of registered user groups. Check the **Assigned** check boxes of the user groups that will work with this project.
7. A list of locations is located at the bottom of the page. Select the location(s) from which this project's tasks are to be executed. Click **Select All** to assign all locations to the project, or click **Deselect All** to select no locations.
8. Click **Save** to save your settings. You are returned to the **Project List** page.

Activating or Deactivating Projects and Project Baselines



Note: You can also activate or deactivate an existing project or project baseline from the **Project List** page. For additional information, see *Editing Projects*.

To activate or deactivate an existing project or project baseline:

1. In the menu, click **Projects > Project List** . The **Projects** page displays, listing all existing projects and project baselines.

2. Click **Active/Inactive** in the **Status** column of the project or project baseline you want to activate or deactivate. A confirmation dialog box displays, asking you if you are sure about the activation or deactivation.
3. Confirm to toggle the project status to *Active* or *Inactive*.

Copying Projects or Project Baselines

Describes how to copy an existing project or project baseline to a new project.




Caution: Copying a project or project baseline can lock the database for several minutes, depending on the size of the project or project baseline that is being copied. It is recommended to copy projects or project baselines during off-hours, when user activity on SilkCentral is minimal.



Note: If the original project or baseline includes schedules, the scheduling options are set to none during the copy.

To copy a project or project baseline:

1. In the menu, click **Projects > Project List** . The **Projects** page displays, listing all existing projects and project baselines.
2. Click  in the **Actions** column of the project or project baseline you want to copy. The **Copy Project** dialog box displays.
3. In the **New project name** text box, type a name for the new project.
4. Check the check boxes of any additional information types you want to have copied along with the new project. When you check the **Test history** check box, the versions are also copied.
For detailed information on the check boxes, see *Copy Project Dialog Box*.
5. Click **OK**.

If your project or project baseline is initialized for Issue Manager, the **Copy Project - Issue Manager** dialog box displays.

If your project or project baseline is not initialized for Issue Manager, or you have not installed Issue Manager, you will receive a message indicating that no Issue Manager depending data will be copied.

Refer to the Issue Manager documentation for detailed information on how to initialize a project for Issue Manager.


6. Check the **Copy Issues** check box to copy all of the source project's existing issues to the new project.
7. Check **Copy Archived Issues** to copy all of the source project's archived issues to the new project.
8. Click **OK**.
9. Click **Yes** on the **Copy Project** dialog box, confirming that you want to begin the copy process and that you know the process may take several minutes. When the copy process is complete, a dialog box informs you what has been copied and asks you if you want to activate the project, thereby making the project available in Test Manager's project view.

Deleting Projects and Project Baselines



Caution: When you delete a project or project baseline you permanently remove all related results from the repository. You also destroy all content associated with the project or project baseline. If you want to keep results, we recommend that you set a project or project baseline to inactive rather than delete it. For information on deactivating projects and project baselines, see *Activating or Deactivating Projects or Project Baselines*.

To delete a project or project baseline:

1. In the menu, click **Projects > Project List** . The **Projects** page displays, listing all existing projects and project baselines.
2. Click  in the **Actions** column of the project or project baseline you want to remove.



Note: The project or project baseline must be inactive.

A confirmation dialog box displays, asking you to confirm the deletion.

3. Click **Yes** to remove the project or project baseline; or click **No** to abort the operation. If you choose **Yes**, you will be returned to projects list, where the deleted project or project baseline is no longer listed.

Copy Project Dialog Box

Projects > Projects List > Copy Project

Use this dialog box to copy an existing project to a new project.



Note: Check the check boxes of any additional information types you want to have copied along with the new project. If you don't select additional information types, an empty project with only group assignments, location assignments, and project settings is copied.

Item	Description
New project name	Specifies the name of the new project to which the existing project is copied to.
New project description	Specifies the description of the new project to which the existing project is copied to.
Settings	Check this check box to copy project settings, filters, attributes, custom requirement properties, change notification, and integration configuration setting information to the new project. Third-party integration configuration setting information is not copied.
Requirements tree (includes Requirements settings)	Check this check box to copy the requirements tree with all information for each requirement, for example properties, attachments, and others. Third-party requirement information is not copied. When a project has been configured for an external requirements management system, you are asked if you want to transfer the RMS settings to the copy of the project.
Requirements history	Check this check box to copy the historical information for each requirement. This option is only available when Requirements tree is checked.
Tests tree (includes Tests settings)	Check this check box to copy the tests tree with all information for each test. When both Requirements tree and Tests tree are checked, in addition to the information listed above, the information related to the relationship between requirements and tests (assigned requirements and assigned tests) is also copied
Tests history	Check this check box to copy the historical information for each test. This option is only available when Tests tree is checked.
Execution Plans tree (includes Tests tree)	Check this check box to copy the execution tree with all information for each execution plan.
Last runs of tests	Check this check box to copy the last run of each test. This option is only available when Execution Plans tree is checked. When Requirements tree , Execution Plans

Item	Description
Reports	tree , and Last runs of tests are checked, all trees are copied in their entirety. The relationship between the trees is also established. Check this check box to copy all project-related reports to the new project.

For Issue Manager, the dialog box displays the following additional check boxes:

Copy Project — Issue Manager Dialog Item	Description
Copy Issues	Check this check box to copy all of the source project's existing issues to the new project.
Copy Archived Issues	Check this check box to copy all of the source project's archived issues to the new project.

If you do not check either check box, issue data will not be copied to the new project.

Source project configurations are automatically copied to the new project. These include:

- Products
- GUI configuration
- Notification rules and systemwide triggers
- Routing rules
- Workflow
- User views on inboxes
- Workgroups
- Inboxes
- User account configuration

Project Settings Page

Project > New Project

Use the **Project Settings** page to configure projects. The page displays the following items:

Item	Description
Project Name	Specifies the name of the project as it should appear in the GUI and in reports.
Description	A description of the project. You can enter any text for the description.
Project Owner	Specifies the owner of the project. The selected user account does not have any special privileges; this setting is purely informative.
Active	Check this check box to activate the project. Inactive projects are not visible in your application.
Project Template	This list box defines whether a project is based on the Agile project template or not. Choose <i>Agile Project Template</i> to base the project on the template for Agile project-management tools, or <i><None></i> to create a simple project.

Item	Description
Groups	Lists all existing user groups and whether they are assigned to the project. Check the check box next to a user group to assign the group to the project. If no user groups exist, you may assign them later after you have created them. You can also configure the group/project assignment on the Group Settings page. Privileges vary based on user roles. For information about user privileges, see <i>User Roles and Permissions</i> .
Select All	Checks the check boxes of all listed groups.
Deselect All	Un-checks the check boxes of all listed groups.
Location	Lists all existing locations and whether they are available to the project. Check the check box next to a location to assign the location to the project. If no locations exist, you may assign them later after you have created them. You can also configure the location/project assignment on the Location Settings page.
Select All	Checks the check boxes of all listed locations.
Deselect All	Un-checks the check boxes of all listed locations.


Project Baselines

This topic describes the conceptual background of project baselines in SilkCentral.


A project baseline is a snapshot of a project at a given time and can be created for any project or even another project baseline. The last run of each execution plan in the project is also included in the project baseline. The schedule options included in a project baseline are initially set to none, to prevent losing the execution status of the last runs. An example usage of a project baseline is to save a snapshot of a project immediately after a release. The *Baseline Comparison* report in Test Manager shows the amount of tests that are currently different in the project compared to the project baseline. For more information on the report, refer to the *Test Manager Help*.


For each new project baseline that includes an element of the **Tests** area, the **History** page of the element includes an entry with links to the project baseline and the corresponding element in the project baseline. If the element itself was created as part of a project baseline, the first entry in the **History** page includes links to the original project and the corresponding element in the original project.

When tests in the original project include calls to shared steps objects from libraries, you can define during the creation of the project baseline whether all calls are resolved or kept. The project baseline has the same visibility on the libraries as the original project. For more information on shared steps objects, refer to the *Test Manager Help*.

 **Note:** Project baselines can be created by the administrator, project manager, and SuperUser roles.


Creating a Baseline for a Project


 **Caution:** Creating a baseline for a project can lock the database for several minutes, depending on the size of the project that the baseline is created for. We recommend to create a baseline for a project during off-hours, when user activity on SilkCentral is minimal.


 **Note:** If the original project includes schedules, the scheduling options in the new baseline are set to none to prevent losing the last execution status. When tests in the original project include calls to

shared steps objects, the baselined tests also call the same shared steps objects. When you create a baseline, the **History** page of each **Test** item included in the baseline is updated with an entry for the baseline.

To create a baseline for a project:

1. In the menu, click **Projects > Project List** . The **Projects** page displays, listing all existing projects and project baselines.
2. In the **Actions** column of the project you want to create a baseline for, click . The **Baseline Project - Test Manager** dialog box displays.
3. Type a name and a description for the new baseline.
4. *Optional:* If the project contains tests that use shared steps from libraries, define the handling of the shared steps in the **Library Assets Handling** section.
 - Click **Detach Library Assets** to detach all manual test steps from the containing shared steps objects into the tests of the baseline. Choose this option to create a project baseline for historical or auditing purposes.
 - Click **Keep References to Library Assets** to keep all references from manual test steps to the shared steps objects in the tests of the baseline. Choose this option to create a working copy for ongoing testing purposes, for example a new version of the project.
5. *Optional:* If the project contains manual tests, define in the **Test asset versioning** section whether a new version should be created for the tests in the original project and in the baseline.
 - Check the **Create new versions for all assets in original project** check box to create new versions for all manual tests with shared steps in the original project.
 - Check the **Create new versions for all assets in new baseline** check box to create new versions for all manual tests with shared steps in the baseline.

 **Note:** Versions are not created for data-driven instances.
6. Click **OK**. The **Baseline Project** dialog box displays and informs you that the operation may take several minutes to complete.
7. Click **Yes** to continue. The **Baseline Project - Adapt Project Settings** dialog box opens. The dialog box displays the requirement integration settings along with all source control profiles that are configured for the original project.
8. Click the corresponding **Edit** button to link the project baseline to the appropriate baseline, branch, label, or other point of reference in the source control profile, or to change the requirement integration settings.

 **Note:** For more information on editing source control profiles, refer to the *Test Manager Help*.
9. Click **Finish** to finish creating the baseline.
10. Click **Yes** in the **Baseline Project** dialog box to activate the new baseline.

Project Templates


This topic describes the conceptual background of project templates in SilkCentral.

The Agile project template is used to support the interaction between SilkCentral and VersionOne or other Agile project management tools. The template is a project with the specific attributes sprint and release. When you create a new project based on this template, a default test container and a default folder are also created. When the project management tool creates a test, the test is added to the default folder. No source control profile and no product are specified for the test container and the folder, therefore they are marked as incomplete.

Managing Locations

This topic describes the conceptual background of locations in SilkCentral.

Locations are logical containers for execution servers. For information on setting up execution servers, see *Setting Up Execution Servers*. Since SilkCentral supports worldwide distribution of Points of Presence (PoP) — the distribution of execution servers — it is desirable to group execution servers into locations.

 **Note:** SilkCentral automatically creates a default location called `Local`.

Adding Locations

To add a new location:

1. In the menu, click **Administration > Execution Servers**.
2. Click **New Location**.


The **New location** dialog box displays.

3. Type a **Location Name**.
4. If you have specified the location of a proxy server, select **Use System Proxy** by checking the respective check box.
For more information, see *Configuring a System Proxy*.
5. In the **Location Proxy** section, you can define a proxy server through which the execution servers of this location will communicate with the application server.
6. In the **Host** text box, type the name of the computer hosting the proxy service.
7. In the **Port** text box, type the port number of the proxy host.
8. If the proxy server requires a username/password authentication, type the valid credentials in the **User** and **Password** text boxes.
9. The **Projects** section includes a list of existing projects. Check the **Assigned** check boxes of the projects that you want to assign to this location.
10. Click **Save** to add the new location. You are returned to the **Locations** page where the new location is listed.

Editing Locations

Describes how to edit a location.

To edit a location:

1. In the menu, click **Administration > Execution Servers**.
2. In the **Actions** column of the location you want to modify, click .

The **Edit Location** dialog box displays.

3. Modify the **Location Name** as required.
4. If you have specified the location of a proxy server, select **Use System Proxy** by checking the respective check box.
For more information, see *Configuring a System Proxy*.
5. In the **Location Proxy** section, you can define a proxy server through which the execution servers of this location will communicate with the application server.
6. In the **Host** text box, type the name of the computer hosting the proxy service.
7. In the **Port** text box, type the port number of the proxy host.

8. If the proxy server requires a username/password authentication, type the valid credentials in the **User** and **Password** text boxes.
9. The **Projects** section includes a list of existing projects. Check the **Assigned** check boxes of the projects that you want to assign to this location.
10. Click **Save**. You are returned to the **Locations** page.

Deleting Locations



Tip: Before you can delete a location, you must first remove all assigned execution servers from the location. For more information, see *Deleting Execution Servers*.

To delete a location:

1. In the menu, click **Administration > Execution Servers**.
2. In the **Actions** column of the location you want to remove, click **X**. A confirmation dialog box displays, asking you to confirm the deletion.
3. Click **Yes** if you want to remove the location, or click **No** to abort the operation. If you choose **Yes**, you will be returned to the list of locations, where the deleted location will no longer be listed.

New Location Dialog Box

Administration > Execution Servers > Locations > New/Edit Location

Use the **New Location** dialog box to configure locations.

Item	Description
Name	Specifies the name of the location as it should appear in the GUI and in reports.
Use system proxy	Enabling this setting will force all execution servers of this location to communicate with the application server through the defined system proxy. If this setting is not enabled, the application server will communicate directly with the execution servers, unless you define a location proxy. This check box is disabled if no system proxy is defined.
Location proxy	<p>Use this area to define a proxy server through which the execution servers of this location will communicate with the application server. Leave the fields empty if you want the execution servers of this location to communicate directly with the application server, or if you checked the Use system proxy option. You can also define a system proxy and a location proxy, in which case the communication will be tunneled through both proxies.</p> <p>You may only define a location proxy that supports Secure Sockets Layer (SSL). All execution servers must use the SSL port of the proxy. For detailed information about execution server settings, see <i>Setting Up Execution Servers</i>.</p>
Hostname	The name of the computer hosting the proxy service.
Port	The port number of the proxy host. Default is port 443.
Username	If the proxy server requires a username/password authentication, enter a valid username.

Item	Description
Password	If the proxy server requires a username/password authentication, enter a valid password for the username specified in the Username text box.
Assigned Projects	Lists all existing projects. Check the check box next to a project to assign the project to the location. If no projects exist, you can assign them later after you have created them. For more information, see <i>Adding Projects</i> . Selected projects will have access to the execution servers at this location.
Select All	Checks the check boxes of all listed projects.
Deselect All	Un-checks the check boxes of all listed projects.

Setting Up Execution Servers

SilkCentral execution servers are responsible for executing scheduled tests, for example SilkTest Classic and SilkPerformer scripts. To execute SilkTest Classic and SilkPerformer tests, SilkTest Classic or SilkPerformer software must be installed on the same computer on which SilkCentral execution servers are installed.

When executing SilkPerformer scripts against multibyte applications or Web pages, review the *Multibyte Support* section in the *SilkPerformer Help*.

For further details regarding the installation of execution servers, refer to the respective SilkCentral product's Help. For information regarding SilkTest Classic and SilkPerformer, refer to the respective product documentation.

Hardware Provisioning with Keywords

The hardware-provisioning technology of Test Manager helps you manage test environments that include numerous execution servers. Rather than having to configure a one-to-one direct relationship between each execution server and execution plan, keywords enable Test Manager to select the most appropriate execution server for each execution plan. This is done through dynamic comparison of an execution plan's keyword list with the keyword lists of all active execution servers.

Keywords typically describe the environment of an execution server, for example platform, operating system, and pre-installed applications. When an execution plan is executed, Test Manager compares the execution plan's keywords with the keywords of all available execution servers. The execution is then run on the execution server that matches the execution-plan's keyword list. If there is no matching execution server, the execution will not be run. If there are multiple execution servers with matching keyword lists, the execution will be run on the first identified execution server.

Reserved Default Keywords

If you do not require hardware provisioning, you can rely on the reserved keywords that are created automatically for each execution server. In such cases, it is not necessary that you manually assign keywords to your execution servers. Instead, you can configure a one-to-one static execution-server assignment for each execution plan.

A reserved keyword is assigned automatically to each newly created execution server. Reserved keywords are structured in the following form:

```
#<execution name>@<location name>
```

Reserved keywords are available when assigning keywords to execution plans. They are neither available or applicable when assigning keywords to execution servers.

In addition to the reserved keywords that are set up automatically for each defined execution server, reserved keywords are also set up for each execution server type:

#PHYSICAL Limits execution-server provisioning to physical execution servers.

#VIRTUAL Limits execution-server provisioning to virtual execution servers.


Keywords and Virtual Execution Servers

Keywords are assigned to virtual execution servers in the same way that they are assigned to physical execution servers. When you configure at least one virtual execution server, the **#VIRTUAL** keyword is dynamically created and made available for assignment to all execution plans. If you prefer that an execution is executed on a virtual machine, select the **#VIRTUAL** keyword for the execution plan. When an execution plan has neither (or both) the **#VIRTUAL** and **#PHYSICAL** keywords, the execution may occur on either a virtual or a physical execution server, assuming the settings of the execution environments are the same. When an execution-plan's keywords match multiple virtual execution servers, the first matching virtual execution server that is identified is selected.


Configuring Physical Execution Servers


To configure a physical execution server:

1. In the menu, click **Administration > Execution Servers**.
2. Click on the name of the location for which you want to configure a physical execution server.
 - To create a new execution server, click **New Execution Server**.
 - To edit an existing execution server, click the respective **Edit** button in the **Actions** column.


 **Note:** Execution servers must be deactivated before their properties can be edited. Keyword-lists of active execution servers can however be edited.

3. Enter a **Name** and **Description** for the execution server.
4. Click the **Physical execution server** option button.
5. Enter a valid IP address or hostname in the **Hostname or IP address** text box.
6. Specify the port on which the execution server listens in the **Port** text box.

 **Note:** Check the **Use SSL** check box if you want to connect to the execution server through SSL.

 **Tip:** To connect to the execution server through a non-standard SSL port, see *Configuring a Non-Standard SSL Port for Execution Servers*.

7. Type a responsiveness timeout in seconds in the **Responsiveness Timeout** text box.
8. Click **Keywords** to select keywords from a list or add new keywords that describe the execution server. These keywords are analyzed at execution time to dynamically select an appropriate server for each execution. For more information, see *Creating New Execution-Server Keywords and Assigning Keywords to an Execution Server*.
9. Check the **Active** check box to activate the execution server.

 **Note:** If the version of the execution server is an invalid older version, but later than or equal to SilkCentral Test Manager 2009 SP1, the execution server is automatically upgraded to the current Test Manager version. Test Manager shows a message concerning the upgrade in the **Information** column in the list of execution servers. As long as the upgrade procedure is not complete, the upgrading execution server is not used.




Note: Click **Test Connection** to establish a test connection to the execution server. You will receive a message stating that the execution server has successfully been connected. If you receive an error message, ensure that your settings are correct, the network is configured properly, and that the required software is installed on the execution server you are setting up.

10. Click **OK** to save your settings. The server now displays on the **Locations** tab in the list of available execution servers. Tests can now be run on this execution server.

Creating New Execution-Server Keywords

To create new execution-server keywords

1. In the menu, click **Administration > Execution Servers**.
2. Click the name of a defined location to go to the list of defined execution servers for that location.
3. In the **Actions** column of a predefined execution server, click , or click **New Execution Server** to create keywords for a new execution server.

Any currently assigned keywords are listed in the **Keywords** section of the resulting dialog box. For additional information on configuring a physical execution server, see *Configuring Physical Execution Servers*. For additional information on configuring a virtual execution server, see *Configuring Virtual Execution Servers on VMware Lab Manager*.

4. Click **Keywords**. The **Assign Keywords** dialog box displays.
5. Type an alphanumeric keyword into the **Keyword** text box that describes the environment on the execution server, like the platform, operating system, or pre-installed applications.

The following characters cannot be used in keywords:

- #
- \$
- ?
- *
- \
- ,
- ;
- '
- "




Note: Keywords are case insensitive. For example, "Vista" and "vista" are handled as the same keyword.

6. Press **Enter**. The new keyword is now available for assignment.

Assigning Keywords to an Execution Server


To assign keywords to an execution server:

1. In the menu, click **Administration > Execution Servers**.
2. Click the name of a defined location to go to the list of defined execution servers for that location.
3. In the **Actions** column of a predefined execution server, click , or click **New Execution Server** to assign keywords to a new execution server.

Any currently assigned keywords are listed in the **Keywords** section of the resulting dialog box. For additional information on configuring a physical execution server, see *Configuring Physical Execution Servers*. For additional information on configuring a virtual execution server, see *Configuring Virtual Execution Servers on VMware Lab Manager*.


4. Click **Keywords**.
5. On the **Assign Keywords** dialog box, select a keyword in the **Select keywords** list.


All available, unassigned keywords are listed in the **Select keywords** column. If you are working with a new Test Manager installation you may not see any available keywords.

 **Note:** Though not visible on the **Assign Keywords** dialog box, reserved keywords are created for each execution server that is configured for the system. These reserved keywords are only available when assigning keywords to execution plans.

6. Select keywords in the **Select keywords** list that describe the environment on the execution server, like the platform, operating system, and pre-installed applications.

You can use **Ctrl + Click** or **Shift + Click** to select multiple keywords using standard Windows multi-select functions.

 **Tip:** The **Select keywords** box is auto-complete enabled. When you enter alphanumeric characters into this box, the box is dynamically updated with an existing keyword that matches the entered characters. Note that this box is disabled when multiple keywords are selected in the **Select keywords** or **Assigned Keywords** list boxes.


 **Note:** If you do not require hardware provisioning, you can use the default, reserved keywords that are created for each execution server. In such cases, it is not necessary that you assign additional keywords to the execution server.

7. Click **Add (>)** to move the keyword into the **Assigned Keywords** list.
8. Click **OK** to save the keywords and close the **Assign Keywords** dialog box.


Activating or Deactivating Execution Servers


To activate or deactivate an existing execution server:

1. In the menu, click **Administration > Execution Servers**.
2. Click the name of the location to which the execution server is assigned.
3. In the **Status** column of the execution server you want to activate or deactivate, click **Inactive/Active**. A confirmation dialog box displays, asking you to confirm the activation or deactivation.
4. Click **Yes** to activate or deactivate the execution server; or click **No** to leave the current status unchanged. You are returned to the list of execution servers. The status toggles to active or inactive.

 **Note:** If the version of the execution server is an invalid older version, but later than or equal to SilkCentral Test Manager 2009 SP1, the execution server is automatically upgraded to the current Test Manager version. Test Manager shows a message concerning the upgrade in the **Information** column in the list of execution servers. As long as the upgrade procedure is not complete, the upgrading execution server is not used.

Deleting Execution Servers

 **Tip:** To prevent data inconsistency, you need to deactivate an execution server before you can delete it. For additional information, see *Activating or Deactivating Execution Servers*.

 **Note:** Deleting an execution server does not remove the actual software installation. Deletion simply disconnects the execution server. You can add a previously deleted execution server again.

To delete an execution server:

1. In the menu, click **Administration > Execution Servers**.
2. Click the name of the location to which the execution server is assigned. A list of execution servers assigned to the selected location displays.
3. In the **Actions** column of the execution server you want to remove, click **X**. A confirmation dialog box displays, asking you to confirm the deletion.
4. Click **Yes** if you want to remove the execution server or click **No** to abort the operation. If you choose **Yes**, you are returned to the list of execution servers where the deleted execution server will no longer be listed.

Configuring a Non-Standard SSL Port for Execution Servers

The default SSL port through which the application server communicates with execution servers is 19125.



Note: This procedure needs to be performed for each execution server that you want to connect to through a non-standard SSL port.

To configure a non-standard SSL port for an execution server:

1. Deactivate the execution server for which you want to configure a non-standard SSL port.
2. Stop the execution server.
3. Open the `SccExecServerBootConf.xml` file with a text editor.
This file is located in the `/conf/execserver` folder of the SilkCentral directory on the execution server.
4. Locate the `<SSLPort>` XML tag. By default, the tag is set to `<19125>`.
Set the value to the port number that you want to use for SSL communication.
5. Save and close the XML file.
6. In SilkCentral, set the SSL port of the execution server to the value that you have specified in the XML file.
7. Restart the execution server.
8. Reactivate the execution server.

New/Edit Execution Server Dialog Box

Administration > Execution Servers > Location > New/Edit Execution Server


Use the **New/Edit Execution Server** dialog box to configure execution servers within a location.

Item	Description
Name	Defines a name for the execution server. This name will appear in all tables and result reports for executions from this specific computer. You can enter up to 100 characters.
Description	A description of the execution server. You can enter any text for the description.
Physical execution server	Select this option to specify a physical machine as execution server.
Host or IP-address	Specifies the name of the host or the IP-address of the computer on which the execution server is installed. Some networks may only find the execution server if you specify the full name of the host, including the name of the domain, for example <code>MyHost.MyDomain</code> .
Virtual machine	Select this option to specify an execution server running on a virtual image of a VMware Lab Manager configuration. VMware Lab Manager Server Select the VMware Lab Manager installation which hosts the virtual machine. The list box lists all

Item	Description
	<p>installations which are configured in Administration > System Settings > VMware Lab Manager Servers .</p> <p>Configuration Lists all available configurations within the selected VMware Lab Manager Server.</p> <p>Machine Lists all available virtual images within the selected Configuration.</p>
Port	Specifies the port of the computer defined in the Host or IP-address text box on which the execution server listens. The default port is 19124.
Use SSL	<p>Check this check box if you want the application server to connect to the execution server through Secure Sockets Layer (SSL). The default SSL port is 19125.</p> <p>If you selected to use a proxy server for the location to which this execution server is assigned, you must check Use SSL with port 443.</p>
Responsiveness timeout [s]	Enter a responsiveness timeout in seconds, or leave the default value of 120 seconds for physical execution servers, 300 seconds for virtual execution servers. The responsiveness timeout is the period of time after which the application server will time out if the execution server does not respond. After 2/3 of the time defined here, the administrator will be warned through email that the execution server is no longer available.
Keywords	Lists the keywords that have been defined for this execution server. Keywords enable Test Manager's hardware-provisioning technology to dynamically identify the most appropriate execution server for each test execution. Click Keywords to edit the keywords list for this execution server.
Status	Check this check box to activate the execution server. If you do not activate the execution server, it will not be available for monitor executions.
Test Connection	Click this button to establish a test connection to the execution server. You will receive a message stating that the execution server has successfully been connected. If you receive an error message, ensure that your settings are correct, the network is configured properly, and that the required software is installed on the execution server you are setting up.


Working with VMware Lab Manager


VMware Lab Manager (Lab Manager) is integrated with Test Manager to enable managing Lab Manager directly from the UI of Test Manager. Integrated functionality includes configuration deployment, test execution, result collection, and automatic undeployment of configurations. Test Manager can support multiple Lab Manager installations and configurations. Configurations captured through LiveLink technology are viewed using Lab Manager.

 **Note:** For full details regarding LiveLink configuration captures and other Lab Manager functionality, refer to the Lab Manager Documentation.

Lab Manager Virtual Configurations

VMware images are virtual computer systems. Lab Manager is used to manage VMware images, or "configurations", which are combinations of images, for example database server, application server, and execution server. VMware configurations offer an effective means of virtualizing complex software-testing lab environments. Configurations are typically deployed from Lab Manager libraries. Configurations are turned on and off just like individual VMware images. Multiple instances of the same configuration can be deployed simultaneously, with separate tests run in each instance. VMware configurations are "network-fenced," meaning that they do not influence each others' network behavior. VMware LiveLink technology enables you to take "snapshots" of complete configurations that can later be recreated (or "restored") on demand.


 **Note:** For full details regarding LiveLink configuration captures and other Lab Manager functionality, refer to the Lab Manager Documentation.

 **Note:** At least one Test Manager execution server must exist within each configuration. These execution server instances control test execution within configurations and retrieve test results.

Configuring Access to Lab Manager Servers

To configure access to a Lab Manager server:

1. In the menu, click **Administration > System Settings**.
2. Click the **VMware Lab Manager Servers** tab.
3. Click **New VMware Lab Manager Server**. The **New VMware Lab Manager Server** dialog box displays.
4. Type a **Name** for the server you are configuring.
5. Enter a **Hostname** for the server you are configuring.
6. Enter the **Port** number.
7. If the connection to the Lab Manager server is to be SSL-encrypted, check the **Use SSL** check box.
8. Enter **Username** and **Password** credentials for the Lab Manager server that you are configuring. The **Status** is set to **Active** by default.

 **Note:** Lab Manager users must have admin rights to perform this task.

9. *Optional:* Type the Lab Manager **Organization**.


Lab Manager uses organizations to determine which resources a user can access. If the user is not assigned to the selected organization in Lab Manager, an error message displays in Test Manager. For more information on organizations in Lab Manager, refer to the Lab Manager documentation.

10. Click **OK**. Test Manager checks the availability of the configured Lab Manager server and adds the server to the Lab Manager Servers list.

Configuring Virtual Execution Servers on Lab Manager

Describes how to configure a virtual execution server on a Lab Manager installation.

To configure an execution server on a virtual image of a Lab Manager configuration:

1. In the menu, click **Administration > Execution Servers**.
2. Click the name of the location to which on which you want to configure a virtual execution server.
3. To create a new execution server, click **New Execution Server**. To edit an existing execution server, click  in the **Actions** column.



Note: Execution servers must be deactivated before their properties can be edited. Keyword lists of active execution servers can be edited while the server is active.

4. Type a **Name** and **Description** for the virtual execution server.
5. Click the **Virtual machine** option button.
6. From the **VMware Lab Manager** list box, select the VMware Lab Manager installation that hosts the virtual machine you want to configure.
7. Select the Lab Manager configuration you want from the **Configuration** list box.
8. From the **Machine** list box, select the machine where the Test Manager execution server runs. This is required to communicate and drive tests in the configuration.
9. Specify the port on which the execution server listens in the **Port** text box.



Note: Check the **Use SSL** check box if you want to connect to the execution server through SSL.



Tip: To connect to the execution server through a non-standard SSL port, see *Configuring Non-Standard SSL Port for Execution Server*.

10. Type a responsiveness timeout in seconds in the **Responsiveness Timeout** text box.
11. Check the **Active** check box to activate the execution server.
12. Click **Test Connection** to establish a test connection to the execution server.

You will receive a message stating that the execution server has successfully been connected. If you receive an error message, ensure that your settings are correct, the network is configured properly, and that the required software is installed on the execution server you are setting up. Executing a **Test Connection** results in the complete configuration being deployed and Test Manager attempts to connect to the execution server on the configuration and subsequently undeploy the configuration. This process can take some time to complete.

13. Click **OK** to save the configuration. The virtual server now displays on the **Locations** tab in the list of available execution servers. Tests can now be run on this virtual execution server.

VMware Lab Manager Servers Page

Administration > System Settings > VMware Lab Manager Servers

Use this page to manage your Lab Manager servers. For each listed server, the page displays the following columns:

Column	Description
Actions	Edit or delete a Lab Manager server connection. These actions are only allowed if the Lab Manager connection is disabled. See Status .

Column	Description
Name	Specifies the name of the Lab Manager server as it should appear in the SilkCentral GUI. You can define any name for the server; this field has no impact on the actual Lab Manager settings.
Status	Displays whether the connection to the Lab Manager server is active or inactive. If inactive, the Lab Manager server's services are not available to SilkCentral. Clicking the status of a VMware Lab Manager server toggles the status to active/inactive.
Host	The hostname and port of the server hosting Lab Manager.
Path	The path to VMware Lab Manager's Web service API. The default path is /LabManager/SOAP/LabManager.asmx?WSDL.
SSL	Displays whether SilkCentral connects to the Lab Manager server using SSL or not.
Created On	Date when the Lab Manager server connection was created.
Created By	The user who created the Lab Manager server connection.
Changed On	Date when the Lab Manager server connection was modified.
Changed By	The user who modified the Lab Manager server connection.

Click **New VMware Lab Manager Server** to create a new Lab Manager connection.

Managing Report Templates

SilkCentral offers a variety of pre-installed reports that let you quickly and easily transform data into presentation-quality information for analysis. The default reports can be customized with either Microsoft Excel or BIRT, an Eclipse-based, open source reporting tool for Web applications. You can also use these tools to create entirely new reports. To customize reports created with Microsoft Excel, you need a copy of Microsoft Excel.

SilkCentral reports do not support bitmap (.bmp) image file format. For proper display, images must be in JPEG, GIF, or PNG format.

Managing Custom Report Templates with BIRT

SilkCentral is tightly integrated with Business Intelligence and Reporting Tools (BIRT) RCP Designer to make it easy for you to generate reports for your test-, build-, defect-, and requirement data.

After downloading a copy of BIRT RCP Designer, you can customize the core SilkCentral reports and add your own reports. For information about running and customizing reports, please refer to the application's Help.

For additional information on BIRT RCP Designer, refer to BIRT RCP Designer's online help system. You can find further information, examples, and demonstrations for BIRT RCP Designer at <http://www.eclipse.org/birt>. An active newsgroup (news.eclipse.org) is also available.

The software prerequisites to work with BIRT custom reports are:

- BIRT RCP Designer
- Access to SilkCentral with administrator privileges



Note: SilkCentral reports do not support bitmap (.bmp) image file format. For proper display, images must be in JPEG, GIF, or PNG format.

Installing BIRT from SilkCentral

This procedure explains how to install BIRT RCP Designer from your SilkCentral installation. By installing BIRT this way, all necessary configurations for SilkCentral are done automatically.

To install BIRT from SilkCentral:

1. Navigate to **Help > Tools**.
2. Click the **BIRT RCP Report Designer** link.
3. After downloading the compressed installer package to your local system, extract the compressed files to a directory on your system, for example `C:\BIRT`.



Note: If you encounter an error when extracting the installer files using Windows compressed folder functionality, use an extraction tool instead, for example WinZip or WinRAR, to extract the files.

4. Start `BIRT.exe` from the directory you extracted the files to.

Configuring BIRT for SilkCentral

If BIRT is already installed on your computer, or you are installing BIRT from another location, for example from the Eclipse homepage, you need to configure BIRT for use with SilkCentral after the installation. If you have installed BIRT from SilkCentral as described in *Installing BIRT from SilkCentral*, you do not need to perform the steps outlined in this procedure.

To configure BIRT RCP Designer for use with SilkCentral:

1. Copy the `jtlds.jar` and `ojdbc6.jar` files, available in the `\lib` directory of your SilkCentral front-end server installation folder, to the `plugins\org.eclipse.birt.report.data.oda.jdbc_<version>\drivers` directory of your BIRT installation.
This will allow JDBC access to your SilkCentral installation.
2. Copy the `scc.jar` file, available in the `\lib` directory of your SilkCentral front-end server installation folder, to the `plugins\org.eclipse.birt.report.viewer_<version>\birt\WEB-INF\lib` directory of your BIRT installation.
3. Create a directory to store the reports you intend to create, for example `C:\MyBirtReports`. Create a subdirectory called `conf` within the newly created directory.
4. Within the `conf` directory, create a directory called `birt`. You should now have a directory structure that resembles the following: `C:\MyBirtReports\conf\birt`.
5. Copy the file `library.rptlibrary`, available in the `\conf\Birt` directory of your SilkCentral front-end server installation folder, to the `\conf\birt` directory that you created in the previous step.
6. Launch BIRT by executing the `BIRT.exe` file, located in the local directory where you extracted the application's compressed files.

7. From within BIRT RCP Designer, select **Preferences** from the **Window** menu.
8. In the **Preferences** window, select **Report Design > Resource** in the directory tree in the left-hand pane.
9. In the **Resource folder** text box, enter the directory that you created.
For example `C:\MyBirtReports\conf\birt`.
10. Click **Apply**, then click **OK**.

Establishing Database Access For a New Report Template

Before you can create a new report template with BIRT RCP Designer, you need to establish database access to the SilkCentral repository you want to query.

To establish database access for a new report template:

1. From within BIRT RCP Designer, select the menu **File > New > New Report**.
2. Follow the steps in the **New Report** wizard.
3. Open the **Resource Explorer**.
4. In the **Resource Explorer**, click **Shared Resources > conf > birt > library.rptlibrary > Data Sources > Data Source** and drag the required datasource into your report's `Data Sources` directory, which is located in the **Outline** window.
5. In the **Resource Explorer**, click **Shared Resources > conf > birt > library.rptlibrary > Report Parameters** and drag the four report parameters `sourceUser`, `sourcePassword`, `sourceURL`, and `sourceDriver` into your report's `Report Parameters` directory, which is located in the **Outline** window.
6. Double-click the newly imported data source to open the **Edit Data Source** dialog box.
7. Type a valid **Driver Class** and **Database URL**.
For additional information, see **BIRT Data Source Settings** topic.
8. Click **Test Connection** to test your settings. If the database connection has been established, you can proceed with designing your new report template.
9. Click **OK**.

BIRT Data Source Settings

Use the BIRT **New JDBC Data Source Profile** dialog box to establish database access to an existing SilkCentral repository. To access the **New JDBC Data Source Profile** dialog box, right-click **Data Sources** in the **Outline** pane, click **New Data Source**, select **JDBC Data Source**, and click **Next >**.

To connect to a MS SQL Server or a MS SQL Server Express database, use the following credentials:

Item	String	
Driver Class	<code>net.sourceforge.jtds.jdbc.Driver</code>	
Driver URL	MS SQL Server	<code>jdbc:jtds:sqlserver://<HOST>:<PORT>/<DATABASE></code>
	MS SQL Server Express	<code>jdbc:jtds:sqlserver://<HOST>:<PORT>/<DATABASE>;instance=<INSTANCENAME></code>
HOST	Host name or IP-address of the computer hosting the database server.	
PORT	Port number of the database management system. Default is 1433.	
DATABASE	The name of the database.	


Item	String
INSTANCENAME	Only for MS SQL Server Express. Instance name of the database instance. The default MS SQL Server Express instance is localhost\SQLExpress.

To connect to an Oracle database, use the following credentials:


Item	String
Driver Class	oracle.jdbc.OracleDriver
Driver URL	jdbc:oracle:thin:@<HOST>:<PORT>:<DATABASE>
HOST	Host name or IP-address of the computer hosting the database server.
PORT	Port number of the database management system. Default is 1521.
DATABASE	Oracle SID.

Adapting Existing Report Templates

SilkCentral allows you to download and adapt BIRT report templates that contain all the information you need to create custom report templates for use with SilkCentral modules.

 **Note:** SilkCentral reports do not support bitmap (.bmp) image file format. For proper display, images must be in JPEG, GIF, or PNG format.

To create a report based on a SilkCentral template:

1. In the menu, click **Administration > Report Templates**. The **Report Templates** page displays, listing all of the report templates that have been uploaded.
2. Click  in the **Actions** column.
3. Save the template file <filename>.rptdesign to your local system.
4. Open the downloaded template file in **BIRT RCP Designer**.
5. Redesign the report as necessary.

For instructions on report design, refer to BIRT RCP Designer's online help system.

6. To preview your report, click the **Preview** tab.

If you click the **Preview** tab for the first time, the **Enter Parameters** dialog box opens, where you need to specify a valid session ID.

7. To generate a session ID, execute the following URL in a web browser.

```
http://<HOST>:<PORT>/services/sccsystem?
method=logonUser&userName=<USERNAME>&plainPasswd=<PASSWORD>.
```

Parameter	Description
HOST	Host name or IP-address of the computer hosting SilkCentral.
PORT	Port number of the SilkCentral front-end server. Default is 19120 if you access SilkCentral through a standalone Web server, and 80 if you access SilkCentral through IIS.
USERNAME/ PASSWORD	Valid credentials of a SilkCentral user.

 **Note:** The order of the valid credentials USERNAME and PASSWORD is very important.

8. If at some point your edited report does not return any data, the likely cause is that the session ID has timed out. Click **Show Report Parameters** in the **Preview** window to enter a new session ID. To generate a new session ID, repeat the previous step.

Setting and Editing Report Permissions and Associations

The report administrator sets and edits the permissions that determine who can print reports and who can change report names and descriptions. You may want to change the projects, modules, or categories with which reports are associated. You also may find it helpful to change a report's description or name to assist users in interpreting reports.

Once you have created a new custom report using BIRT RCP Designer or Excel and uploaded the report to SilkCentral, you need to set permissions to make the report available to users.


To set or edit permissions for a SilkCentral report template:

1. In the menu, click **Administration > Report Templates**. The **Report Templates** page displays, listing all of the report templates that have been uploaded.
2. Click the name of the report template for which you would like to edit or set permissions and associations. The **Edit Report Template** dialog box displays.
3. You can change a report's permission settings by modifying the selections in the **Projects** and **Modules** list boxes.
This will determine which users have access to the selected report template.
4. Once you are done editing, click **OK** to save your changes to the report template.
The edits you have made are applied immediately. Users will see changes the next time they access or refresh the report list.

Downloading Report Templates

The report template of the selected report, including the layout, is downloaded. Downloading SilkCentral report templates to your local system enables you to edit them through BIRT Report Designer or Microsoft Excel. After you download and edit a report, you can upload it to make it available to other users. For more information, see *Uploading Report Templates*.

To download a SilkCentral report template:


1. In the menu, click **Administration > Report Templates**. The **Report Templates** page displays, listing all of the report templates that have been uploaded.
2. Click  in the **Action** column of the report you want to download. The **File Download** dialog box displays.
3. Click **Save** and download the report file to your local system as a `.rptdesign` or `.xls` file, depending on the report type that you are downloading.
4. Now edit the report based on your needs using either BIRT RCP Designer, for `.rptdesign` files, or Excel, for `.xls` files.


Uploading Report Templates

Uploading SilkCentral report templates makes them available for others to use. You may want to upload a report template after you have edited it with BIRT RCP Designer or Microsoft Excel. You can only run a report if you have access to the project and module to which the report is associated.



Note: SuperUser, Administrator, or Reporter privileges are required to create and upload custom reports. You cannot upload or update reports with other user privileges.

 **Tip:** Templates must be configured with additional information so that they can be identified once they are uploaded to SilkCentral.


 **Note:** SilkCentral reports do not support bitmap (.bmp) image file format. For proper display, images must be in JPEG, GIF, or PNG format.


To upload a customized template as a new report:

1. In the menu, click **Administration > Report Templates** . The **Report Templates** page displays, listing all of the report templates that have been uploaded.
2. Click **Upload** at the bottom of the page. The **Upload Report Template** dialog box displays.
3. Type a **Name** for the report.
4. *Optional:* Type a **Description** of the report.
5. From the **Projects** list box, select the projects with which the report is to be associated.
Hold down the **Ctrl** key to select multiple projects.
6. From the **Modules** list box, select the modules with which the report is to be associated.
Hold down the **Ctrl** key to select multiple modules.
7. Click **Browse** next to the **File** field.
8. Browse to and select the template file that is to serve as the basis for the report template.
The file you select must have the `.rptdesign` or `.xls` file extension.
9. Click **OK** to upload the report template for use in SilkCentral.


Updating Report Sources

Updating an existing SilkCentral report template allows you to move a report you have customized with BIRT RCP Designer or Microsoft Excel into SilkCentral and make it available to other users.

 **Note:** SuperUser, Administrator, or Reporter privileges are required to create and upload custom reports. You cannot upload or update reports with other user privileges.

 **Caution:** Report templates that ship with SilkCentral are automatically patched when you upgrade to a new version. It is therefore important that you save your customized report templates in a dedicated custom folder, or that you upload customized report templates as new templates. For more information, see **Uploading Report Templates**.


To update a report template with a modified template file:

1. In the menu, click **Administration > Report Templates** . The **Report Templates** page displays, listing all of the report templates that have been uploaded.
2. Click  in the **Action** column of the report you want to update.
3. Click **Browse** on the **Update Report Template** dialog box to browse to and select the template file that is to overwrite the existing template file.
The file you select must have the `.rptdesign` or `.xls` file extension.
4. Click **OK** to upload the file, and thereby overwrite the file that the report template was previously based on.

Deleting Report Templates

You can remove a SilkCentral report from the list of available reports.

To delete a SilkCentral report:

1. In the menu, click **Administration > Report Templates** . The **Report Templates** page displays, listing all of the report templates that have been uploaded.
2. Click  in the **Action** column of the report you want to remove. A confirmation dialog box displays.

3. Click **Yes** to remove the report from the list.

Report Templates Page

Administration > Report Templates

Use the **Report Templates** page to manage the report templates which you want to make available to the SilkCentral applications for reporting.

Click **Upload** to upload a new report template from your hard disk or a UNC to SilkCentral.

For each listed report, the page displays the following columns:

Column	Description								
Title	The name of the report template as it displays in the application's GUI.								
File Name	The physical file name of the report template.								
Uploaded On	Date when the report template was uploaded to SilkCentral.								
Uploaded By	The user who uploaded the report template to SilkCentral.								
Project	The project to which the report template is associated. Only the specified project can use that template for reporting purposes. If a template is assigned to <i>All Projects</i> , then any project can use it.								
Module	The SilkCentral application which may access the reporting template. If a template is assigned to no module, then any application can use it.								
Actions	This column contains action icons which allow the user to perform the following actions on a report template: <table><tr><td>Action</td><td>Description</td></tr><tr><td>Update</td><td>Replaces the currently uploaded template with a new one.</td></tr><tr><td>Download</td><td>Downloads the template to your local computer.</td></tr><tr><td>Delete</td><td>Deletes the template permanently.</td></tr></table>	Action	Description	Update	Replaces the currently uploaded template with a new one.	Download	Downloads the template to your local computer.	Delete	Deletes the template permanently.
Action	Description								
Update	Replaces the currently uploaded template with a new one.								
Download	Downloads the template to your local computer.								
Delete	Deletes the template permanently.								

Audit Log

Administration > Log Files > Audit Log

The audit log allows administrators to view all recorded SilkCentral user activity. The log file stores all login and logout information, as well as all changes to the SilkCentral database, for example projects, monitors, and schedules.

You can manage the listed log entries to suit your information needs by using the available features.

Sorting Data by Column

Clicking a column header sorts all listed data by that column. Clicking the same column header multiple times toggles the sort order between ascending and descending.





Selecting a Range From the Calendar

Click the displayed time range to expand the calendar. The **From** and **To** rows of the calendar allow you to specify start and end times for the period of time for which you want to view data. After specifying **From** and **To** times with the list boxes, click **Update** to update the audit log based on the new time range.

The **day**, **week**, **month**, **quarter**, **[last 7 days]**, **[last 31 days]** links allow you to bypass the calendar and instead view information for set time periods.

You can also use the **Forward** and **Backward** arrows to increase and decrease the selected time range by the following intervals:

- one day
- one week
- one month
- one quarter

Use  and  for increasing and decreasing the range of time covered by the audit log. Clicking  one time enlarges the period of time by 50%. Clicking  one time reduces the period of time by 50%.

When the calendar displays a custom interval, for example after zooming in or out, you can use the left-most arrows, **Earlier** and **Later**, to move the selected period of time forward or backward in time by half of the selected interval.



Tip: After specifying a new time period, click **Update** to update the report.

Filtering Data

Filter options enable you to better target the audit log information you want to analyze.

You can filter listed data by:

Login Displays the actions of a specified user login.

Object Displays actions taken on a specified database item, for example project, monitor, or location.

Operation Displays selected operations, for example login, logoff, create, or delete.

Accessing and Viewing the Audit Log

To view the audit log:

1. In the menu, click **Administration > Log Files**.
2. Click the **Audit Log** tab.
3. Select a calendar range to limit the listed log entries.
4. Use the filter options to better target the audit log information you want to analyze.

Audit Log Page

Administration > Log Files > Audit Log

Use the **Audit Log** page to view all recorded SilkCentral user activity.

Item	Description
Calendar area	Select a calendar range to limit the listed log entries.
Filter area	Use the filter options to better target the audit log information you want to analyze. Click Update to refresh the list according to your filter settings.

Item	Description
Result area	This section displays the logged information. Use the page numbers to move between pages. Click the column headers to sort by the defined column.

For detailed information about the calendar and filtering options, see *Audit Log*.

Server Log Files

The front-end server, the application server, and the execution server write log files. These files provide valuable information for error analysis. SilkCentral allows administrators to view, search, and download these files directly from its Web interface.

Downloading Server Log Files

You can download a server log file to your local computer in CSV format to allow for further data analysis, for example in Microsoft Excel.


To download a server log file:

1. In the menu, click **Administration > Log Files**.
2. Click the tab of the server to which the log file belongs.
 - **Front-end Server Log**
 - **Application Server Log**
 - **Execution Server Log**

A list of log files is displayed in chronological order. Log file names are made up of server component name and a suffix with a timestamp. The current log files are named `FrontendServer.log`, `AppServer.log`, and `ExecServer.log`.



Note: To locate an execution server log file, navigate to the respective execution server through its location.

3. In the **Actions** column of the log file, click .

Alternative: To view the contents of the log file before downloading it, click the name of the log file you want to download. The selected log file displays, along with chronologically sorted log entries. Click **Download as CSV** at the bottom of the page.
4. To view the data in a spreadsheet program, select **Open** on the subsequent dialog box. To save the data on your hard drive, select **Save** on the subsequent dialog box.

Analyzing Server Log Files

To analyze a server log file:

1. In the menu, click **Administration > Log Files**.
2. Click the tab of the server to which the log file belongs.
 - **Front-end Server Log**
 - **Application Server Log**
 - **Execution Server Log**

A list of log files is displayed in chronological order. Log file names are made up of server component name and a suffix with a timestamp. The current log files are named `FrontendServer.log`, `AppServer.log`, and `ExecServer.log`.



Note: To locate an execution server log file, navigate to the respective execution server through its location.

3. Click the name of the log file you want to view. The selected log file is displayed, along with chronologically sorted log entries.
4. Filter options allow you to page recorded log information.

You can filter listed data by:

Severity Displays events of a selected severity.

- error
- warning
- informational

Log level Displays events that match a selected log level.

- overview
- detailed
- verbose
- debug

More detailed log information can only be displayed when the log level is set accordingly on the server. For more information about configuring a server's log level, see *Log Levels*.

Module Displays log information for a selected module. Log entries can only be displayed when the respective products (modules) are installed and connected to the front-end server that is being accessed.

Deleting Server Log Files



Caution: Deleting a log file permanently removes the file from the server. You will not be able to view log data from the deleted file anymore.

To delete a server log file:

1. In the menu, click **Administration > Log Files**.
2. Click the tab of the server to which the log file belongs.
 - **Front-end Server Log**
 - **Application Server Log**
 - **Execution Server Log**

A list of log files is displayed in chronological order. Log file names are made up of server component name and a suffix with a timestamp. The current log files are named `FrontendServer.log`, `AppServer.log`, and `ExecServer.log`.



Note: To locate an execution server log file, navigate to the respective execution server through its location.

3. In the **Actions** column of the log file you want to delete, click **X**. A confirmation dialog box displays.
4. Click **No** to avoid deleting the log file; or click **Yes** to remove the log file from the list.

If you choose **Yes**, the list of log files redisplay, with the deleted log file no longer listed.

Log File Management

Each of the SilkCentral servers writes its activities to log files. For more information about SilkCentral servers, see *Architecture*. When application errors or system failures occur, these log files provide valuable information regarding the root causes of problems. You can customize the level of detail that is written to server log files.

The log files for the SilkCentral servers are accessible through **Administration > Log Files**.

Changing Log Levels of the SilkCentral Servers

The following servers generate log files:

- Front-end server
- Application server
- Execution server

To change the log level of a SilkCentral server:

1. Stop the server for which you want to change the log level.
2. Open the appropriate file with a text editor, depending on the server for which you want to change the log level:

Front-end server `SccFrontendBootConf.xml`, located in the `/conf/frontendserver` folder of the SilkCentral directory on the front-end server.

Application server `SccAppServerBootConf.xml`, located in the `/conf/appserver` folder of the SilkCentral directory on the application server.

Execution server `SccExecServerBootConf.xml`, located in the `/conf/execserver` folder of the SilkCentral directory on the execution server(s).

3. Locate the `<LogLevel>` XML tag in the `<Log>` section of the file.
4. Set the value to the log level at which you want the server to write information. The following log levels are available:

Value	Log level	Description
0	Overview	The server writes only the most important information to the log files. This is the default setting.
1	Detailed	The server writes additional information to the log files: Front-end server Connection- and event-dispatcher information. Application server Result-writer and result-fetcher activities. Execution server Transaction-execution activities.
2	Verbose	The server writes additional information to the log file: Front-end server User administration information, for example cookie management. Application server Detailed result-writer and result-fetcher information. Execution server Detailed transaction-execution and bandwidth information.
3	Debug	This is the most detailed log level and should only be used for debugging severe issues.

5. Save and close the XML file, then restart the server.

Front-End Server Log Page

Administration > Log Files > Front-end Server Log

Use this page to view logging information from the SilkCentral front-end server service.

For each log file, the page displays the following columns:

Column	Description
Actions	This column contains action icons which allow the user to perform the following actions on a log file: <ul style="list-style-type: none"> Download Downloads the log file to your local computer. Delete Deletes the log file permanently.
Name	The name of the log file. Click the file name to view logging details.
Size	The physical size of the log file in bytes.
Date	Date when the log file was last physically saved.

Administration > Log Files > Front-end Server Log > Front-end server log file name .

When clicking on the name of a log file, the logging details list displays. The list includes the following items:

Item	Description
Filter area	Use the filter options to filter the log list information by <i>severity</i> , <i>log level</i> , and <i>module</i> . Click Update to refresh the list according to your filter settings.
Table area	Displays the following logging information: <ul style="list-style-type: none"> Severity Severity of the event: <ul style="list-style-type: none"> • Info • Warning • Error Log Level Log level of the event: <ul style="list-style-type: none"> • OV = Overview • DT = Detailed • VB = Verbose • DB = Debug

Click **Back** to return to the **Front-end Server Log** page. Click **Download as CSV** to download the log file as a CSV file to your local computer.

Application Server Log Page

Administration > Log Files > Application Server Log

Use this page to view logging information from theSilkCentral application server service.

For each log file, the page displays the following columns:

Column	Description
Actions	This column contains action icons which allow the user to perform the following actions on a log file: <ul style="list-style-type: none"> Download Downloads the log file to your local computer. Delete Deletes the log file permanently.

Column	Description
Name	The name of the log file. Click the file name to view logging details.
Size	The physical size of the log file in bytes.
Date	Date when the log file was last physically saved.

Administration > Log Files > Application Server Log > Application server log file name .

When clicking on the name of a log file, the logging details list displays. The list includes the following items:

Item	Description				
Filter area	Use the filter options to filter the log list information by <i>severity</i> , <i>log level</i> , and <i>module</i> . Click Update to refresh the list according to your filter settings.				
Table area	Displays the following logging information: <table border="0" style="margin-left: 40px;"> <tr> <td style="padding-right: 20px;">Severity</td> <td>Severity of the event: <ul style="list-style-type: none"> • Info • Warning • Error </td> </tr> <tr> <td style="padding-right: 20px;">Log Level</td> <td>Log level of the event: <ul style="list-style-type: none"> • OV = Overview • DT = Detailed • VB = Verbose • DB = Debug </td> </tr> </table>	Severity	Severity of the event: <ul style="list-style-type: none"> • Info • Warning • Error 	Log Level	Log level of the event: <ul style="list-style-type: none"> • OV = Overview • DT = Detailed • VB = Verbose • DB = Debug
Severity	Severity of the event: <ul style="list-style-type: none"> • Info • Warning • Error 				
Log Level	Log level of the event: <ul style="list-style-type: none"> • OV = Overview • DT = Detailed • VB = Verbose • DB = Debug 				

Click **Back** to return to the **Application Server Log** page. Click **Download as CSV** to download the log file as a CSV file to your local computer.

Execution Server Log Page

Administration > Log Files > Execution Server Log

Use this page to view logging information from the SilkCentral execution server service.

For each location, the page displays the following columns:

Column	Description
Location	Displays all available locations.
Execution Servers	Displays the amount of execution servers per location.
Status	Displays a summary status of the execution servers in the location.

Administration > Log Files > Execution Server Log > Location name

When clicking on the name of a location, the list of execution servers in the selected location displays. The list displays the following columns for each execution server.

Column	Description
Execution Server Name	The name of the execution server.

Column	Description
Host	The name of the computer hosting the execution server.
Type	The SilkCentral application that the execution server is configured for. For Test Manager, the type is always <i>Test Manager</i> .
Assigned Tasks	The amount of tasks that are currently scheduled on the execution server.
Status	The status of the execution server. <i>Active</i> or <i>Inactive</i> .

Click **Back** to return to the list of locations.

Administration > Log Files > Execution Server Log > Location name > Execution server name

When clicking on the name of an execution server, the list of log files for the selected execution server displays. For each log file, the page displays the following columns:

Column	Description
Actions	This column contains action icons which allow the user to perform the following actions on a log file: <ul style="list-style-type: none"> Download Downloads the log file to your local computer. Delete Deletes the log file permanently.
Name	The name of the log file. Click the file name to view logging details.
Size	The physical size of the log file in bytes.
Date	Date when the log file was last physically saved.

Click **Back** to return to the list of execution servers.

Administration > Log Files > Execution Server Log > Location name > Execution server name > Execution server log file name

When clicking on the name of a log file, the logging details list displays. The list includes the following items:

Item	Description
Filter area	Use the filter options to filter the log list information by <i>severity</i> , <i>log level</i> , and <i>module</i> . Click Update to refresh the list according to your filter settings.
Table area	Displays the following logging information: <ul style="list-style-type: none"> Severity Severity of the event: <ul style="list-style-type: none"> • Info • Warning • Error Log Level Log level of the event: <ul style="list-style-type: none"> • OV = Overview • DT = Detailed • VB = Verbose

Item	Description
	<ul style="list-style-type: none"> DB = Debug

Click **Back** to return to the **Execution Server Log** page. Click **Download as CSV** to download the log file as a CSV file to your local computer.

Integrating Task Management Tools

A variety of external task management tools can integrate their tests with Test Manager through the Agile project template.

The Agile project template is a Test Manager project with the preselected attributes release and sprint. When you create a project based on the Agile project template, an empty subfolder and test container are created for the new project. The external task management tool can then insert tests into the template. For information about how to create a project based on the Agile project template, see *Adding Projects*.


The task management tools that are currently supported by Test Manager “out of the box” are:

Task Management Tool	Description
VersionOne	VersionOne is a project planning and management tool specifically designed for agile software development. It incorporates agile and iterative management practices such as release planning, iteration planning and tracking, user story or backlog item management, and task management.

Integrating VersionOne in Test Manager

To integrate tests from VersionOne into Test Manager:

1. Add a new Test Manager project and apply the Agile project template to the project.
For information on how to add a project based on the Agile template to Test Manager, see *Adding Projects*.
2. Open the file Explorer.
3. Navigate to the VersionOne configuration XML file, `VersionOneConfig.xml`.
The default path for the file is `C:\Program Files\Silk\SC Test Manager <version>\wwwrootAS\VersionOneIntegration`.
4. Open the VersionOne configuration XML file with an editor.
5. Configure the VersionOne configuration XML file with the appropriate settings.
For detailed information on the settings in the VersionOne configuration XML file, refer to the comments in `VersionOneConfig.xml`.
6. Save and close the configuration file.

 **Note:** You do not need to restart the application server after you edit the configuration file because the file is automatically updated.
7. In Test Manager, navigate to the **Tests** area. The empty test container is displayed as incomplete, because you have to select a product.
8. Click on the container, select the **Properties** tab, and click on the product link to browse for the product.

VersionOne is now integrated with Test Manager. New test tasks in VersionOne, for which you have defined the appropriate user, are inserted as manual tests into the default integration folder in the defined Test Manager project. The test status is now exchanged between Test Manager and VersionOne.

Refer to the `VersionOneIntegration.log` log file for information about changes to the VersionOne integration. The default path for the log file is `C:\Documents and Settings\All Users\Application Data\SilkCentral\log\`.



Note: To integrate VersionOne with a Japanese Test Manager, change the start options of the Application Server service in the registry to `-Dfile.encoding=utf-8`.

Managing Products and Platforms

SilkCentral enables you to create and organize products, product components, versions of products, and build numbers of product versions. Product specifications can then be associated with tests, versions and builds can be associated with execution plans. You can even import products and components that were defined previously in Issue Manager.

- *Components* are discrete product elements that are tracked separately for testing purposes.
- *Versions* are product releases that are tracked separately for development and testing purposes.
- *Builds* are iterations of versions that are tracked separately for development and testing purposes.

SilkCentral also enables you to set up platform designations for tests, for example operating systems. As with product, version, and build setup, platforms can be assigned names, descriptions, and active/inactive status.

Managing Builds

Builds are iterations of versions that are tracked separately for development and testing purposes.

Adding Builds

To add a new build to a version:

1. In the menu, click **Administration > Products, Versions and Builds**.
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. In the **Builds for Version** list box, select the version for which you want to add a build.
5. Click **New Build**. The **New Build** dialog box displays.
6. Type a name for the new build in the **Name** text box.
7. Type a description for the build in the **Description** text box.
8. Check the **Active** check box to make this build available for association with versions.
9. Click **OK** to save the build, or click **Cancel** to abort the operation.

Editing Builds

To edit an existing build within a version:

1. In the menu, click **Administration > Products, Versions and Builds**.
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. Select the build you want to edit.
5. The **Edit Build** dialog box displays, detailing the **Name**, **Description**, and **Active** status of the selected build. Make all required changes, then click **OK**.
6. Check the **Tagged** check box to tag the build.



Activating and Deactivating Builds

To activate or deactivate an existing build:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. Click the **Status** icon associated with the build you want to activate or deactivate. A confirmation dialog box displays, asking you if you are sure about the activation or deactivation.
5. Confirm the message to toggle the build status to `active` or `inactive`.

Sorting the Builds List

To move a build up or down in the list or sort the builds list alphabetically by name:


1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. In the **Builds for Version** list box, select the version for which you want to see the builds.
5. In the **Actions** column of the item you want to move, click  or .
6. To sort the list alphabetically by name, click **Sort by Name**.

Tagging Builds

To tag an existing build:




Note: You can delete runs of tagged builds. If the selection of the runs that you are trying to delete contains tagged builds, then you get a warning and you have to confirm the action. Tagged builds will not get deleted if you perform a bulk delete (all or for a specific time span) by right clicking on the execution node.

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. In the **Builds** section, click  in the **Actions** column of the build that you want to tag. A confirmation dialog box displays.
5. Click **Yes** to continue with the tagging or click **No** to abort the tagging.

Deleting Builds

To delete an existing build from a version:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. Deactivate the build you want to delete.
For additional information, see *Activating and Deactivating Builds*.
5. In the actions column of the build, click . A confirmation dialog box displays.
6. Click **Yes** to continue with the deletion or click **No** to abort the deletion.

Managing Components

Components are discrete product elements that are tracked separately for testing purposes.

Adding Components

To add a new component to a product:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. Click **New Component**. The **New Component** dialog box displays.
5. Type a name for the new component in the **Name** text box.
6. Type a description for the component in the **Description** text box.
7. Select the **Type** of the component.
Available values are *Software* and *Documentation*.
8. Check the **Active** check box to make this component available for association with products.
9. Click **OK** to save the component, or click **Cancel** to abort the operation.

Editing Components

To edit an existing component within a product:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. Select the component you want to edit.
5. The **Edit Component** dialog box displays, detailing the **Name**, **Description**, and **Active** status of the selected component. Make all required changes, then click **OK**.



Note: The type of a component can only be edited if you deactivate the component first. For additional information, see *Activating and Deactivating Components*.



Activating and Deactivating Components

To activate or deactivate an existing component:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. Click the **Status** icon associated with the component you want to activate or deactivate. A confirmation dialog box displays, asking you if you are sure about the activation or deactivation.
5. Confirm the message to toggle the component status to *active* or *inactive*.

Sorting the Components List

To move a component up or down in the list or sort the components list alphabetically by name:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. In the **Component Type** list box, select the component type for which you want to see the components.
5. In the **Actions** column of the item you want to move, click  or .
6. To sort the list alphabetically by name, click **Sort by Name**.

Deleting Components

To delete an existing component from a product:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. Deactivate the component you want to delete.
For additional information, see *Activating and Deactivating Components*.
5. In the actions column of the component, click **X** . A confirmation dialog box displays.
6. Click **Yes** to continue with the deletion or click **No** to abort the deletion.

Managing Platforms

Set up platform designations for tests, for example operating systems. As with product, version, and build setup, platforms can be assigned names, descriptions, and active or inactive status.


Adding Platforms

To add a new platform:


1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Platforms** tab. The **Platforms** page displays, listing all existing platforms.
3. Click **New Platform**. The **New Platform** dialog box displays.
4. Type a name for the new platform in the **Name** text box.
5. Type a description for the platform in the **Description** text box.
6. Check the **Active** check box to make this platform available for association with tests.
7. Click **OK** to save the platform.

Editing Platforms

To edit an existing platform:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Platforms** tab. The **Platforms** page displays, listing all existing platforms.
3. In the **Actions** column of the platform that you want to edit, click .
4. The **Edit Platform** dialog box displays, detailing the **Name**, **Description**, and **Active** status of the selected platform. Make all required changes, then click **OK**.

Activating and Deactivating Platforms



 **Note:** Platforms that are associated with a test cannot be deactivated.

To activate or deactivate an existing platform:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Platforms** tab. The **Platforms** page displays, listing all existing platforms.
3. Click the **Status** icon associated with the platform you want to activate or deactivate. A confirmation dialog box displays, asking you if you are sure about the activation or deactivation.
4. Confirm the message to toggle the platform status to *active* or *inactive*.


Sorting the Platforms List

To move a platform up or down in the list or sort the platforms list alphabetically by name:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Platforms** tab. The **Platforms** page displays, listing all existing platforms.
3. In the **Actions** column of the item you want to move, click  or .
4. To sort the platforms list alphabetically by name, click **Sort by Name**.

Deleting Platforms

To delete an existing platform:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Platforms** tab. The **Platforms** page displays, listing all existing platforms.
3. Deactivate the platform you want to delete.
For additional information, see *Activating and Deactivating Platforms*.
4. In the **Actions** column of the platform that you want to delete, click . A confirmation dialog box displays.
5. Click **Yes** to continue with the deletion or click **No** to abort the deletion.

Platform Configuration Page




Administration > Platforms

Use this page to configure platforms.

To create a new platform, click **New Platform**. For additional information, see *Adding Platforms*.

To sort the platforms list alphabetically by name, click **Sort by Name**. For additional information, see *Sorting the Platforms List*.

For each listed platform, the page displays the following columns:

Columns	Description
Actions	<p>The user can perform the following actions on a platform:</p> <ul style="list-style-type: none"> Moves the platform up one row in the list. Moves the platform down one row in the list. Deletes the platform permanently. Platforms need to be inactive before you can delete them, and deletion is not allowed if a platform is already associated to a test.
Name	<p>The name of the platform as it displays in the GUI and in reports. Click the name of a platform to modify the name, description, and status of the platform.</p>

Columns	Description
Description	A textual description of the platform.
Status	The status of the platform, <i>Active</i> or <i>Inactive</i> . Click the status to toggle between <i>Active</i> and <i>Inactive</i> .
Created On	Date when the platform was created.
Created By	The user who created the platform.

Managing Products

Describes how to configure products in SilkCentral.

Adding Products

To add a new product:


1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click **New Product**. The **New Product** dialog box displays.
4. Type a name for the new product in the **Name** text box.
5. Type a description for the product in the **Description** text box.
6. Check the **Active** check box to make this product available for association with tests.
7. Click **OK** to save the product.



Note: When creating a product, SilkCentral automatically creates a new default version 1 . 0 and a new default build 1 for the new product.

Editing Products

To edit an existing product:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. In the **Actions** column of the product that you want to edit, click . The **Edit Product** dialog box displays.
4. Make all required changes to the **Name**, **Description**, and **Active** status of the selected product, then click **OK**.



Activating and Deactivating Products

To activate or deactivate an existing product:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click the **Status** icon associated with the product you want to activate or deactivate. A confirmation dialog box displays, asking you if you are sure about the activation or deactivation.
4. Confirm the message to toggle the product status to *active* or *inactive*.


Sorting the Products List

To move a product up or down in the list or sort the products list alphabetically by name:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. In the **Actions** column of the item you want to move, click  or .
4. To sort the list alphabetically by name, click **Sort by Name**.

Deleting Products

To delete an existing product:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Deactivate the product you want to delete.
For additional information, see *Activating and Deactivating Products*.
4. In the **Actions** column of the product that you want to delete, click . A confirmation dialog box displays.
5. Click **Yes** to continue with the deletion or click **No** to abort the deletion.





Product Configuration Page

Administration > Products, Versions, and Builds > Products

Use this page to configure products, components, versions, and builds.

Click **New Product** to create a new product. Click **Sort by Name** to sort the products alphabetically by name.

For each listed product, the page displays the following columns:

Column	Description
Actions	<p>You can perform the following actions on a product:</p> <ul style="list-style-type: none">  Moves the product up one row in the list.  Moves the product down one row in the list.  Edit the name, description, and status of the product.  Deletes the product permanently. Products need to be inactive before you can delete them, and deletion is not allowed if a product is already associated to a test.
Name	The name of the product as it displays in the GUI and in reports. Click the name of a product to modify the product's components, versions, and builds.
Description	A textual description of the product.
Status	The status of the product, <i>Active</i> or <i>Inactive</i> . Click the status to toggle between <i>Active</i> and <i>Inactive</i> .
Created On	Date when the product was created.
Created By	The user who created the product.

For a selected product, the page displays the details of the included components, versions, and builds.

The page displays the following columns for the components of the product:

Column	Description
Actions	You can delete the component in this column.
Name	The name of the component. Click to open the Edit Component dialog box.
Description	The description of the component.
Created On	Date when the component was created.
Created By	The user who created the component.
Status	The status of the component. <i>Active</i> or <i>Inactive</i> . Click to toggle the status.

Click **New Component** to create a new component. Click **Sort by Name** to sort the components alphabetically by name. Click **Update** to update the components list.

The page displays the following items for the versions of the product:

Item	Description
Actions	You can delete the version in this column, or move the version up or down in the list.
Name	The name of the version. Click to open the Edit Version dialog box.
Description	The description of the version.
Created On	Date when the version was created.
Created By	The user who created the version.
Status	The status of the version. <i>Active</i> or <i>Inactive</i> . Click to toggle the status.

Click **New Version** to create a new version. Click **Sort by Name** to sort the versions alphabetically by name.

The page displays the following items for the builds of the product:

Item	Description
Actions	You can delete the build or tag the build.
Name	The name of the build. Click to open the Edit Build dialog box.
Description	The description of the build.
Created On	Date when the build was created.
Created By	The user who created the build.
Status	The status of the build. <i>Active</i> or <i>Inactive</i> . Click to toggle the status.

Click **New Build** to create a new build. Click **Sort by Name** to sort the builds list alphabetically by name. Click **Update** to update the components list.



Note: You have to select a specific version in the **Builds** list box to enable these buttons.

Click **Back** to return to the product list.

Managing Versions

Versions are product releases that are tracked separately for development and testing purposes.

Adding Versions

To add a new version to a product:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. Click **New Version**. The **New Version** dialog box displays.
5. Type a name for the new version in the **Name** text box.
6. Type a description for the version in the **Description** text box.
7. Check the **Active** check box to make this version available for association with products.
8. Click **OK** to save the version, or click **Cancel** to abort the operation.

Editing Versions

To edit an existing version within a product:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. Select the version you want to edit. The **Edit Version** dialog box displays.
5. Make all required changes to the **Name**, **Description**, and **Active** status of the selected version, then click **OK**.



Activating and Deactivating Products

To activate or deactivate an existing product:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click the **Status** icon associated with the product you want to activate or deactivate. A confirmation dialog box displays, asking you if you are sure about the activation or deactivation.
4. Confirm the message to toggle the product status to *active* or *inactive*.

Sorting the Versions List


To move a version up or down in the list or sort the versions list alphabetically by name:

1. In the menu, click **Administration > Products, Versions and Builds** .
2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. In the **Actions** column of the item you want to move, click  or .
5. To sort the list alphabetically by name, click **Sort by Name**.

Deleting Versions

To delete an existing version from a product:

1. In the menu, click **Administration > Products, Versions and Builds** .

2. Click the **Products** tab. The **Products** page displays, listing all existing products.
3. Click a product name. The **Product Detail** page for the product opens.
4. Deactivate the version you want to delete.
For additional information, see *Activating and Deactivating Versions*.
5. In the **Actions** column of the product that you want to delete, click . A confirmation dialog box displays.
6. Click **Yes** to continue with the deletion or click **No** to abort the deletion.

Maintaining Value Lists

Value lists are used to populate custom properties within custom issue tabs that can be configured for Issue Manager in **Issues > Configuration**. For details regarding custom issue properties and tabs, refer to the *SilkCentral Issue Manager Administration Guide*.

Adding Value Lists

To add a new value list:

1. In the menu, click **Administration > Lists of Values**.
2. Click **New List**. The **New List Of Values** dialog box displays.
3. Type a name for the new value list in the **Name** text box and a description for the value list in the **Description** text box.
4. From the **Grouped by** list box, select a parameter by which this list is to be grouped.
This selection is definite and cannot be edited once you save your new list. Grouping values means that each value in your list must be assigned a value from the list you selected in the **Grouped by** list box. Not grouping values means that you can define custom values manually.
5. Click **New Value** to add a value to the list. The **New Value** dialog box displays.
6. Type a **Name** and **Description** for the new value.
7. Select a value from the **Grouped by** list box, if applicable.
8. Select the position of the new value within the list of existing values from the **Insert after** list box, or select `<last entry>` to add the new value to the end of the list.
9. Click **OK** to save the value. The **New List Of Values** dialog box displays the newly added value.
10. Add as many additional values as are required to complete the value list.
11. Click **OK** to save the value list.

Editing Value Lists

To edit an existing value list:

1. In the menu, click **Administration > Lists of Values**.
2. Click the name of the value list you want to edit. The **Edit List of Values** dialog box displays.
3. Change the **Name**, **Description**, and **Group by** setting of the selected value list, then click **OK**.



Note: Each individual value that is configured for the list is also available for editing. For details on editing individual values, see *Editing Individual Values*.

Editing Individual Values

To edit an individual value within a value list:

1. In the menu, click **Administration > Lists of Values**.

2. Click the name of the value list you want to edit. The **Edit List of Values** dialog box displays.
3. Click the name of the value you want to edit. The **Edit Value** dialog box displays.
4. Edit the **Name** and **Description** of the value as required.
5. Click **OK** to save your changes.

Activating and Deactivating Value Lists



Note: You cannot deactivate the value list *Issue Types*, as this list is required by Issue Manager.

To activate or deactivate an existing value list:

1. In the menu, click **Administration > Lists of Values**.
2. Click the **Status** icon associated with the value list you want to activate or deactivate. A confirmation dialog box displays, asking you if you are sure about the activation or deactivation.
3. Confirm the message to toggle the value list status to *Active* or *Inactive*.



Note: Each individual value that is configured for the list can also be activated or deactivated. For details on activating or deactivating individual values, see *Activating and Deactivating Individual Values*.



Activating and Deactivating Individual Values

To activate or deactivate an individual value within a value list:

1. In the menu, click **Administration > Lists of Values**.
2. Click the name of the value list that includes the value you want to activate or deactivate. The **Edit List of Values** dialog box displays.
3. Click the **Status** icon associated with the value you want to activate or deactivate. A confirmation dialog box displays.
4. Click **OK** to save the updated value list.

Sorting Values within Value Lists

To move a value up or down within a value list or sort the value list alphabetically by value name:


1. In the menu, click **Administration > Lists of Values**.
2. Click the name of the value list that includes the value you want to sort. The **Edit List of Values** dialog box displays.
3. In the **Actions** column of the item you want to move, click  or .
4. To sort the value list alphabetically by value name, click **Sort by Value**. The **Sort By Value** dialog box displays.
5. Select the sort order, *Ascending* or *Descending* and click **OK**.
6. Click **OK** on the **Edit List Of Values** dialog box to save the updated value list.

Deleting Value Lists

To delete an existing value list:

1. In the menu, click **Administration > Lists of Values**.
2. Deactivate the value list you want to delete.

For additional information, see *Activating and Deactivating Value Lists*.


3. In the Actions column of the value list that you want to delete, click . A confirmation dialog box displays.
4. Click **Yes** to continue with the deletion or click **No** to abort the deletion.



Note: Each individual value that has been configured for the list is also available for deletion. For details on deleting individual values, see *Deleting Individual Values*.

Deleting Individual Values


To delete an individual value within a value list:

1. In the menu, click **Administration > Lists of Values**.
2. Click the name of the value list that includes the value you want to delete. The **Edit List of Values** dialog box displays.
3. Deactivate the value you want to delete. For additional information, see *Activating and Deactivating Individual Values*.
4. In the **Actions** column of the value that you want to delete, click .
5. Click **OK** on the **Edit List Of Values** dialog box to save the updated value list.

List of Values Configuration Page

Administration > Lists of Values

Use this page to configure value lists. For each listed list of values, the page displays the following columns:

Column	Description
Name	The name of the value list as it displays in the GUI and in reports. Click the name of a value list to modify the name, description, and values of the value list.
Grouped By	Displays if a value list is grouped by <i>Product</i> or <i>Issue Types</i> , or if it is <i>Not Grouped</i> .
Status	The status of the value list, <i>Active</i> or <i>Inactive</i> . Click the status to toggle the between <i>Active</i> and <i>Inactive</i> . The default value list, <i>Issue Types</i> , cannot be deactivated, because it is a key component used in Issue Manager.
Created On	Date when the value list was created.
Created By	The user who created the value list.
Changed On	Date when the value list was last modified.
Changed By	The user who last modified the value list.
Actions	You can perform the following actions on a value list: <ul style="list-style-type: none">  Deletes the value list permanently. Value lists need to be inactive before you can delete them, and deletion is not allowed if a value list is already associated with issues.

Click **New List** to create a new value list.

Configuring Global Schedules

You can define global schedules that can be re-used in Test Manager for the scheduling of execution plans. Global schedules speed up the process of scheduling execution plans since the need to define individual schedules is reduced to only those execution plans that require special scheduling. For detailed information on schedules, refer to the *SilkCentral Test Manager Help*.

Exclusions



You can define weekdays and time-of-day intervals during which tests are not to be executed. For example, you may not want tests to take place on weekends.

Definite Runs

You can define points in time at which tests must execute, regardless of configured schedules.


Adding Global Schedules


To add a new global schedule:

1. In the menu, click **Administration > Schedules**. The **Schedules** page displays, listing all existing global schedules.
2. Click **New Schedule**. The **Configure Schedule** page displays.
3. Type a name for the new schedule in the **Name** text box.
4. Type a description for the schedule in the **Description** text box.
5. Click  next to **From** to define a start date and time for the schedule.
6. Define the **Interval** at which an execution should repeat. The available time range is from 1 minute to 36 days.
7. Check the **Adjust schedule to daylight savings** check box to have scheduled executions automatically adjust to daylight-saving time changes.
8. Click  next to run to define the date and time at which execution should end. Click **Forever** to execute for an undefined time period, or **until** to execute for a defined period.
9. To define weekdays and time-of-day intervals at which the test should not execute, click **Add Exclusion**.
For additional information, see *Scheduling Exclusions*.
10. To define a point in time when the test must execute, click **Add Definite Run**.
For additional information, see *Scheduling Definite Runs*.
11. Click **Save** when you have finished defining the schedule.

Editing Global Schedules

To modify a global schedule:

1. In the menu, click **Administration > Schedules**. The **Schedules** page displays, listing all existing global schedules.
2. Click the name of the schedule you want to edit. The **Configure Schedule** page displays.
3. Change the name of the schedule in the **Name** text box.
4. Change the description of the schedule in the **Description** text box.
5. Click  next to **From** to define a new start date and time for the schedule.

6. Change the **Interval** at which an execution should repeat. The available time range is from 1 minute to 36 days.
7. Check the **Adjust schedule to daylight savings** check box to have scheduled executions automatically adjust to daylight-saving time changes.
8. Click  next to run to define the date and time at which execution should end. Click **Forever** to execute for an undefined time period, or **until** to execute for a defined period.
9. To define weekdays and time-of-day intervals at which the test should not execute, click **Add Exclusion**.
For additional information, see *Scheduling Exclusions*.
10. To define a point in time when the test must execute, click **Add Definite Run**.
For additional information, see *Scheduling Definite Runs*.
11. Click **Save** when you have finished modifying the schedule.


Activating and Deactivating Global Schedules

To activate or deactivate an existing product:

1. In the menu, click **Administration > Schedules**. The **Schedules** page displays, listing all existing global schedules.
2. Click the **Status** icon associated with the schedule that you want to activate or deactivate. A confirmation dialog box displays, asking you if you are sure about the activation or deactivation.
3. Confirm the message to toggle the schedule status to *Active* or *Inactive*.

Deleting Global Schedules

To delete an existing global schedule:

1. In the menu, click **Administration > Schedules**. The **Schedules** page displays, listing all existing global schedules.
2. In the **Actions** column of the schedule that you want to delete, click . A confirmation dialog box displays.
3. Click **Yes** to remove the current schedule, including all exclusions and definite runs, or click **No** to abort the deletion.





Note: Once a global schedule is in use by a test, you cannot delete it. You must first re-schedule all tests to another schedule.

Scheduling Exclusions

To schedule exclusions:


1. In the menu, click **Administration > Schedules**. The **Schedules** page displays, listing all existing global schedules.
2. Click the name of the schedule you want to edit.
3. On the **Configure Schedule** page, click **Add Exclusion**.
4. On the **Configure Schedule Exclusion** page, select the weekdays on which tests should be suppressed.
5. Define the specific time intervals on those days during which execution should be suppressed.
6. Click **OK** once you have completed definition of exclusion settings, or click **Cancel** to abort. Exclusion settings are now listed on the **Configure Schedule** page.
7. Click **Save** to add the exclusion to the current schedule, or continue adding additional exclusions.





Tip: You can edit and delete exclusions by clicking  or  in the **Actions** column of the exclusion that you want to modify.

Scheduling Definite Runs

To schedule definite runs:

1. In the menu, click **Administration > Schedules** . The **Schedules** page displays, listing all existing global schedules.
2. Click the name of the schedule you want to edit.
3. On the **Configure Schedule** page, click **Add Definite Run**.
4. On the **Configure Definite Run** page, click  to define a point in time for the definite run.
5. Click **OK** once you have completed definition of the definite run, or click **Cancel** to abort. Definite run settings are now listed on the **Configure Schedule** page.
6. Click **Save** to add the definite run to the current schedule, or continue adding additional definite runs.




Tip: You can edit and delete definite runs by clicking  or  in the **Actions** column of the definite run that you want to modify.

Schedules Configuration Page

Administration > Schedules

Use this page to configure global schedules for Test Manager. For each schedule, the page displays the following columns:

Column	Description
Actions	This column contains action icons which allow the user to perform the following actions on a schedule:  Deletes the schedule permanently. Deletion is not allowed if a schedule is already associated with execution plans.
Name	The name of the schedule as it displays in the GUI and in reports. Click the name of a schedule to modify the name, description, and status of the schedule.
Description	A textual description of the schedule.
Status	The status of the schedule, <i>Active</i> or <i>Inactive</i> . Click the status to toggle between <i>Active</i> and <i>Inactive</i> .
Created On	Date when the schedule was created.
Created By	The user who created the schedule.

Click **New Schedule** to create a new schedule.

Managing the File Pool

The file pool is an upload and download area on the SilkCentral Web server, which is called the front-end server. SuperUsers and Administrators can upload files to this area and make them available for the creation of new tests.

You can upload a file from your hard disk or UNC path through the browser interface.



Note: Creating a test from an uploaded file does not remove that file from the file pool; it creates an independent instance. To remove files from the file pool, navigate to **Administration > Files** and click the **Delete** icon of the file you want to remove.

Uploading Files from a Browser

To upload a file from a browser:

1. In the menu, click **Administration > Files** .
2. Click the **File Pool** tab. The **File Pool** page displays, listing the files that have been uploaded to the file pool.
3. Click **Upload From Browser** to open the **Upload file to file pool** page.
4. Type a **Description** for the file you want to upload.
5. To make the uploaded file available only to a specific project, select the project name from the **Project** list box. If the file is to be accessible by all projects, select `No specific project`.
6. Optionally, you can assign an **Owner** to the uploaded file.
This enables users to filter the file pool based on the owners of files.
7. In the **Select file for upload** text box you can manually enter a valid local path or a UNC path to the file you want to upload. Alternately, you can browse for the file using **Browse**.
SilkCentral only allows .sep, .stp, .zip, and .ltz files for test creation.
8. Click **Upload** to upload the file to the SilkCentral file pool. You are be returned to the **File Pool** page where the file you uploaded is listed. The file is now available for the creation of new tests in Test Manager.

File Pool Page



Administration > Files

Use the **File Pool** page to upload files to the file pool and to download files from the file pool.

Filter options enable you to better target the uploaded files you want to access. The page allows you to set the following filter items:

Filter Item	Description
Uploaded By	Displays files uploaded by the selected user, or files uploaded by any user.
Project	Displays files associated to the selected project. Selecting <code>Any Project</code> will display all uploaded files, while selecting <code>No specific project</code> will display only files that are not associated to any project.
Owner	Displays files associated to the selected owner. Selecting <code>Any Owner</code> will display all uploaded files, while selecting <code>No Owner</code> will display only files that are not associated to an owner.
Update	Updates the list of displayed files according to your filter settings.

For each listed file, the page displays the following columns:

Table Item	Description
Actions	<p>This column contains action icons which allow the user to perform the following actions on a file:</p> <ul style="list-style-type: none">  Deletes a file permanently from the file pool.  Downloads a file to your local computer.
File	The filename of a file.
File Size	The size of the file.
Uploaded On	Date when the file was uploaded.
Uploaded By	The user who uploaded the file.
Project	The project to which the file is associated. Files can also be associated to no specific project, indicating that they can be used by any project.
Owner	The user who owns the file. If a file has no owner, any user with permission to access the file pool can access or modify this file.

Upload Buttons	Description
Upload From Browser	Uploads a file from your hard disk or a UNC path through the browser interface.
Upload From SilkPerformer	Provides information on how to upload a project from SilkPerformer.

Time Zones

SilkCentral is designed to execute tests over a network of execution servers. Because the Internet enables such networks to be spread worldwide across multiple time zones, it is important to understand time-zone handling in SilkCentral.

All date and time values are saved in GMT to the database. The presentation of values is set based on the **Time zone** setting specified in the user settings. For more information, see *Adding User Accounts*.

The following requirements apply:

- The application server and front-end server should be in the same time zone. Separating these servers locally within a WAN does not make sense because the application server communicates closely with one or several front-end servers. Also, front-end servers as well as the application server have direct database access.
- Execution servers may be in different time zones, separated both from the application server and from other execution servers.

Configuring Advanced Settings

This section describes how to configure advanced settings to customize your SilkCentral system.

Login Options

The following two enhanced login configurations are available:

Remember Login

Changing the default setting for the **Remember login** option on the SilkCentral login page.

Normally when users work with multiple browser windows, each browser session checks out a unique license. Enabling **Remember login** allows individual users to work with multiple browser sessions on a single computer while checking out only a single license.

Each user may enable or disable the **Remember login** option as required; the administrator can however set the default setting.

Cookie Duration

Each time a user accesses SilkCentral, a cookie containing encoded login information is created. These cookies are destroyed when users log out, or when sessions time out. When the **Remember login** option is enabled however, cookies are not destroyed when sessions time-out. Instead, they remain active for a set duration of time. This enables users to continue working with SilkCentral without re-entering login information after each session time-out. By default, cookies remain active for 30 days. The duration setting can be adjusted by the administrator.

Configuring the Remember Login Option

To enable or disable the remember login option:

1. Stop the front-end server.
2. Open the `SccFrontendBootConf.xml` file with a text editor.

This file is located in the `/conf/frontendserver` folder of the SilkCentral directory on the front-end server.
3. Locate the `BootConf\Options\Login\RememberLogin` XML tag.

By default, the tag is set to `<RememberLogin>true</RememberLogin>`.
4. Set the value to `false` to have the login page open with an unchecked **Remember Login** check box by default. Set the value to `true` to have the login page open with a checked **Remember Login** check box by default.
5. Save and close the XML file.
6. Re-start the front-end server.

Adjusting the Cookie Duration

To set the duration of login cookies:

1. Stop the front-end server.
2. Open the `SccFrontendBootConf.xml` file with a text editor.

This file is located in the `/conf/frontendserver` folder of the SilkCentral directory on the front-end server.

3. Locate the `BootConf\Options\Login\MaxCookieAge` XML tag.
By default, the tag is set to `<MaxCookieAge>30</MaxCookieAge>`.
4. Set the value to the number of days you want login cookies to remain active on user computers.
5. Save and close the XML file.
6. Re-start the front-end server.

Using the SilkCentral Service Manager

The SilkCentral Service Manager is a tool that is used to manage the SilkCentral services and to view their log files. The following services are available:

- Execution server
- Front-end server
- Application server
- Chart server

Log Files

SilkCentral servers write their activities to log files. When application errors or system failures occur, these log files provide valuable information regarding the root causes of problems.

SilkCentral Services

Setup automatically installs the Service Manager when any of the four services are installed. You can access the Service Manager either from the SilkCentral program group, or from its Windows task bar tray icon. The Windows services, which are viewable in the Windows Services window, are called *SilkCentral <name> Server*, for example *SilkCentral Application Server*.



Note: The Service Manager does not work out-of-the box on Windows platforms that use User Account Control (UAC), like for example Microsoft Windows Vista, Microsoft Windows 7, or Microsoft Windows Server 2008. To enable the Service Manager to work on these platforms, you either need to disable UAC or stop the Service Manager and start it again with the option **Run as administrator**.

All four services must be running to enable operation of SilkCentral. The services can be distributed over different computers or run on a single machine. For information about installing services, refer to the *Test Manager Installation Help*.



Tip: Stopping and restarting services is an administrative task that only needs to be done when a system is not operating as intended, or when maintenance tasks are required.

SilkCentral Execution Server

The SilkCentral execution server can be run as both a Windows system service and as a Windows process.

By default, SilkCentral launches an execution server as Windows process.

While a Windows process is launched with the credentials of the currently logged in user, a system service is launched with the local system account, by default the Windows system account. A system service remains active even after the user logs off; thus the SilkCentral execution server is available until the computer is turned off completely.


To execute and monitor SilkTest Classic, Citrix, and SAP scripts you must launch the SilkCentral execution server as a Windows process, with valid user credentials.

Managing Which SilkCentral Services Shall Be Running At System Start


SilkCentral services are services that will start automatically when the system is started. You can change this behavior if you want to deactivate a service, or if you want to switch an execution server permanently from service mode to process mode.

To manage which individual SilkCentral services shall be running at system start:

1. Double-click the **SilkCentral Service Manager** tray icon in the Windows task bar. The *SilkCentral Service Manager* displays, with up to five tabs visible, depending on the services that are installed on this computer.
2. Click the tab that corresponds to the service you want to access:
 - SilkCentral Execution Server
 - Execution Server (Process)
 - SilkCentral Front-End Server
 - SilkCentral Application Server
 - SilkCentral Chart Server
3. Check the **Run at start-up** check box if you want the selected service to start automatically.
4. Click **OK** to finish managing the servers. The *SilkCentral Service Manager* closes, but remains active in the system tray.

 **Note:** The **Execution Server (Process)** will only start after a logon to the Windows server.

Starting or Stopping All SilkCentral Services

 **Caution:** SilkCentral will not operate properly when the four services are not running.

To start or stop all SilkCentral services at once:

1. Right-click the **SilkCentral Service Manager** tray icon in the Windows task bar.
2. Click one of the following:
 - Start all Services** All SilkCentral services currently installed on the computer begin running.
 - Stop all Services** All SilkCentral services installed on the computer are stopped.
3. To start or stop individual services, see *Starting or Stopping Individual Services*.


Starting or Stopping Individual SilkCentral Services

 **Caution:** SilkCentral will not operate properly when the four services are not running.


To start or stop individual services:

1. Double-click the **SilkCentral Service Manager** tray icon in the Windows task bar. The *SilkCentral Service Manager* displays, with up to five tabs visible, depending on the services that are installed on this computer.
2. Click the tab of the service you want to manage.

To run the SilkCentral Execution Server as a Windows process, rather than as a system service like the other servers, see *Running the Execution Server as a Windows Process*.
3. Click **Start** or **Stop** to start or stop the selected service.
4. Click **Query Status** to check the current status of a service.

 **Note:** Make sure the service status is `running` to enable the operation of SilkCentral.


The execution server runs as a Windows process, rather than as a system service like the other servers. Therefore, you can launch the SilkCentral Execution Server with a console window that displays real-time activity.

 **Note:** This option is disabled for the front-end, application, and chart servers.

5. To launch the SilkCentral execution server with a console window:
 1. On the **Execution Server (Process)** tab, click **Start with console**.
 2. Click **Stop**.
 3. Click **Start**.
6. Click **OK** to finish managing the services. The Service Manager closes, but remains active in the system tray.


Starting The SilkCentral Execution Server As Windows Process

Per default, an execution server runs as a Windows system service under the system account. For executing GUI-level tests or browser-driven tests however, the execution server must run as a process using the credentials of an actual user.

 **Tip:** Both execution server modes, service and process, should not be run simultaneously. Before beginning a new execution server mode, first stop the currently running execution server.

To start the SilkCentral execution server as a Windows process:

1. Double-click the **SilkCentral Service Manager** tray icon in the Windows task bar. The *SilkCentral Service Manager* displays, with up to five tabs visible, depending on the services that are installed on this computer.
2. Click the **SilkCentral Execution Server** tab.
This tab represents the SilkCentral execution server, running as a Windows system service.
3. Click **Stop** to stop the SilkCentral execution server system service.
4. Click **Query Status** to check the service's status.
Make sure that the service status is `stopped`.
5. Uncheck **Run at start-up** to prevent that the service is started after computer re-boot.
6. Click the **Execution Server (Process)** tab.
This tab represents the SilkCentral execution server, running as a Windows process.

 **Note:** The Windows process is launched with the credentials of the user who is currently logged in. Make sure that this user has sufficient privileges to accomplish the tasks you are planning to execute with SilkCentral execution server.

7. Click **Start** to start the SilkCentral execution server as a Windows process.
To start the SilkCentral execution server with a console window that displays real-time activity, see *Starting or Stopping Individual SilkCentral Services*.
8. Check **Run at start-up** so that the process is started after computer re-boot and re-login.
9. Click **OK** to finish managing the SilkCentral execution server. The Service Manager closes, but remains active in the system tray.

Viewing Log Files from the SilkCentral Service Manager Console

To view SilkCentral log files from the SilkCentral Service Manager console:

1. Double-click the **SilkCentral Service Manager** tray icon in the Windows task bar. The *SilkCentral Service Manager* displays, with up to five tabs visible, depending on the services that are installed on this computer.
2. Select the tab representing the server of which you want to view the log file.
3. Click the **Logfile** link of the server.
The log file opens in the registered text editor. Microsoft Notepad by default.
4. On the SilkCentral Service Manager, click **OK** or **Cancel** to close the Service Manager. The Service Manager closes, but remains active in the system tray.

Suspicious Execution Duration

The execution durations of tests vary, however if an execution takes too long, the user that made the last change to the execution plan can get notified by email.

SilkCentral sends a notification when test execution takes longer than a certain amount of time. The user can define how long a test execution may take before an email is sent.



Note: You can also set a timeout for each specific test by setting the `Execution Time-Out [s]` property in the **Success Conditions** section of the **Tests** area.

Setting the Suspicious Execution Duration

To set the suspicious execution duration:

1. Stop the application server.
2. Open the `TmAppServerHomeConf.xml` file with a text editor.
This file is located in the `/conf/appserver` folder of the SilkCentral directory on the application server.
3. Locate the `Config\ExecutionTracking\SuspiciousDuration` XML tag.
By default, the tag is set to `<SuspiciousDuration>360</SuspiciousDuration>`.
4. Set the duration value to the number of minutes after which SilkCentral should notify the administrator about test executions that take too long.
5. Save and close the XML file.
6. Restart the application server service.

Disable Updating of External Issue Statistics

Updating the issue statistics of external issue tracking profiles may use much memory. This may also slow down performance. To disable updating:

1. Stop the application server.
2. Open the `TmAppServerHomeConf.xml` file with a text editor.
This file is located in the `/conf/appserver` folder of the SilkCentral directory on the application server.
3. Locate the `Config/IssueStateUpdate/UpdateIssueUnitStatistics` XML tag.

By default, the tag is set to `true`.

4. Set the value to `false` to disable updating.
5. Save and close the XML file.
6. Restart the application server service.

Date and Time Formats

SilkCentral offers user-defined date and time format settings. Each SilkCentral user can change their user settings, which include options for displaying custom date formats in the form of long or short date formats. For additional information, see *Editing User Accounts*.

SilkCentral presents lists of pre-defined date and time formats from which users may choose. SilkCentral administrators can populate these lists with customized formats.

Pattern Definition

Date and time formats are specified by date and time pattern strings. Within date and time pattern strings, unquoted letters from "A" to "Z" and from "a" to "z" are interpreted as pattern letters representing the components of a date or time string. Text can be quoted using single quotes (') to avoid interpretation. "" represents a single quote. All other characters are not interpreted; they are simply copied into the output string during formatting or matched against the input string during parsing.

The following pattern letters are defined. All other characters from "A" to "Z" and from "a" to "z" are reserved:

Letter	Date or Time Component	Presentation	Examples
G	Era designator	Text	AD
y	Year	Year	1996; 96
M	Month in year	Month	July; Jul; 07
w	Week in year	Number	27
W	Week in month	Number	2
D	Day in year	Number	189
d	Day in month	Number	10
F	Day of week in month	Number	2
E	Day in week	Text	Tuesday; Tue
a	Am/pm marker	Text	PM
H	Hour in day (0-23)	Number	0
k	Hour in day (1-24)	Number	24
K	Hour in am/pm (0-11)	Number	0
h	Hour in am/pm (1-12)	Number	12
m	Minute in hour	Number	30
s	Second in minute	Number	55
S	Millisecond	Number	978
z	Time zone	General time zone	Pacific Standard Time; PST; GMT-08:00
Z	Time zone	RFC 822 time zone	-0800

Pattern letters are usually repeated, as their number determines the exact presentation.

The following list explains the items in the **Presentation** column in the table above:

Item	Description
Text	For formatting, when the number of pattern letters is 4 or more, the full form is used; otherwise an abbreviated form is used, when available. For parsing, both forms are accepted, independent of the number of pattern letters.
Number	For formatting, the number of pattern letters is the minimum number of digits, and shorter numbers are zero-padded to this amount. For parsing, the number of pattern letters is ignored unless it is needed to separate two adjacent fields.
Year	For formatting, when the number of pattern letters is 2, the year is truncated to 2 digits; otherwise it is interpreted as a <i>Number</i> .
Month	When the number of pattern letters is 3 or more, the month is interpreted as <i>Text</i> ; otherwise, it is interpreted as a <i>Number</i> .
General time zone	Time zones are interpreted as <i>Text</i> when they have names. When the number of pattern letters is less than 4, the time zone abbreviation is displayed, for example PST. When the number of pattern letters is 4 or more, the full name is displayed, for example Pacific Standard Time.
RFC 822 time zone	The RFC 822 4-digit time zone format is used, for example -0800.

Examples	
The following examples show how date and time patterns are interpreted in the U.S. The given date and time are 2001-07-04 12:08:56 local time, Pacific Standard Time zone.	
Date and Time Pattern	Result
"yyyy.MM.dd G 'at' HH:mm:ss z"	2001.07.04 AD at 12:08:56 PDT
"EEE, MMM d, 'yy"	Wed, Jul 4, '01
"h:mm a"	12:08 PM
"hh 'o'clock' a, zzzz"	12 o'clock PM, Pacific Daylight Time
"K:mm a, z"	0:08 PM, PDT
"yyyyy.MMMMM.dd GGG hh:mm aaa"	02001.July.04 AD 12:08 PM
"EEE, d MMM yyyy HH:mm:ss Z"	Wed, 4 Jul 2001 12:08:56 -0700
"yyMMddHHmmssZ"	010704120856-0700

Customizing Date and Time Formats

To customize date and time formats:

1. Stop the front-end server.
2. Open the `SccFrontendBootConf.xml` file with a text editor.
This file is located in the `/conf/frontendserver` folder of the SilkCentral directory on the front-end server.
3. Locate the `DateFormats` XML tag.

The XML tags `<LongDateFormats>` and `<ShortDateFormats>` show the date formats that are available by default. You can add or remove any formats you want to make available or unavailable to users.

4. Type time formats based on Java's `SimpleDateFormat` class.
5. Save and close the XML file.
6. Re-start the front-end server.

HTML Response Compression

The SilkCentral front-end server offers an option for automatically sending gzip-compressed responses. Enabling this feature speeds up load times of SilkCentral HTML pages, but results in a slight increase of load on the front-end server, depending on the amount of HTML requests, which is the number of concurrent SilkCentral users, that you expect.

HTML response compression only works when the Web browsers of the users support HTML response compression.

For the current list of supported browsers, refer to the release notes.

Enabling or Disabling HTML Response Compression

To enable or disable HTML response compression:

1. Stop the front-end server.
2. Open the `Server.xml` file with a text editor.
This file is located in the `/conf/frontendserver` folder of the SilkCentral directory on the front-end server.
3. Locate the `Connector XML` tag.
4. Add `compression="on"` and `compressableMimeType="text/html,text/xml,text/plain,text/css,text/javascript,application/xml"` to the connectors.
The servlet will compress any response with gzip. Gzip is taken from Apache Tomcat Native.
5. Save and close the XML file.
6. Re-start the front-end server.

Host Name Display

When you are working with Web applications on multiple front-end servers, it can be useful to know which host you are working on. SilkCentral offers a setting that displays the host name of the front-end server in the title bar of your Web browser.

Displaying or Hiding the Host Name in the Title Bar of Your Web Browser

To display or hide the host name in the title bar of your Web browser:

1. Stop the front-end server.
2. Open the `SccFrontendBootConf.xml` file with a text editor.
This file is located in the `/conf/frontendserver` folder of the SilkCentral directory on the front-end server.
3. Locate the `DisplayHostNameInTitleBar XML` tag in the `Options` section of the file.

4. If you set the value to `true`, which is the default value, the host name of the front-end server will be displayed in the title bar of Web browsers when accessing SilkCentral. If you set the value to `false`, no host name will be displayed, and if you set the value to any other string, the specified string will be displayed.

For example, when the XML tag is set to `true`, the browser displays: HURRICANE - SilkCentral - Micro Focus - Administration: System - Microsoft Internet Explorer.

When the tag is set to `false`, the browser displays: SilkCentral - Micro Focus - Administration: System - Microsoft Internet Explorer.

When the tag is set to `MyHost`, the browser displays: MyHost - SilkCentral - Micro Focus - Administration: System - Microsoft Internet Explorer.

5. Save and close the XML file.
6. Re-start the front-end server.

CVS Repository Access using Ext Method (using PuTTY)

PuTTY is a free, open-source, SSH-, Telnet-, rlogin-, and raw-TCP-client. For full details regarding PuTTY, or to download a copy, visit <http://www.chiark.greenend.org.uk/~sgtatham/putty/>.

The `ext` method in CVS indicates that an external application is to be used to communicate with the CVS server. To let the CVS command know what program to use, the program path must be specified in the environment variable `CVS_RSH`. When using PuTTY, this needs to be the path of `Plink.exe`.

When using an `ext` method to connect to a CVS repository, the hostname and the credentials are combined and stored in a PuTTY session. When specifying this session in a SilkCentral Test Manager CVS profile, the servername, the username, and the password are ignored.

For additional information on CVS and other source control profiles, refer to the *Test Manager Help*.

Accessing a CVS Repository using Ext Method (using PuTTY)

For additional information on CVS and other source control profiles, refer to the *Test Manager Help*.

To create a PuTTY profile to access a CVS repository by using `ext` method:

1. From within PuTTY, select the **Session** node in the **Category** tree.
2. Type your CVS server name in the **Host name** text box.
3. In the **Load, save or delete a stored session** area, define the session name by selecting a saved session or loading a new session.
4. Select the **Connection** node in the **Category** tree.
5. Specify an **Auto login username**.

This username will be used by PuTTY to log into the target application when a username is not specified. This setting will override any username set-up in CVS profile settings when using the `ext` method.

6. Select the **SSH/Auth** node in the **Category** tree.
7. In the **Private key for authentication** text box, set the key file that is to be used for authentication.



Note: You can create private and public keys with the `putty` program `puttygen.exe`. Public/Private key authentication enables you to login to the system without a password. The public key will be installed on the server, the private key will be saved in a local file. Specify the local filename in the **Private key for authentication** field. To optionally secure the key with a password, you

need to use the PuTTY program `pageant.exe`. This program runs in the system tray and maintains the password for private keys.

8. Select the **Session** node in the **Category** tree again, and click **Save**.
9. Now click **Open** to test your settings. You should now be able to execute `putty @cvs-server` and generate a login shell. When you create a CVS profile in Test Manager you will need to enter the name of the putty session as the servername, without the @ symbol.

Data Caching in Tests

Test Manager uses caching in **Tests** to improve the scalability of the front-end server and to reduce database load when multiple users work on the same project simultaneously. The **Tests** tree and test filters have significant impact on the front-end and database servers. Because information from the **Tests** tree and filters for specific projects can be shared among users, these areas are well suited to caching.

Tests Tree Caching

The **Tests** tree cache retains all tree information for projects that are currently in use in memory and regularly checks the database for changes to the tree. Administrators can influence the behavior of the cache by setting `Cache/TestPlanTree/CheckForChangesInterval` in the `TMFrontendBootConf.xml` configuration file. This is the maximum interval in seconds that tree information may remain outdated. Regardless of this setting, if a change occurs to a test, folder, or container on the same front-end server, the cache will be immediately updated with the change. The `Cache/TestPlanTree/CheckForChangesInterval` setting is only relevant when a change occurs on a different front-end server. When a project is not used by a user for more than an hour, the entire project tree cache is cleared and the project is reloaded the next time a user accesses it.

Test Filter Caching

With filter caching, the IDs of tests that match the criteria of specific filters are cached for a specified period of time, based on the minimum cache time setting and the execution time of each filter. Administrators can influence this behavior by setting two properties at `Cache/FilterCache/` in the `TMFrontendBootConf.xml` configuration file.

The first property, `MinimalLifeTime`, defines the minimum time in seconds before a filter result can be removed from the cache. The second property, `LifeTimeMultiplier`, makes this minimum setting dependent on the time it takes to execute the filter query. For example, if you define a multiplier of > 0 , the maximum time that a result can remain in the cache is `MinimalLifeTime`, or the query execution time, multiplied by the `LifeTimeMultiplier`. So, if you have a filter query that takes 1 second to execute, and you use the default values, both 30, for `MinimalLifeTime` and `LifeTimeMultiplier`, then the filter result will be cached for 30 seconds. If the filter query takes half a second to execute, then the filter result will still be cached for 30 seconds. If however the filter query takes 2 seconds to execute, then the filter result will be cached for 60 seconds.

JMX Measures for Caching

Test Manager offers JMX read measures to monitor underlying Java processes and other process-specific measures. JMX information for the **Tests** tree cache and the test filter cache can be found in the JMX measures tree at borland.com/Frontend/TM.



Note: Silk Performance Explorer and other tools can be used to track these and other measures.

JMX Measures for Caching in Tests

JMX read measures are available to monitor the underlying Java process and other process-specific measures in Test Manager. JMX information for the **Tests** tree cache and the filter cache can be found in the JMX measures tree at borland.com/Frontend/TM.

Tests Tree Cache Measures

Two primary measures are available for the **Tests** tree cache. `TestPlanTreeCache` only delivers a measure, `NumberOfCachedProjects`, on how many projects are currently cached. All details of the cache of the project are available from the second measure, `TestPlanTreeCache_0`. This measure is actually made out of the following measures:

Measure	Description
Hits	The number of times the cache was used, and database requests were not required.
LastUpdateCheckDurationInMillis	The duration in milliseconds the last update took, see <code>LastUpdateCheckTime</code> , to check for updates in the database.
LastUpdateCheckTime	The time when the last update check occurred.
LastUpdateDurationInMillis	The duration in milliseconds the last update took, see <code>LastUpdateTime</code> , to update the cache after a change occurred.
LastUpdateTime	The time when the last update to the cache occurred due to a change in the Tests tree.
TreeInitializationTimeInMillis	The duration in milliseconds it took to load the whole project tree into the cache. This value will not change as long as the project cache is loaded.
TreeSize	The number of test nodes, which are test containers, test folders, and tests, in the project.
UpdateChecks	The number of checks for changes of the Tests tree for this project since the project tree cache was initialized.
Updates	The number of updates of the cached tree due to changes in the Tests tree.

Test Filter Cache Measures


The `TestPlanFilterCache` measure is comprised of the following three measures:

Measure	Description
Hits	The number of times the cache was used and no separate execution of

Measure	Description
Misses	the filter on the database was necessary. The number of times the filter cache was not used, but the filter was executed against the database.
Size	The current number of cached filter results.

JMX Measures for LQM Reporting Updater

Test Manager offers JMX read measures to monitor underlying Java processes and other process-specific measures. JMX information on the LQM Reporting Updater can be found on your application server in the JMX measures tree at borland.com/LQMReporting/TM.

 **Note:** These measures only measure the common LQM Reporting updater, not an updater running on a database upgrade. Silk Performance Explorer and other tools can be used to track these and other measures.

Configuring the LQM Reporting Updater

Describes how to configure the interval and other settings of the thread that updates the LQM Reporting tables (LQM Reporting Updater). For detailed information about the LQM Reporting tables, refer to the *Database Model Help*.

To configure the LQM Reporting Updater settings:

1. Stop the application server.
2. Open the `TMAppServerHomeConf.xml` file with a text editor.
This file is located in the `/conf/appserver` folder of the SilkCentral directory on the application server.
3. Locate the `LQMReporting` XML tag.

You can modify the following settings:

UpdateInterval	Defines the interval in seconds when the LQM Reporting tables are updated with the most current data.
MSSqlUpdateBatchSize	Number of test tables processed at once. The batch size determines how much memory and processor resources are used on the application server for the update process. This setting only affects MS SQL Server databases.
OracleUpdateBatchsize	Same as <i>MSSqlUpdateBatchSize</i> , but for Oracle databases.
QueryTimeout	Specifies the time-out in seconds after which queries in the LQM Reporting update process are aborted. 0 or a negative value specifies that the queries never time out.
OracleCheckForUpdateStrategy	Determines how the update process reads from the source tables. Allowed values are <code>NOWAIT</code> and <code>WAIT</code> . <ul style="list-style-type: none"> • <code>NOWAIT</code>: When the update process wants to read from the source tables and another process is currently writing to these tables, the update process terminates and retries the next time it is called.

- **WAIT:** The update process grabs a table lock and waits until other processes have finished accessing the tables, then reads from the source tables. The advantage is that the process always executes because it doesn't have to wait until a table is unlocked. The disadvantage is that all other processes that try to access a table after the LQM update process are blocked and have to wait until the process releases the table lock.

4. Save and close the XML file.
5. Restart the application server service.

Configuring the Report Update Interval

To configure the report updater interval:

1. Stop the chart server.
2. Open the `SccChartServerBootConf.xml` file with a text editor.
This file is located in the `/conf/chartserver` folder of the SilkCentral directory on the application server.
3. Locate the `Options` XML tag.
4. Change the value in `MaxCacheAge` to define the interval in seconds when the reports are updated with the most current data.
5. Save and close the XML file.
6. Restart the chart server service.

JMX Measures for Monitoring the LQM Reporting Updater

Test Manager offers JMX read measures to monitor underlying Java processes and other process-specific measures. JMX information on the LQM Reporting Updater can be found on your application server in the JMX measures tree at borland.com/LQMReporting/TM.



Note: The measures only measure the common LQM Reporting Updater, not an updater running on a database upgrade.

LQM Reporting Updater Measures

The following measures are available:

Measure	Description
LastDataLoadResetTime	Gives the time when the last reset of the LQM reporting tables was performed. If this attribute is null, then no reset was performed during the lifetime of the process.
LastRunFromDate	Gives the start of the time span processed for the current update cycle.
LastRunToDate	Gives the end of the time span processed for the current update cycle.

Measure	Description
LastUpdatesNeededCheckDurationInMillis	The duration (in milliseconds) of the last check for new or changed data.
LastTotalUpdateDurationInMillis	Total time used for the last update run.
LastUpdateFixedAttributesDurationInMillis	Duration of the last update of fixed attributes.
LastDeleteDurationInMillis	Time used to remove deleted nodes from the LQM Reporting tables.
LastDeleteTestsCnt	Number of tests deleted in the last run.
LastInsertLQMTestsDuration	Time used to insert new tests in the <code>LQM_Tests</code> table.
LastUpdatesNeededCheckOracleWaitForTableLocksDuration	Oracle requires special handling when checking for updated tests. It may be necessary to wait for other processes to finish their transactions on test tables. The time waited for these transactions is measured by this attribute.
LastInsertLQMTestUDAsDuration	Time used to insert new tests in the <code>LQM_TestUDAs</code> table.
LastSelectChangedDataQueryDurationInMillis	Time used for querying changed data.
LastUpdateTestsDurationInMillis	Duration of the last update of properties in the <code>LQM_Tests</code> table.

Configuring JMX Settings

Test Manager offers a set of default ports for the configuration of JMX settings.

Available Locations for Configuring JMX Settings

The communication on the default ports is by default unencrypted, meaning no SSL is running.

Setting	Description
<code>Dcom.sun.management.jmxremote.ssl=false</code>	The SSL is set to false by default.
<code>Dcom.sun.management.jmxremote.authenticate=false</code>	The authentication is set to false by default.

JMX settings can be configured in the following locations:

Location	Settings
Application Server	Registry Key: <code>HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Procrun 2.0\SCCAppServer\Parameters\Java Settings: 'Options'</code> . The default port for the application server is: <code>Dcom.sun.management.jmxremote.port=19142</code> .

Location	Settings
Front-End Server	Registry Key: HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Procrun 2.0\SCCFrontendServer\Parameters\Java Settings: 'Options'. The default port for the front-end server is: Dcom.sun.management.jmxremote.port=19140.
Execution Server	Registry Key: HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Procrun 2.0\SCCExecServer\Parameters\Java Settings: 'Options'. The default port for the execution server is: Dcom.sun.management.jmxremote.port=19144.
Chart Server	Registry Key: HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Procrun 2.0\SCCChartServer\Parameters\Java Settings: 'Options'. The default port for the chart server is: Dcom.sun.management.jmxremote.port= 19146.

Execution Server Host Name Resolution

An execution server may no longer be recognized by the application server if the execution server's IP address has changed. Re-starting the application server means the execution server should be recognized again.

Java uses a cache to store the host name resolution to guard against DNS spoofing attacks. In SilkCentral the result of positive host name resolutions are cached forever, but this can be changed by editing the file `java.security` on the application server. This enables the application server to recognize execution servers even if their IP address has changed.

More information on this Java setting can be found at <http://java.sun.com/j2se/1.5.0/docs/guide/net/properties.html>.

Disabling The Caching of Host Name Resolutions

To specify that host name resolutions are never cached:

1. Stop the application server.
2. Open the `java.security` file with a text editor.
This file is located in the `/lib/jre/lib/security` folder of the SilkCentral directory on the application server.
3. Locate the line `#networkaddress.cache.ttl=-1` and change it to `networkaddress.cache.ttl=0`.



Note: The "#" character needs to be removed to uncomment this line.



Caution: This change should be discussed with your network administrator, as there may be security concerns in doing this.

4. Save and close the file.
5. Restart the application server service.

Configuring the Test Manager Location in Issue Manager

Describes how to configure the location of your Test Manager installation in Issue Manager. This enables the traceability from issues in Issue Manager to related tests in Test Manager. For additional information on using the traceability feature, refer to the Issue Manager documentation.

To configure the Test Manager location in Issue Manager:

1. Stop the front-end server.

2. Open the `SRFrontendBootConf.xml` file with a text editor.
This file is located in the `/conf/frontendserver` folder of the SilkCentral directory on the front-end server.
3. Locate the `Alm\ElementServiceEndpoint` and `Alm\LinkServiceEndpoint` XML tags.
4. Replace the default values `localhost:19120` with the host and port information of your Test Manager installation in both tags.
If your Test Manager installation uses the same front-end server as your Issue Manager installation, and you use Tomcat Web server with the default port, then you can leave the default values.
5. Save and close the XML file.
6. Re-start the front-end server.

Disabling Unused Ports on Execution Servers

Depending on whether you use SSL or insecure communication between the application server and the execution servers, you may want to disable the respective unused port. You can also disable the default Tomcat port, which is never used by SilkCentral.

The following procedure needs to be performed on each execution server where you want to enable persistent result data storage.

To disable unused ports on the execution server:

1. Stop the execution server.
2. Open the `SccExecServerBootConf.xml` file with a text editor.
This file is located in the `/conf/execserver` folder of the SilkCentral directory on the execution server.
3. Locate the `InsecurePort` and `SSLPort` XML tags in the `RmiProxy` section of the file.
4. Depending on whether you use SSL or insecure communication between application server and execution server, proceed as follows:

SSL communication	Set the value of <code>InsecurePort</code> to 0.
Insecure communication	Set the value of <code>SSLPort</code> to 0.
5. Save and close the XML file.
6. Restart the execution server.

Disabling Unused Ports on Front-End Servers

To disable the unused Tomcat port:

1. Stop the front-end server.
2. Open the `server.xml` file with a text editor.
This file is located in the `/conf/frontendserver/conf` folder of the SilkCentral directory on the front-end server.
3. Change the port setting in the first line of the file from `<Server port="19132" shutdown="SHUTDOWN">` to `<Server port="0" shutdown="SHUTDOWN">`.
4. Save and close the XML file.
5. Re-start the front-end server.

Setting Maximum Number of MRU Reports

To set the maximum number of MRU reports that displays in the **Last Used Reports** list box:

1. Open the `SccFrontendBootconf.xml` file with a text editor.
This file is located in the `/conf/frontendserver` folder of your SilkCentral installation.
2. Locate the `<MRUListSize>` tag in the `<Report>` section of the file.
The default value for this tag is 10.
3. Set the value to the maximum number of reports that you want to have displayed in the **Last Used Reports** list box.
4. Save and close the XML file.

Memory Settings for SilkCentral Servers

This section describes how you can change the memory settings of the SilkCentral servers when out-of-memory errors occur.

The Java heap size of the SilkCentral front-end and application servers is set by default to 512 MB. If you are experiencing out-of-memory errors, for example while copying a project in Test Manager, try to increase the heap size on the front-end or application server to 1024 MB or more.

The following error is an indicator that the Java heap size is too small: `java.lang.RuntimeException: java.lang.OutOfMemoryError: Java heap space at com.seguscc.webgui.module.console.ProjectsUnit $CopyProjectThread.run(ProjectsUnit.java:1473)` Caused by: `java.lang.OutOfMemoryError: Java heap space`. This error is reported in the logfile of the front-end server or the application server. Another indicator is the error message `The system is now working close to capacity. For security reasons no more users will be permitted to login, which displays when you try to login to Test Manager.`

Increasing the Java Heap Size on a SilkCentral Server

Increase the Java heap size on a SilkCentral server when you receive out-of-memory errors.

To increase the Java heap size on a front-end or application server:

1. Stop all SilkCentral services.
2. Click **Start > Run**.
3. In the **Run** dialog box, type `regedit` into the **Open** text box.
4. Click **OK**. The **Register Editor** opens.
5. In the menu tree, choose one of the following locations, depending on your operating system and the server type:

Operating System and Server Location

32bit and front-end server	HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Procrun 2.0\SCCFrontendServer\Parameters\Java
32bit and application server	HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Procrun 2.0\SCCAppServer\Parameters\Java

Operating System and Server Location

64bit and front-end server	HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Apache Software Foundation\Procrun 2.0\SCCFrontendServer\Parameters\Java
64bit and application server	HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Apache Software Foundation\Procrun 2.0\SCCAppServer\Parameters\Java

6. Double-click **JvmMx**. The **Edit DWORD Value** dialog box opens.

7. In the **Value data** text box, type 1024.



Note: The value of the Java heap size cannot exceed the available physical RAM on the front-end server machine and enough memory should be left available for other necessary processes. For example, if 2GB of RAM are available, you can increase the Java heap size to a value of 1.5GB, which corresponds to a value of 1536 in the **Value data** text box, depending on what other processes are running.

8. In the **Base** section of the dialog box, click the **Decimal** option button.



Important: If you leave the **Base** on the default value, **Hexadecimal**, you may experience memory overflows.

9. Restart all SilkCentral services.

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