MICRO FOCUS

Silk Performance Manager 21.0

Installation and Setup Help

Contents

Installing Silk Performance Manager

This help describes the process of installing, uninstalling, and customizing Silk Performance Manager.

The Silk Performance Manager setup offers the flexibility of creating an application environment that meets your needs. You may want to read through the various options before deciding how to proceed.

Each setup option must meet certain pre-installation requirements. Once these requirements are fulfilling, you can proceed to the instructions for the setup option of your choice.

Note: You must have administrative rights on the computer to install Silk Performance Manager.

System Requirements and Prerequisites

Describes the prerequisites required to achieve optimal performance of Silk Performance Manager.

To install Silk Performance Manager as an enterprise system, the Silk Performance Manager servers, which means the application server, the front-end server, the charting server, the execution server, and the database system, should be installed on separate machines. However, you can also install any combination of these components on the same machine. For performance reasons, Micro Focus recommends installing at least the database separately, as a standalone system.

If you wish to install Silk Performance Manager for demonstration purposes, all components can run on a single machine. However, such an installation will not provide full performance due to system resource limitations.

In addition to the hardware requirements, your system must also meet certain software conditions to ensure the efficient setup and use of Silk Performance Manager. The availability of these requirements is checked when the Setup Launcher opens. Silk Performance Manager cannot be installed while required components are missing.

Hardware Requirements

System Area	Requirement
CPU	Intel Core i5 or better
Memory	8 GB minimum
Free disc space	30 GB minimum, except for the database server
Network	100 Mbit
Operating system, database management system, Web server	See *Tested and Supported Software*.
Power Supply	Uninterruptible power supply (UPS) for all environments to reduce risks of power outages

Setup Options

Describes the setup options that are available when installing Silk Performance Manager.

The setup variation that you should choose depends on the application environment you want to create and the resources that are available to you.

The Silk Performance Manager setup program enables you to install all software components on a single system or to install components individually on separate systems.

⚠️ **Warning:** Only one application server can be connected to a specific Silk Performance Manager database. Connecting multiple application servers to a single Silk Performance Manager database will result in data inconsistency.

The following setup variations are available:

Standard Installation
Installs a complete Silk Performance Manager system on a single computer. This setup variation requires minimal user input as it automatically configures a local web server, an application server, a chart server, and an execution server. This installation type is ideal for demonstration purposes.

Advanced Installation
Gives you full control over the Silk Performance Manager installation. Use this setup variation if to set up a distributed environment.

> 📝 **Note:** If the setup finds an Internet Information Server (IIS) installation, this server is selected as the default web server for hosting theSilk Performance Manager home page. For information on setting up SSL on the Silk Performance Manager web server, refer to the *Silk Performance Manager Administration Help*.

Execution Server
Installs a Silk Performance Manager execution server on your machine. This option can be used to set up distributed test execution or distributed monitoring systems.

Silk Performer Monitor Workbench
Silk Performance Manager uses Silk Performer Monitor Workbench to create monitor scripts. For additional information about Silk Performer, refer to the Silk Performer documentation.

Standard Installation

Before you start, download the Silk Performance Manager executable file or insert the Silk Performance Manager DVD into the drive.

Set up a standalone installation with all features installed on a single machine. Standalone installations do not provide the full performance of Silk Performance Manager. Use this installation type for evaluation or demonstration purposes only.

> 📝 **Note:** When installing Silk Performance Manager on a system where a previous version of Silk Performance Manager is already installed, the server services of both versions are launched on startup. For detailed information about how to disable the services that you want to deactivate, see *Parallel Installations*.

1. Locate and double-click the Silk Performance Manager executable file.

If your Windows TEMP environment variable does not point to a valid directory, an error message is displayed. In order to successfully install Performance Manager, reset your TEMP environment variable to a valid directory:

a) Click **StartControl Panel**.
b) Select **System and Security**.
c) Select **System**.
d) Click **Advanced System Settings**. The **System Properties** dialog appears.
e) Click **Environment Variables**. The **Environment Variables** dialog appears.
f) Select the **TEMP** variable.
g) Click **Edit**. The **Edit User Variable** dialog appears.
h) Type a valid directory into the **Variable value** field.
i) Click **OK**.

j) Double-click the Silk Performance Manager executable file to restart the Silk Performance Manager installation.

2. Choose whether to remove the installation files when installation completes.

   If you do not plan to run setup again later, you might choose to unpack the files to a temporary location that is automatically removed after installation completes.

3. Click **Next**. Setup extracts, prepares, and installs the files that are needed for installation.

4. Click **Next**. The **Setup Launcher** checks that your computer fulfills the necessary requirements. If one or more of the software requirements are not fulfilled, the required components are displayed in order of their importance to the installation. Enabled **Install** buttons in the **Setup Launcher** indicate components that were not found on your machine and that must be installed before you can proceed with the installation. You may have to reboot your computer after installing each required component. After reboot, restart the **Setup Launcher**.

5. Click **Next** to begin the installation of Silk Performance Manager. The **InstallShield wizard** opens.

6. Follow the setup wizard and confirm all default settings by clicking either **Next** or **OK** on each dialog.

   If the **InstallShield wizard** fails to update a file during the installation, for example if a system library is locked by Windows, you will be prompted to restart your computer so that the changes can take effect. If you do not restart your computer you may experience problems when accessing Silk Performance Manager.

   Note: A log file is generated during the installation process. If errors occur during installation, or if you experience problems accessing Silk Performance Manager, this log file may contain information that will be helpful in identifying the cause of the problems. You can access the installation log file at `C:\Users\<username>\AppData\Local\Temp\SPM<version>.log`.

Advanced Installation

Before you start, download the Silk Performance Manager executable file or insert the Silk Performance Manager DVD into the drive.

Use the advanced installation to install a distributed Silk Performance Manager environment.

Note: When installing Silk Performance Manager on a system where a previous version of Silk Performance Manager is already installed, the server services of both versions are launched on startup. For detailed information about how to disable the services that you want to deactivate, see *Parallel Installations*.

1. Locate and double-click the Silk Performance Manager executable file.

   If your Windows TEMP environment variable does not point to a valid directory, an error message is displayed. In order to successfully install Performance Manager, reset your TEMP environment variable to a valid directory:

   a) Click **StartControl Panel**.
   b) Select **System and Security**.
   c) Select **System**.
   d) Click **Advanced System Settings**. The **System Properties** dialog appears.
   e) Click **Environment Variables**. The **Environment Variables** dialog appears.
   f) Select the **TEMP** variable.
   g) Click **Edit**. The **Edit User Variable** dialog appears.
   h) Type a valid directory into the **Variable value** field.
   i) Click **OK**.
   j) Double-click the Silk Performance Manager executable file to restart the Silk Performance Manager installation.

2. Choose whether to remove the installation files when installation completes.

If you do not plan to run setup again later, you might choose to unpack the files to a temporary location that is automatically removed after installation completes.

3. Click **Next**. Setup extracts, prepares, and installs the files that are needed for installation.

4. Click **Next**. The **Setup Launcher** checks that your computer fulfills the necessary requirements. If one or more of the software requirements are not fulfilled, the required components are displayed in order of their importance to the installation. Enabled **Install** buttons in the **Setup Launcher** indicate components that were not found on your machine and that must be installed before you can proceed with the installation. You may have to reboot your computer after installing each required component. After reboot, restart the **Setup Launcher**.

5. Click **Next** to begin the installation of Silk Performance Manager. The **InstallShield wizard** opens.

6. Click **Next**.

If the **InstallShield wizard** fails to update a file during the installation, for example if a system library is locked by Windows, you will be prompted to restart your computer so that the changes can take effect. If you do not restart your computer you may experience problems when accessing Silk Performance Manager.

7. Read the *License Agreement* carefully and accept it.

8. In the **Setup Type** dialog, select **Silk Performance Manager Advanced Installation**.

9. *Optional:* Click **Browse** to change the installation directory.

> **Note:** You can only install Silk Performance Manager on local drives. You will receive an error message if you specify an invalid installation destination.

10. Click **Next**. The **Select Features** dialog box opens.

11. Select the components that you want to install on the current system.

- To install the Silk Performance Manager application server, check **Application Server**.
- To install the Silk Performance Manager web server, which is also known as the front-end server, check **Web Server**.

  If Microsoft Internet Information Services (IIS) is installed on your system, and the default IIS site is running, IIS is selected as the default Silk Performance Manager web server and an Internet Server Application Program Interface (ISAPI) filter is installed to perform the URL parsing. If IIS is not detected, this option is not available, and the **Tomcat Web Server** is selected by default. To use IIS as the Silk Performance Manager web server, you need to install the following IIS features before installing Silk Performance Manager:

  - CGI
  - ISAPI Extensions
  - ISAPI Filters

  > **Note:** When installing a web server, apply the following rules:
  >
  > - Install a web-based product with the server.
  > - Choose only one web server option
  > - Install the web server in the same LAN as the application server, otherwise the application system will suffer from the slowed down internal network traffic.
  > - You can install multiple web servers, each on a dedicated computer, that connect to the same application server. For detailed information on configuring the location of the application server, refer to the *Silk Performance Manager Administration Help*.

- To install the Silk Performance Manager chart server, check **Chart Server**. Micro Focus recommends to install the chart server on a separate system due to its high memory consumption when handling reporting requests.
- To install the Silk Performance Manager execution server, check **Execution Server**.

12. Click **Next**. The **Installation options summary** dialog lists the settings you have chosen during setup.

13. Click **Next** to start the installation. When the installation is complete the **Complete** dialog appears.

14. Click **Finish** to complete the installation.

> ✎ **Note:** A log file is generated during the installation process. If errors occur during installation, or if you experience problems accessing Silk Performance Manager, this log file may contain information that will be helpful in identifying the cause of the problems. You can access the installation log file at `C:\Users\<username>\AppData\Local\Temp\SPM<version>.log`.

Execution Server Setup

Before you start, download the Silk Performance Manager executable file or insert the Silk Performance Manager DVD into the drive.

The execution server is used to execute Silk Performance Manager monitors on remote computers. Install an Silk Performance Manager execution server on each Point of Presence (POP) that you want to use as a remote execution server.

> ✎ **Note:** When installing Silk Performance Manager on a system where a previous version of Silk Performance Manager is already installed, the server services of both versions are launched on startup. For detailed information about how to disable the services that you want to deactivate, see *Parallel Installations*.

1. Locate and double-click the Silk Performance Manager executable file.

If your Windows TEMP environment variable does not point to a valid directory, an error message is displayed. In order to successfully install Performance Manager, reset your TEMP environment variable to a valid directory:
   a) Click **StartControl Panel**.
   b) Select **System and Security**.
   c) Select **System**.
   d) Click **Advanced System Settings**. The **System Properties** dialog appears.
   e) Click **Environment Variables**. The **Environment Variables** dialog appears.
   f) Select the **TEMP** variable.
   g) Click **Edit**. The **Edit User Variable** dialog appears.
   h) Type a valid directory into the **Variable value** field.
   i) Click **OK**.
   j) Double-click the Silk Performance Manager executable file to restart the Silk Performance Manager installation.

2. Choose whether to remove the installation files when installation completes.

If you do not plan to run setup again later, you might choose to unpack the files to a temporary location that is automatically removed after installation completes.

3. Click **Next**. Setup extracts, prepares, and installs the files that are needed for installation.

4. Click **Next**. The **Setup Launcher** checks that your computer fulfills the necessary requirements. If one or more of the software requirements are not fulfilled, the required components are displayed in order of their importance to the installation. Enabled **Install** buttons in the **Setup Launcher** indicate components that were not found on your machine and that must be installed before you can proceed with the installation. You may have to reboot your computer after installing each required component. After reboot, restart the **Setup Launcher**.

5. Click **Next** to begin the installation of Silk Performance Manager. The **InstallShield wizard** opens.

6. Click **Next**.

If the **InstallShield wizard** fails to update a file during the installation, for example if a system library is locked by Windows, you will be prompted to restart your computer so that the changes can take effect. If you do not restart your computer you may experience problems when accessing Silk Performance Manager.

7. Read the *License Agreement* carefully and accept it.

8. In the **Setup Type** dialog, select **Silk Performance Manager Execution Server**.

9. *Optional:* Click **Browse** to change the installation directory.

   ✏ **Note:** You can only install Silk Performance Manager on local drives. You will receive an error message if you specify an invalid installation destination.

10.Click **Next**. The **Installation options summary** dialog box opens.

11.Click **Next** to start the installation. When the installation is complete the **Complete** dialog appears.

12.Click **Finish** to complete the installation.

   ✏ **Note:** A log file is generated during the installation process. If errors occur during installation, or if you experience problems accessing Silk Performance Manager, this log file may contain information that will be helpful in identifying the cause of the problems. You can access the installation log file at `C:\Users\<username>\AppData\Local\Temp\SPM<version>.log`.

Upgrading to Silk Performance Manager 21.0

When upgrading to a new version of Silk Performance Manager, the following apply:

- If you need to upgrade additional execution servers after the initial upgrade, re-start the application server and refresh the UI. Ignore any error messages that may display. For additional information, see *Upgrading Execution Servers*.

- Information that is stored in the database, such as monitors and schedules, is automatically retained during the upgrade. However, information in manually edited configuration files is not retained. Therefore, these files must be backed up before upgrading, and the corresponding files in the upgrade must be edited manually to retain the changes.

- The time zone of the application server influences the daylight savings time (DST) of schedule exclusions and blackout periods that you have defined. It is therefore important that the time zone of your application server is set correctly. To specify the time zone, preform the following actions:

  1. In the `conf\appserver` folder of the Silk Performance Manager directory on the application server, create a new file named `dbupgrade.properties`.

  2. Open the `dbupgrade.properties` file with a text editor and add the following line:

     ```
     exclusion.timezone = <timezone code>
     ```

     Where <timezone code> is any valid Java time zone code, for example GMT or EST.

  3. Save and close the file.

  4. Restart the application server service.

- If the current version contains new reports that were not available in the previously installed version, these new reports will not be available in your existing projects when you re-connect to an existing repository. To make new reports available in an existing repository, create a new project.

Upgrading Execution Servers

Before you begin upgrading to a new version of Silk Performance Manager, ensure that the following prerequisites are met:

- You have the administrator password for the Silk Performance Manager server.
- Your database is backed up.
- Your Silk Performance Manager execution servers are upgraded.

To minimize the downtime when upgrading your distributed Silk Performance Manager installation, an automated procedure for simultaneously upgrading all execution servers is available.

Note: This procedure cannot be performed on an execution server that is installed on the same host computer as Silk Performance Manager. If you attempt to upgrade such an execution server, the following error message is displayed:
Other servers installed – no upgrade possible (<version information>)

1. On the Silk Performance Manager application server, create a folder named `upgrade` in the Silk Performance Manager root directory.
   For example `C:\Program Files (x86)\Silk\Silk Performance Manager 19.0\upgrade\`.
2. Copy the setup package to the new `upgrade` directory.
3. Log on to the Silk Performance Manager web console as an administrator.
4. Click **Administration**.
5. Select the **Upgrade** tab. The **Available Packages** list displays the patch that you have copied to the upgrade directory.
6. Click the package name to continue to the execution server overview. All active execution servers are listed.

   Note: Deactivated execution servers will not be upgraded. If you want to exclude certain execution servers from the upgrade, deactivate them before continuing the version upgrade process.

7. Click **Start Upgrade** and confirm the appearing message. The **Upgrade Status** page shows the current status of the upgrade progress for each execution server. Use the **Refresh** button of your browser to refresh the displayed information.
8. If an error occurs, move the mouse cursor over the red X in the respective step to view the error. After fixing the error, click **Retry** in the **Action** column to try again.
9. When all execution servers have been upgraded, click on the **Switch** link to reboot all execution servers and confirm the appearing message.
10. Wait until all execution servers have rebooted.

    Use the **Refresh** button of your browser to view the current status. If the **Version Info** column displays the message `Error while retrieving status info`, the execution server is still in the process of rebooting.

    Note: If an execution server is started with **Run as process**, the application server will not receive a response from the execution server because it is waiting for login credentials. For such execution servers, you must login on the machine before it is responsive.

11. After all execution servers have been upgraded, you can proceed to upgrade the application, front-end, and chart servers.

Upgrading Other Servers

To upgrade the application, front-end, and chart servers to a new version of Silk Performance Manager:

1. Backup your database.
2. If you have made changes to any of the XML-based configuration files in your current installation's /conf directory, or have added new files to this directory, make a backup copy of the `/conf` directory.
3. Remove the current installation of the front-end server, application server, and chart server.

   For additional information, see *Uninstalling Silk Performance Manager*. Skip this step if you want to install a new version of Silk Performance Manager while retaining the previous installation. For additional information, see *Parallel Installations*.
4. Install the Silk Performance Manager front-end server, application server, and chart server.

   For additional information, see *Advanced Installation*.
5. The database settings will automatically be updated, however some advanced configuration settings, for example displaying the host name in the browser title bar, must be edited manually in the new configuration files with a text or XML editor.

For detailed information about advanced settings in the configuration files, refer to the *Silk Performance Manager Administration Help*. Before editing your XML files, make sure that the front-end server service is stopped.

6. After editing your configuration files, restart the front-end server service.

For detailed information about stopping and starting services, refer to the *Silk Performance Manager Administration Help*.

7. After installing the front-end server, application server, and chart server components, connect to the database by entering the correct data on your web front-end.

For detailed information, refer to the *Silk Performance Manager Administration Help*.

Note: Your existing database is automatically updated to the current version when you connect. This can take up to several hours, depending on the size of the database and the version of Silk Performance Manager from which you are upgrading.

Uninstalling Silk Performance Manager

To uninstall Silk Performance Manager components:

1. Click **Start** > **Control Panel**.
2. In the **Programs** area, click **Uninstall a Program**.
3. Right-click Silk Performance Manager and click **Uninstall**.
4. Follow the instructions of the setup wizard.

Parallel Installations

When installing Silk Performance Manager on a computer where a previous version of Silk Performance Manager is already installed, the server services of both versions are launched on start-up. Having two versions of Silk Performance Manager services installed may be desired if you consider a fall-back to the previous version. However, you must manually define which services you want to be active, as active identical services of both versions will conflict with each other.

Note: When you remove the older version of Silk Performance Manager from your computer, the `silkroot` IIS folder, which is needed by the newer version, is also removed. Therefore the IIS configuration is broken and you need to perform a repair of the new version before the system is usable again. This issue does not occur when you uninstall the older version before installing the new one.

Disabling Silk Performance Manager Services

To disable Silk Performance Manager services:

1. Use the **Windows Services Manager** to shut down all services of the installed version of Silk Performance Manager.
2. Change the service **Startup Type** of the services you want to disable from *Automatic* to either *Manual* or *Disabled*.
3. Manually restart the Silk Performance Manager services that you want to be active.

Configuring Your Database

Repositories can only be configured by a system administrator. For information on user roles, refer to the *Silk Performance Manager Administration Help*.

Once you have installed and configured your Relational Database Management System (RDBMS) and you have installed Silk Performance Manager, you can create one or more repositories, or you can connect to existing repositories. For information about working with repositories, refer to the *Silk Performance Manager Administration Help*.

Micro Focus recommends not to install Silk Performance Manager and the RDBMS software on the same machine.

Silk Performance Manager only supports Microsoft SQL Server. You require the following to connect to a Microsoft SQL Server database:

- Server host name and port number.
- MS SQL Server system username or Windows domain\username, and password.
- Name for your Silk Performance Manager repository.
- Name and password of your Silk Performance Manager database user.

To connect to SQL Server with a Windows user account, enter the Username in Silk Performance Manager including the domain information in the format <domain>\<username>.

Install and setup Microsoft SQL Server as described in your RDBMS documentation. Once you have installed Microsoft SQL Server, you are ready to install Silk Performance Manager.

Due to security risks, Micro Focus recommends not using the database administrator user for maintaining your Silk Performance Manager repository. The following database roles (database user privileges) for your Silk Performance Manager repository allow you to work with Silk Performance Manager:

- db_owner
- db_ddladmin

Either of these two roles allow for creating and configuring repository tables, for working with an already created database, and for installing and upgrading the software. Giving less privileges to the Silk Performance Manager database user will result in errors.

> **Note:** To upgrade your RDBMS, make sure you stop all Silk Performance Manager services first to avoid result writing activity. For information about stopping and starting services, refer to the *Silk Performance Manager Administration Help*.

Database Size Calculation

This topic helps you estimate the required disk space for the database server. As data is collected, the database grows in size. The following rules of thumb apply:

- A measure consumes approximately 100 bytes in the database.
- A page timer requires approximately 300 bytes.
- Health rates have an additional three measures for each transaction.

The database size in the example below comes to approximately 175 MB per month. This already includes some TrueLogs on Error.

Without data aggregation							
Schedule		15 Min	Pages	5			
Transactions		Executions	Monitors	Bytes			
	Raw data	2928	10500	1800	52775,57 MB		
	15 min merged	2928	10500	1800	52775,57 MB		
	1h merged	732	10500	1800	13193,89 MB		
	1d merged	31	10500	1800	549,75 MB		
	1 week merged	4	10500	1800	78,54 MB		
					119373,32 MB		
TrueLogs		Executions	Raw data p	Raw data	Overhead	Errors	
	Transactions	30744000	50,00 KB	250	33%	1%	19965,59 MB
Disk space per Month:		139338,91 MB					

With data aggregation							
		15 Min	Pages	5			
Keep data for x days		Executions	Monitors	Bytes			
30 days	Raw data	2880	10500	1800	51910,40 MB		
60 days	15 min merged	5760	10500	1800	103820,80 MB		
100 days	1h merged	2400	10500	1800	43258,67 MB		
200 days	1d merged	200	10500	1800	3604,89 MB		
400 days	1 week merged	57	10500	1800	1029,97 MB		
					203624,73 MB		
Limit TrueLogs		Executions	Raw data p	Raw data	Overhead	Errors	
10240,00 MB	Transactions	110592000	50,00 KB	250	33%	1%	10240,00 MB
Disk space in 400 days		213864,73 MB					

Micro Focus recommends that you discuss your calculations with your database administrator.

Tested and Supported Software

This section lists the platforms that Silk Performance Manager 21.0 supports, which includes the application server, front-end server, chart server, and execution server components.

System Area	Tested With
Operating system	• Microsoft Windows Server 2012 R2 • Microsoft Windows Server 2016 • Microsoft Windows Server 2019 • Microsoft Windows 8.1 (execution server) • Microsoft Windows 10 (execution server)
Database support	• Microsoft SQL Server 2012, 2014, 2016
Web browser support	• Google Chrome • Internet Explorer 10 or later (no compatibility mode) • Mozilla Firefox • Microsoft Edge
Web server support	• IIS 10
Silk Test/Silk Performer support	• Silk Test 21.0 • Silk Performer 21.0

Contacting Micro Focus

Micro Focus is committed to providing world-class technical support and consulting services. Micro Focus provides worldwide support, delivering timely, reliable service to ensure every customer's business success.

All customers who are under a maintenance and support contract, as well as prospective customers who are evaluating products, are eligible for customer support. Our highly trained staff respond to your requests as quickly and professionally as possible.

Visit *http://supportline.microfocus.com/assistedservices.asp* to communicate directly with Micro Focus SupportLine to resolve your issues, or email supportline@microfocus.com.

Visit Micro Focus SupportLine at *http://supportline.microfocus.com* for up-to-date support news and access to other support information. First time users may be required to register to the site.

Information Needed by Micro Focus SupportLine

When contacting Micro Focus SupportLine, please include the following information if possible. The more information you can give, the better Micro Focus SupportLine can help you.

- The name and version number of all products that you think might be causing an issue.
- Your computer make and model.
- System information such as operating system name and version, processors, and memory details.
- Any detailed description of the issue, including steps to reproduce the issue.
- Exact wording of any error messages involved.
- Your serial number.

To find out these numbers, look in the subject line and body of your Electronic Product Delivery Notice email that you received from Micro Focus.

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