

# Citrix SCOM Management Pack 1.4 for ShareFile

Nov 27, 2017

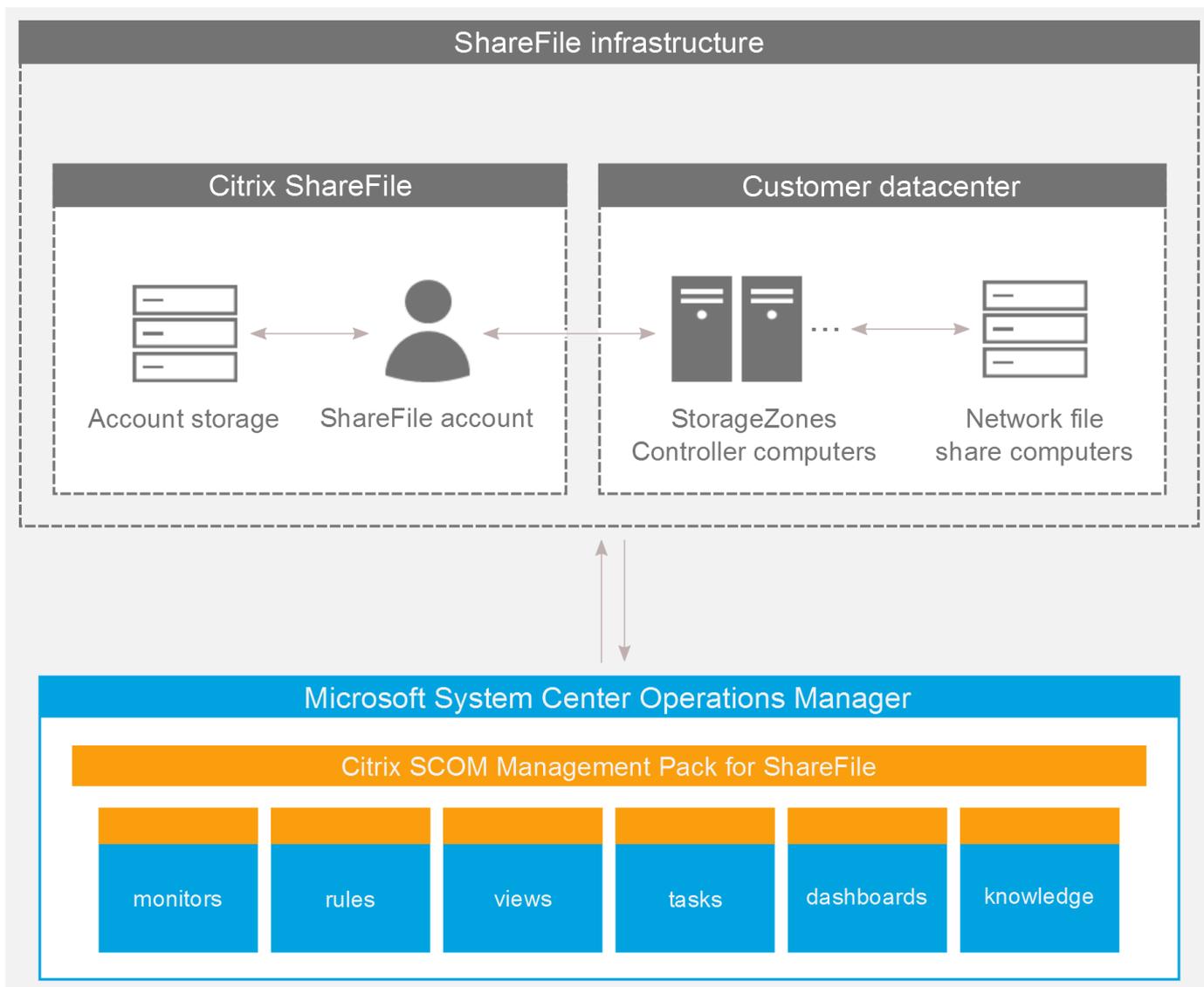
Citrix SCOM Management Pack for ShareFile is an availability and performance management solution that extends end-to-end service monitoring capabilities of Microsoft System Center Operations Manager (SCOM) to include the Citrix ShareFile (ShareFile) infrastructure. It fully integrates the topology, health, and performance data into SCOM, providing an end-to-end operations overview across the ShareFile infrastructure and enabling delivery of effective business service management.

Citrix SCOM Management Pack for ShareFile provides the following features:

- Monitoring StorageZones Connector services availability
- Monitoring of Internet Information Services (IIS) application pool and website statuses on the StorageZones Controller computer
- Receiving alerts regarding SSL certificate expiry on StorageZones Controller computer
- Presentation components including the Topology, State, Alert, and Performance views
- Performance monitoring of ShareFile user accounts and StorageZones Controller instances

## Architecture

The following diagram shows how Citrix SCOM Management Pack for ShareFile connects the SCOM management platform and the Citrix enterprise infrastructure.

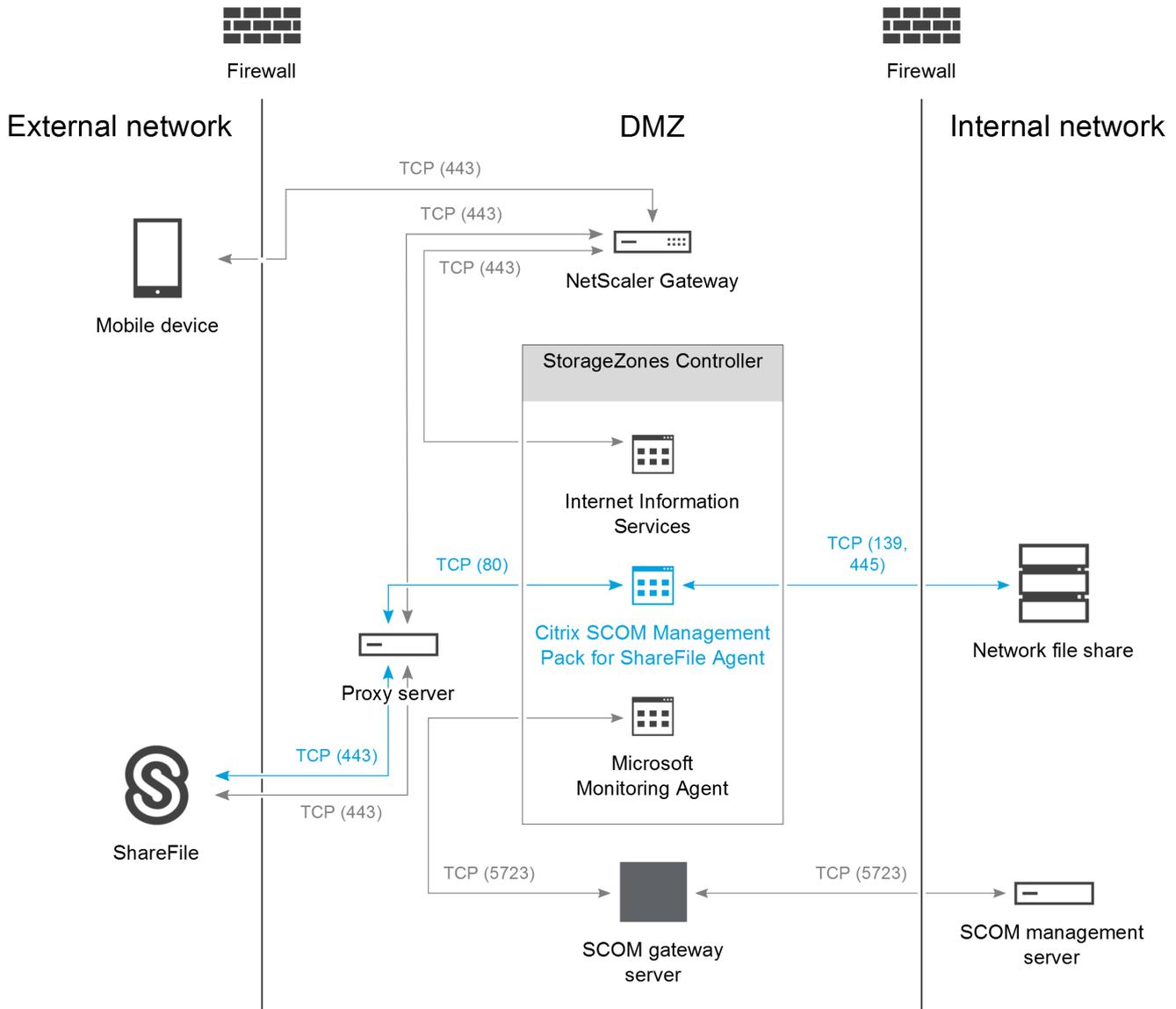


## Deployment scenarios

Citrix SCOM Management Pack for ShareFile can be installed and configured in highly restrictive network environments, provided that the required ports and protocols are enabled in the firewalls.

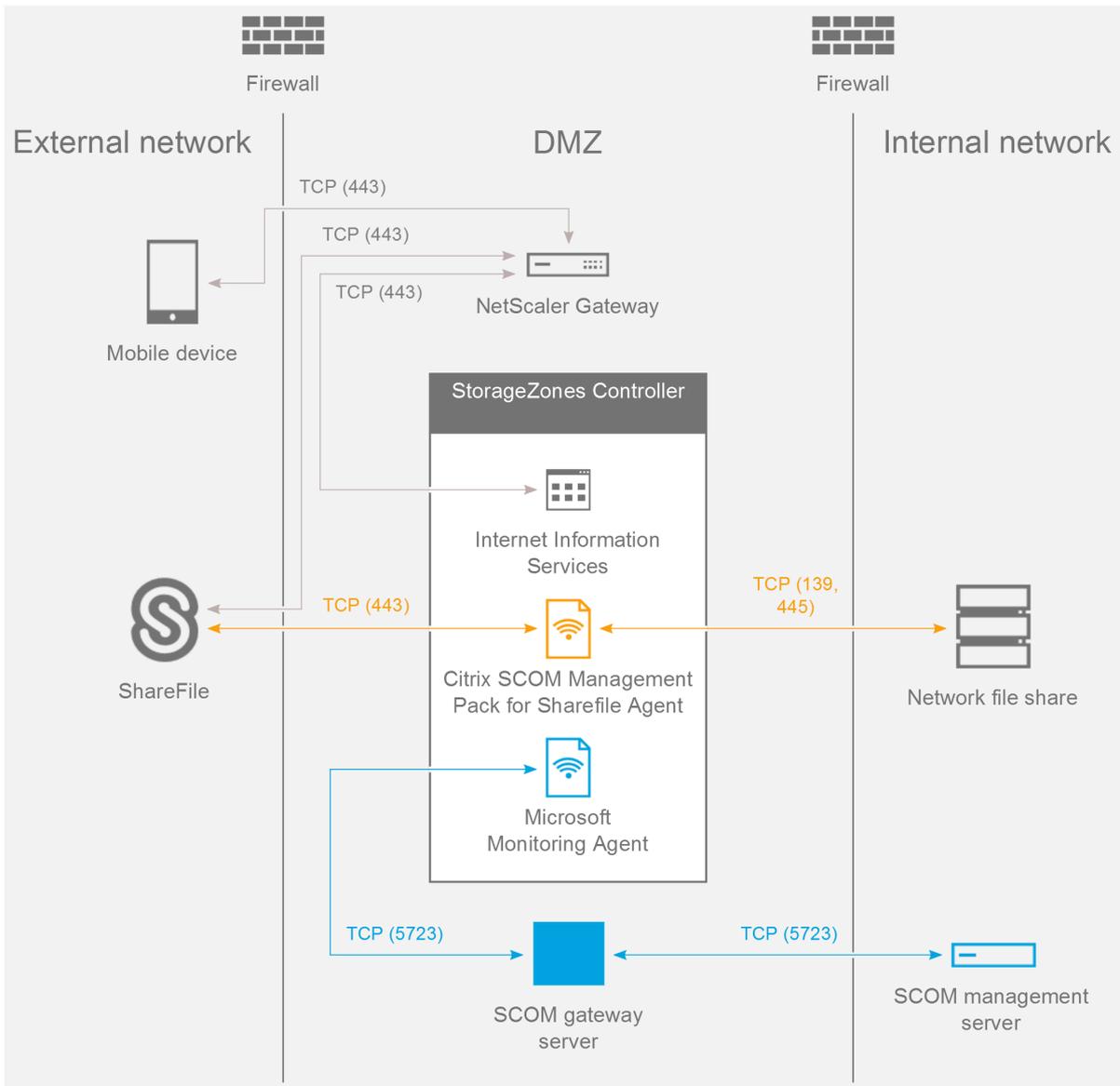
### Deployment scenario with direct connection

The following diagram shows a sample deployment with a direct connection between the SCOM management server and the SCOM agent (Microsoft Monitoring Agent in this example) deployed in the DMZ. The diagram also depicts protocols and ports that must be enabled in the firewalls in order for the Citrix SCOM Management Pack for ShareFile Agent service (*Citrix MPSHF Agent*) to be fully functional.



### Deployment scenario with SCOM gateway server

The following diagram shows a sample deployment with a SCOM gateway server within the DMZ, managing the connection between the SCOM management server and the SCOM agent (Microsoft Monitoring Agent in this example). The diagram also depicts protocols and ports that must be enabled in the firewalls in order for the Citrix SCOM Management Pack for ShareFile Agent service (*Citrix MPSHF Agent*) to be fully functional.



# What's new

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Citrix SCOM Management Pack 1.4 for ShareFile introduces the following new or enhanced features:

- **Support for Citrix ShareFile versions.** Citrix SCOM Management Pack for ShareFile now supports ShareFile Versions 5.0, 5.0.1, and 5.1.
- **FIPS Compliance.** Citrix SCOM Management Pack for ShareFile now uses FIPS (Federal Information Processing Standards) compliant algorithms and can monitor FIPS-compliant systems.
- **TLS 1.2 support.** Citrix SCOM Management Pack for ShareFile is enhanced to monitor Citrix ShareFile that has TLS (Transport Layer Security) protocol Version 1.2 enabled.

## Known issues

The following is a list of known issues in this product version.

- **Issue ID:** SCOM-898  
**Symptom:** In the ShareFile MP Configuration tool, modifications of the Enable Proxy option are not immediately reflected in the Enabled column in the main window.  
**Action:** None. The tool properly enables or disables configuration entries. The column shows the correct option values after the configuration changes are applied (by clicking **OK** in the main window) and the tool is started again.
- **Issue ID:** SCOM-770  
**Symptom:** Health states of several aggregate rollup monitors are not propagated up to the Customer Managed Zones level; they are not propagated at all. Examples of such monitors are:
  - *Availability Health Rollup From StorageZone Service Group to StorageZone Controller Monitor*
  - *Configuration Health Rollup From StorageZone Service Group to StorageZone Controller Monitor***Action:** None. There is no workaround available.
- **Issue ID:** SCOM-514  
**Symptom:** In the output of the *Check Requirements and Configuration for Citrix MPSHF Agent* task in the SCOM Operations console, user names and folder names that contain non-ASCII characters are not displayed correctly. For example, Spanish characters *çñ* appear as *çñ* in such a name.  
**Action:** None. Apart from the visual glitch, the functionality of the product is not affected in any way. You can therefore safely ignore the symptom.
- **Issue ID:** SCOM-459  
**Symptom:** During a Citrix SCOM Management Pack for ShareFile upgrade on the SCOM management server computer, the Setup Wizard fails to import the included management packs. This issue occurs when the effective installation folder of the new product version differs from the installation folder of the earlier version.  
**Action:** After you close the Setup Wizard, manually import the management packs. For instructions, see section [Manually importing included management packs into SCOM](#) in Optimize.
- **Issue ID:** SCOM-411

**Symptom:** After upgrading the product from the version 1.1, the *%ProgramData%\Comtrade* folder is left on the local system. This issue occurs on the SCOM management server computer as well as on the agent-managed computers.

**Action:** Manually remove the residuary folder by using an operating system tool.

# Upgrading

**Note:** Earlier product versions were released under the name Comtrade Management Pack for Citrix ShareFile.

Upgrade is available only for the following version: 1.1. During the upgrade process, the included management packs of the earlier product version are automatically upgraded; they prior removal is not required.

To upgrade the Citrix SCOM Management Pack for ShareFile to its current version, do the following:

1. Prepare your environment for installation of the new product version. For instructions, see [Preparing for the installation](#) in Install and configure.
2. Check if the *.mpb* file that was installed by the product is locked by any program, for example, SCOM Operations console or Windows PowerShell. This includes programs in both active and disconnected sessions. If the file is locked, exit the locking program, for example, exit the SCOM Operations console or close the Windows PowerShell window.  
**Tip:** To check if a file is locked, try renaming it and then reverting to its original file name. Inability to rename the file indicates a locking program. You can identify it by using the Handle utility of Sysinternals Suite (see the [Handle](#) webpage on the Microsoft TechNet website).
3. Install the product (its server-side part) on the SCOM management server computer. For instructions, see [Installing the product on the SCOM management server computer](#) in Install and configure.  
**Note:** Installation process upgrades the product and preserves local configuration data.
4. Verify the installation on the SCOM management server computer. For instructions, see [Verifying the installation on the SCOM management server computer](#) in Install and configure.
5. On the SCOM management server computer, move the *mpshf\_config.dat* file from the *%ProgramData%\ComTrade\MPSHare\ShareFile MP* directory to the *%ProgramData%\Citrix\CitrixMPSHare\ShareFile MP* directory.
6. Configure access to the shared folder for agent installation. For instructions, see [Configuring access to the shared folder for agent installation](#) in Install and configure.
7. Install the product (its agent-side part) on the StorageZones Controller computers. For instructions, see [Installing the product on the StorageZones Controller computers](#) in Install and configure.  
**Important:** In the Run Task – Install Citrix MPSHF Agent dialog box, set the **UpgradeAgent** task parameter to the true value.
8. Verify the installation and configuration on the StorageZones Controller computers. For instructions, see [Verifying the installation and configuration on the StorageZones Controller computers](#) in Install and configure.

# System requirements

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Before installing Citrix SCOM Management Pack for ShareFile, make sure that your environment meets the requirements listed in this section.

## Software requirements

Citrix SCOM Management Pack for ShareFile requires a supported version of the following products that it integrates with:

- Citrix ShareFile
- Microsoft System Center Operations Manager

**Note:** Make sure that Microsoft .NET Framework 4.5.2 or later is available on the ShareFile StorageZones Controllers.

## Supported versions of Citrix ShareFile

Citrix SCOM Management Pack for ShareFile is compatible with the following Citrix ShareFile versions:

Product version (StorageZones Controller)	Supported
Citrix ShareFile 5.1	✓
Citrix ShareFile 5.0.1	✓
Citrix ShareFile 5.0	✓
Citrix ShareFile 4.1	✓
Citrix ShareFile 4.0	✓
Citrix ShareFile 3.4	✓
Citrix ShareFile 3.0	✓
Citrix ShareFile 2.3	✓

## Supported versions of SCOM

Citrix SCOM Management Pack for ShareFile is compatible with the following SCOM versions:

Microsoft System Center Operations Manager version	Supported
Microsoft System Center Operations Manager 2016	✓
Microsoft System Center Operations Manager 2012 R2	✓

<sup>1</sup>This entry covers the following configurations: base release, base release + SP1 (Service Pack 1).

## Language support

Citrix SCOM Management Pack for ShareFile can be deployed and operates correctly in environments with the following languages and locale settings:

Language	Locale identifier	Supported
English	en	✓
Spanish	es	✓

# Install and configure

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This chapter contains instructions that you must follow to install and configure Citrix SCOM Management Pack for ShareFile. Perform all procedures in the documented order of precedence.

## Preparing for the installation

Before installing Citrix SCOM Management Pack for ShareFile, make sure the following general prerequisites are fulfilled:

- Your environment meets the software requirements.  
For software requirements, see the Software requirements section in [System requirements](#).
- You know the credentials (user name, password) for accessing the following:
  - ShareFile account (<Subdomain>.sharefile.com or <Subdomain>.sharefile.eu)  
For access, the ShareFile master administrator user (**master administrator**) is used.
  - ShareFile network file share  
For access, an operating system user account is used that has read permissions on the on-premises network file share (**network share**). This must be a domain user account.  
**Note:** Several network shares may be configured in ShareFile for the same ShareFile account.
- If ShareFile deployment includes a proxy server, you have the following information about the proxy server available:
  - Server's fully qualified domain name or IP address
  - Proxy service listening port
  - Authentication mode
  - User name and password (and domain, in case of NTLM) of the user account used for authenticating
  - IP addresses of StorageZones Controller computers that utilize connections through the proxy server
- A computer is chosen on which a SCOM management server resides and where the server side of Citrix SCOM Management Pack for ShareFile will be installed. This computer is referred to as **SCOM management server computer**.
- SCOM agent is installed on all the computers that host ShareFile StorageZones Controller instances, and these computers are configured as **agent-managed computers** in the SCOM management group.
- Firewalls allow communication of Citrix SCOM Management Pack for ShareFile Agent with other components. They are configured as follows:
  - On the network file share computer, inbound network traffic from the StorageZones Controller computer is enabled on the TCP ports 139 and 445.
  - If you have a ShareFile deployment that does not include a proxy server:  
On the StorageZones Controller computer, outbound network traffic to the ShareFile control plane is enabled on the TCP port 443.
  - If you have a ShareFile deployment that includes a proxy server:  
On the proxy server computer, outbound network traffic to the ShareFile control plane is enabled on the TCP port 443.

## Installing the product on the SCOM management server computer

The server-side part of Citrix SCOM Management Pack for ShareFile must be installed on the SCOM management server computer.

To install Citrix SCOM Management Pack for ShareFile on the SCOM management server computer, do the following:

1. Log on to the management server computer. Use a user account that has local administrative privileges and SCOM

administrative privileges.

2. In Windows Explorer, locate the *Citrix\_SCOM\_Management\_Pack\_for\_ShareFile\_<Version>.exe* file (where <Version> is the current software version), and double-click it to invoke the installation process. Wait for the Setup Wizard to appear.
3. In the Welcome page of the Setup Wizard, click **Next**.

4. In the View Relevant Product Configuration page, click **Next**.

5. In the License Agreement page of the Setup Wizard, carefully read the end user license agreement. If you accept the terms of the agreement, click **Next**.

6. In the Destination Folder page, define the Citrix SCOM Management Pack for ShareFile installation folder. Citrix recommends that you install Citrix SCOM Management Pack for ShareFile to the default folder.

Proceed as follows:

- To install the product to the default folder listed in the Setup Wizard, no special actions are required.
- To install the product to a different folder, follow the substeps:

1. Click **Change**.

2. In the Browse For Folder dialog box, browse to the desired installation folder, select it, and click **OK**.

Click **Next**.

7. In the Configure Post-Install Actions page of the Setup Wizard, decide whether the Setup Wizard should automatically import the included management packs into SCOM.

To let the Setup Wizard import the management packs, select the **Automatically import the Management Pack** option. Citrix recommends this choice.

To import the management packs into SCOM manually at a later time, leave the **Automatically import the Management Pack** option unselected. For instructions on how to import or reimport the management packs, see [Manually importing included management packs into SCOM](#).

8. Click **Install**. The Setup Wizard displays the Installing the product page and starts copying the installation files.

9. After the installation completes, the installation completion page is displayed.

If you let the Setup Wizard to automatically import the management packs, click **Next**. In the opposite case, click **Finish** to close the Setup Wizard.

10. If you let the Setup Wizard to automatically import the management packs, it displays the Executing post-install actions page. Attend the import process.

11. In the post-installation completion page, review the management packs import log, and click **Finish** to close the Setup Wizard.

## Configuring access to the shared folder for agent installation

**Note:** Steps of this procedure must be followed only once on a SCOM management server computer. In case you previously installed and configured any of the following Citrix Management Pack products on the same computer, you may not need to repeat the steps:

- Citrix SCOM Management Pack for Provisioning Services
- Citrix SCOM Management Pack for StoreFront
- Citrix SCOM Management Pack for Web Interface
- Citrix SCOM Management Pack for XenApp
- Citrix SCOM Management Pack for XenApp and XenDesktop

- Citrix SCOM Management Pack for XenMobile

To configure access to the shared folder for agent installation, do the following:

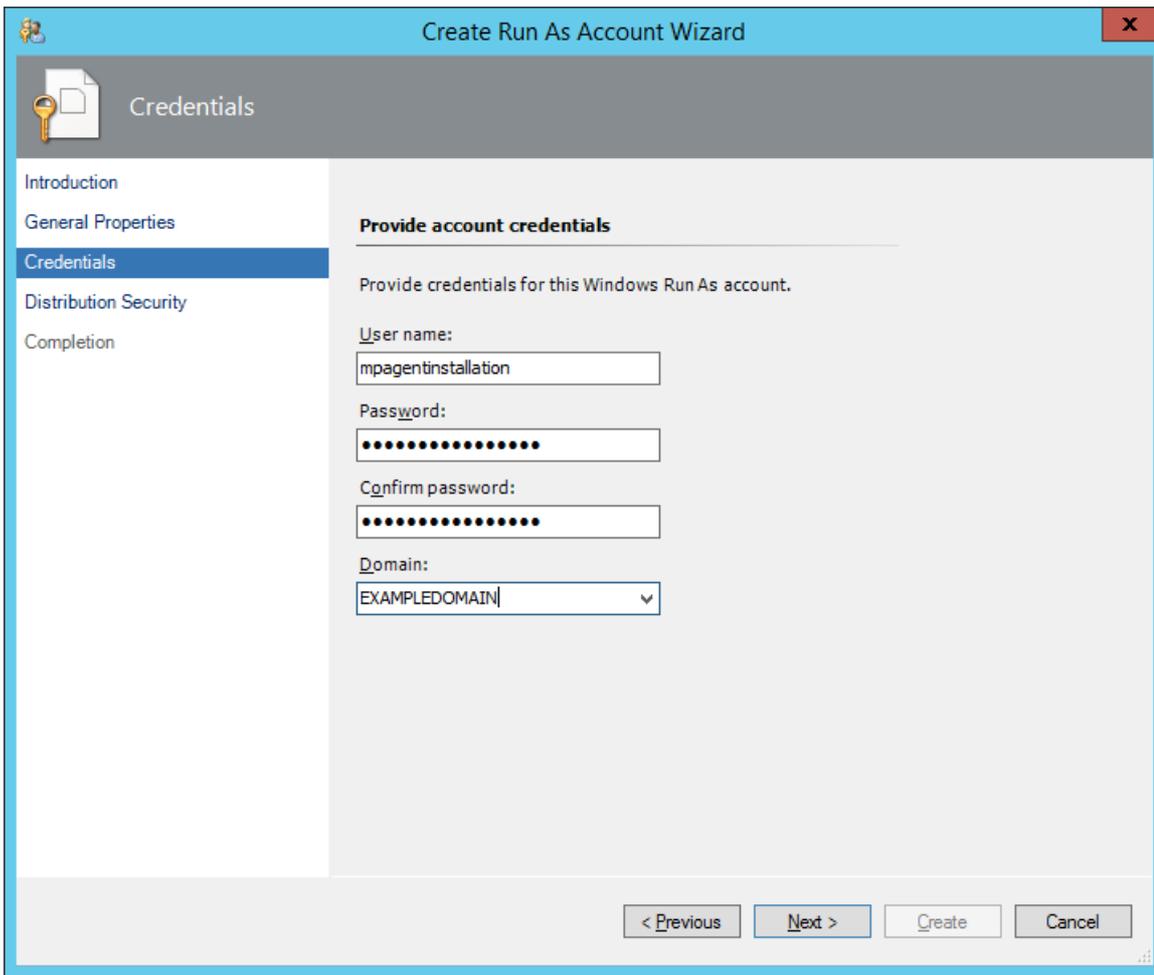
1. Log on to the SCOM management server computer. Use a user account that has local administrative privileges.
2. Choose a local user account (local to the computer with the shared folder) or a domain user account that will have access to the shared folder.  
**Important:** Citrix recommends creating a new, dedicated user account that you will use only for deployment of the Citrix SCOM Management Pack for ShareFile Agent to managed computers.
3. Using an operating system administrative tool, add the user account to the *CitrixMPShareUsers* user group.
4. Launch the SCOM Operations console.
5. In the **Administration** view, in the left pane, expand **Run As Configuration**, and then click **Accounts**.
6. In the Tasks pane, expand **Actions**, and then click **Create Run As Account**.
7. In the Create Run As Account Wizard window, click **Next**.
8. In the **Run As account type** drop-down menu, leave the default selection (Windows).

The screenshot shows the 'Create Run As Account Wizard' window with the 'General Properties' step selected. The window title is 'Create Run As Account Wizard'. The left pane shows a navigation menu with 'General Properties' highlighted. The main area is titled 'Specify general properties for the Run As account' and contains the following fields:

- Run As account type:** A dropdown menu with 'Windows' selected.
- Display name:** A text box containing 'MP Agent Installation User Account'.
- Description (optional):** A text area with up and down arrow buttons on the right side.

At the bottom of the window, there are four buttons: '< Previous', 'Next >', 'Create', and 'Cancel'.

9. In the **Display name** text box, type a name that the SCOM Operations console will use to refer to the newly created SCOM user account. Click **Next**.
10. In the **User name** text box, type the user name of the operating system user account that you chose in step 2.



11. In the **Password** and **Confirm password** text boxes, type the valid password of the operating system user account.

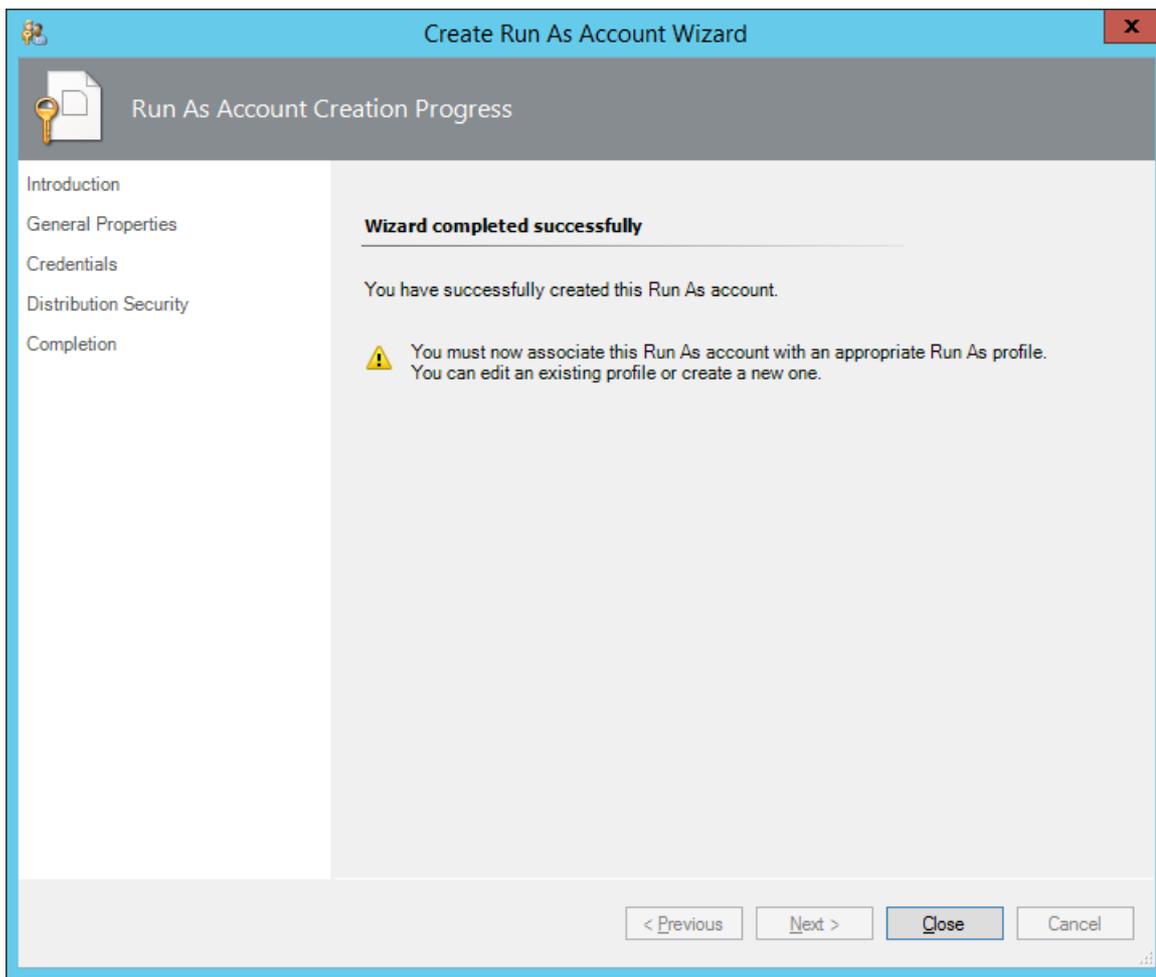
12. In the **Domain** text box, update the value if needed. Click **Next**.

13. Depending on the effective security policy in your SCOM environment, select either the **Less secure** or **More secure** option.

**Note:** Selecting **More secure** requires manual steps to be performed in SCOM for each newly added managed computer.

14. Click **Create**.

15. After the message about successful account creation appears, click **Close**.



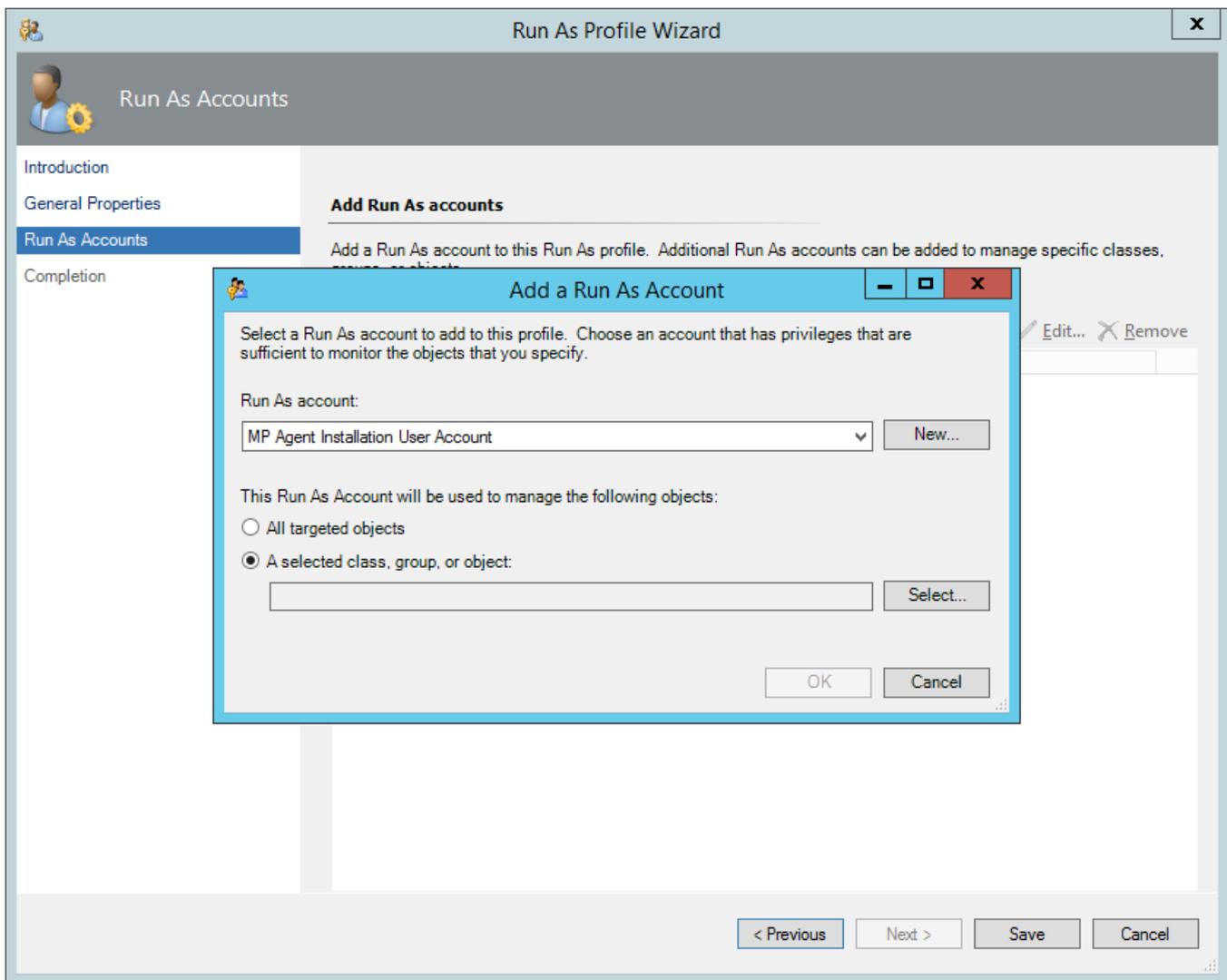
16. In the left pane, under Run As Configuration, click **Profiles**.

17. In the Profiles list, double-click **Citrix Management Pack Network Share Account**.

18. In the Run As Profile Wizard window, in the Introductory page, click **Next**. In the General Properties page, click **Next**.

19. In the Run As Accounts page, click **Add**.

20. In the Add a Run As Account dialog box, in the Run as account list, select the newly created SCOM user account.



21. Select the **A selected class, group, or object** option.
22. Click **Select** and then select **Class**.
23. In the Class Search dialog box, in the **Filter by (optional)** text box, type **Windows Computers**.
24. Click **Search**.
25. In the Available items list, select **All Windows Computers**.
26. Click **OK** to close the Class Search dialog box.
27. Click **OK** to close the Add a Run As Account dialog box.
28. Click **Save** to update the profile. This may take a while.
29. Click **Close** to close the Run As Profile Wizard window.

## Verifying the installation on the SCOM management server computer

To verify that the Citrix SCOM Management Pack for ShareFile installation on the management server computer is correct, do the following:

1. Log on to the management server computer.
2. Go to **Start > Control Panel** and click **Programs and Features** (actions of this step may differ on operating systems earlier than Windows Server 2016).
3. Check for the presence of the following entry in the Name column:  
**Citrix SCOM Management Pack for ShareFile**

4. To check if the *CitrixMPShare* shared folder is correctly configured, open a Command Prompt window and run the following commands in sequence (their outputs in case of success are also shown):

command

COPY

```
net share | findstr -i CitrixMPShare
```

output

COPY

```
CitrixMPShare
```

```
    %ProgramData%\Citrix\CitrixMPShare
```

command

COPY

```
net use \\<ManagementServerHostName>\CitrixMPShare
```

```
 /USER:<DomainName>\<UserName>
```

output

COPY

```
The command completed successfully
```

command

COPY

```
dir \\<ManagementServerHostName>\CitrixMPShare
```

output

COPY

<FolderContents>

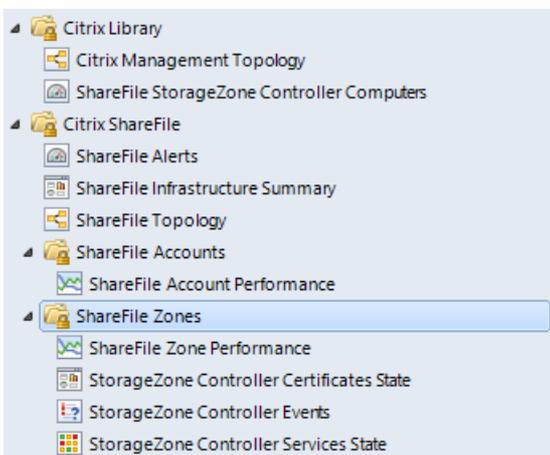
In these instances, *%ProgramData%* refers to the actual value of this operating system variable.

<ManagementServerHostName> is the name of the SCOM management server computer. <DomainName> is the domain or computer name and <UserName> is the name of the user account that you chose in step 2 of the procedure documented in [Configuring access to the shared folder for agent installation](#). <FolderContents> is the list of the contents of the *CitrixMPShare* folder.

**Note:** The shared folder is vital for installation of the Citrix SCOM Management Pack for ShareFile agent and deployment of its configuration to the managed computers.

5. Launch the SCOM Operations console.

6. In the **Monitoring** view, expand the items in the left pane until they match the following figure.



7. In the **Administration** view, expand **Administration > Management Packs** and click **Installed Management Packs** (the navigation pane structure may differ in SCOM versions earlier than 2016).

8. Verify that the following management pack versions are listed in the results pane:

Citrix Management Pack for ShareFile	1.4.136.0
Citrix Management Pack Library	1.0.8.0

## Configuring SCOM agent to act as proxy on StorageZones Controller computers

SCOM agent on each computer where ShareFile StorageZones Controller is installed must be configured to act as a proxy agent. This configuration enables the agent to relay or forward information from or about other computers and network devices to the SCOM management server.

To configure the SCOM agent instances to act as proxy agents, do the following:

1. Launch the SCOM Operations console and connect to the management server.
2. In the **Administration** view, expand **Device Management**, and then click **Agent Managed**.
3. For each ShareFile (StorageZones Controller) computer, follow the steps:
  1. Right-click the host name, and select **Properties**.

2. Click the **Security** tab.
3. Select the **Allow this agent to act as proxy and discover managed objects on other computers** option.
4. Click **OK**.

**Note:** On a Citrix StorageZones Controller that is running on a Windows Server 2008 R2 system updated with Service Pack 1, the *Citrix MPSHF Agent* service stops abnormally. It logs the following entries into the Applications and Services Logs part of the operating system event log:

*Faulting module name: mshtml.dll*

*Exception code: 0xc0000005*

*Faulting module path: C:\Windows\System32\mshtml.dll*

**Action:** Restart the *Citrix MPSHF Agent* service either remotely (by using a corresponding SCOM task in the Actions pane of the SCOM Operations console) or directly on the StorageZones Controller computer (by using an administrative operating system tool).

Providing information for accessing ShareFile account and network share location

### Providing information for ShareFile account access

Credentials of the master administrator must be provided to Citrix SCOM Management Pack for ShareFile for probing the ShareFile account.

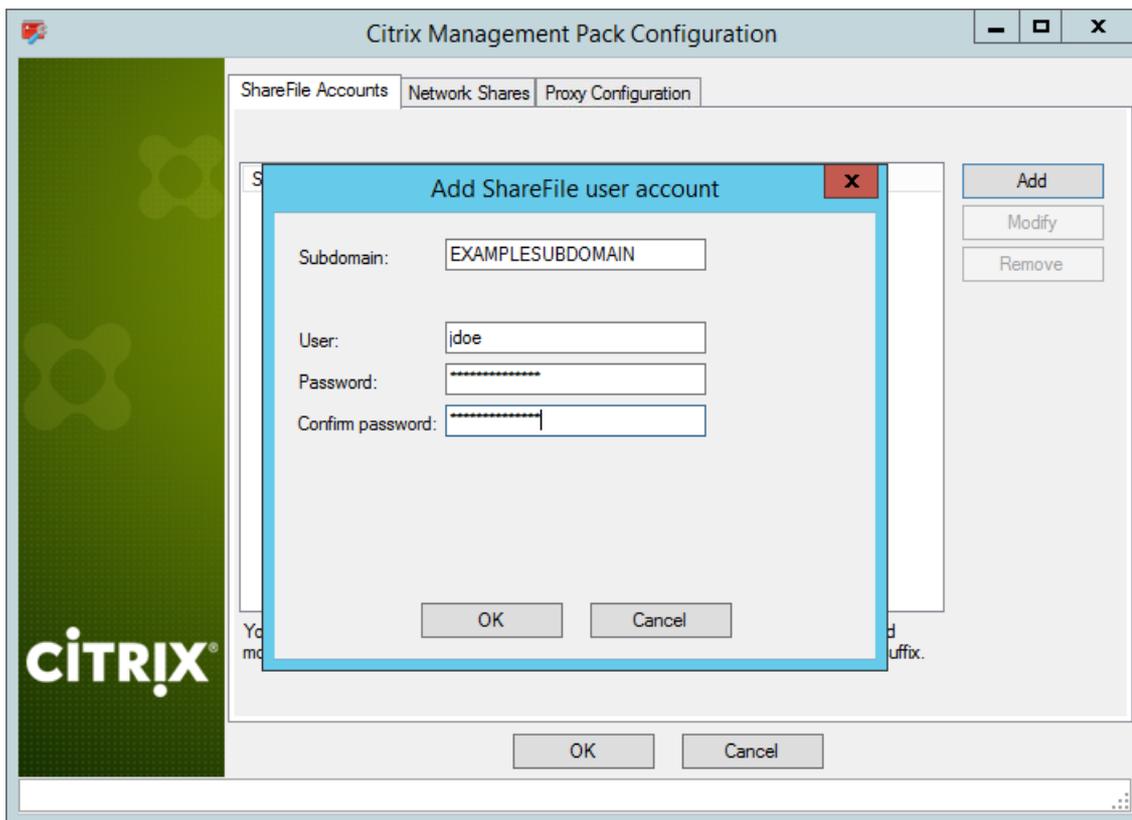
To provide the master administrator credentials, do the following:

1. Log on to the management server computer. Use a user account that has local administrative privileges.
2. Go to **Start > All apps > Citrix** (actions of this step may differ on operating systems earlier than Windows Server 2016).
3. Click **ShareFile MP Configuration**.

**Note:** Configuration changes are applied only when you click **OK** in the main window of the ShareFile MP Configuration tool.

4. In the Citrix Management Pack Configuration window, in the ShareFile Accounts tab, click **Add**.
5. In the Add ShareFile user account dialog box, type the following data in the respective text boxes:

- ShareFile subdomain (omit the *https://* and *.sharefile.com* or *.sharefile.eu* parts of the URL)
- Master administrator user name
- Password



6. Click **OK**.
7. Repeat steps 4 to 6 for each additional ShareFile account you plan to monitor.
8. *Optional.* To modify data of an entry, click **Modify**. In the Modify ShareFile administrative account dialog box, modify the data as required, and then click **OK**.
9. *Optional.* To remove an entry, click **Remove** and then click **Yes**.
10. Click **OK** to apply the configuration changes and close the window.

**Note:** If you modify configuration data for a ShareFile account where Citrix SCOM Management Pack for ShareFile Agent is already installed on the StorageZones Controller computers, run the *Update Configuration on Citrix MPSHF Agent* task from the SCOM Operations console to refresh the local configuration data.

### Providing information for network share location access

Network share locations and the corresponding access credentials must be provided to Citrix SCOM Management Pack for ShareFile for the monitored ShareFile account.

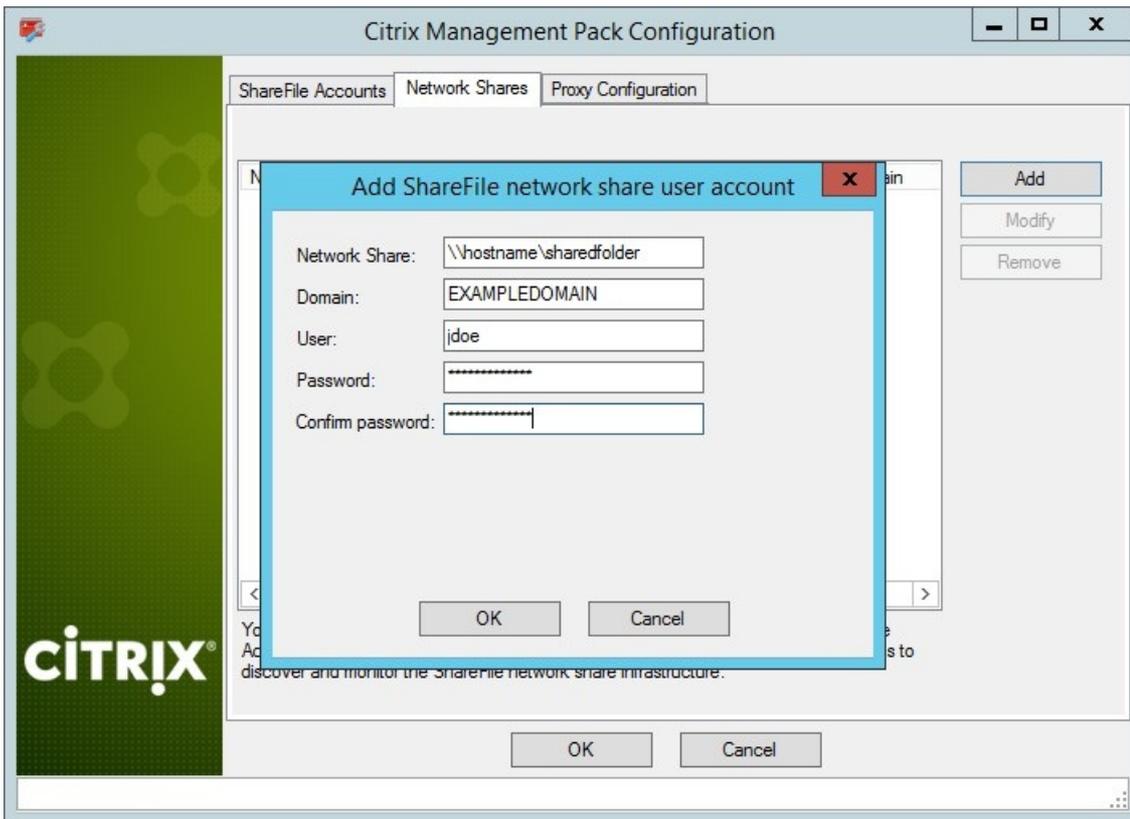
To provide the network file share locations and access credentials, do the following:

1. Log on to the management server computer. Use a user account that has local administrative privileges.
2. Go to **Start > All Programs > Citrix > ShareFile Management Pack**.
3. Click **ShareFile MP Configuration**.

**Note:** Configuration changes are applied only when you click **OK** in the main window of the ShareFile MP Configuration tool.

4. In the Citrix Management Pack Configuration window, in the Network Shares tab, click **Add**.
5. In the Add ShareFile network share user account dialog box, type the following data in the respective text boxes:
  - Network share location (in the UNC format)
  - Domain name

- Operating system user name
- Password



6. Click **OK**.
7. Repeat steps 4 to 6 for each additional network share location that is configured for the ShareFile account.
8. *Optional.* To modify data of an entry, click **Modify**. In the Modify ShareFile network share user account dialog box, modify the data as required, and then click **OK**.
9. *Optional.* To remove an entry, click **Remove** and then click **Yes**.
10. Click **OK** to apply the configuration changes and close the window.

**Note:** If you modify configuration data for ShareFile account where Citrix SCOM Management Pack for ShareFile Agent is already installed on the StorageZones Controller computers, run the *Update Configuration on Citrix MPSHF Agent* task from the SCOM Operations console to refresh the local configuration data.

### Providing proxy server-related information

**Important:** Perform this procedure only if StorageZones Controller instances in your ShareFile deployment are configured to use a proxy server.

With ShareFile deployments in which proxy server is used, you must provide additional data to Citrix SCOM Management Pack for ShareFile Agent.

To provide data required for communication with a proxy server, do the following:

1. Log on to the management server computer. Use a user account that has local administrative privileges.
2. Go to **Start > All Programs > Citrix > ShareFile Management Pack**.
3. Click **ShareFile MP Configuration**.

**Note:** Configuration changes are applied only when you click **OK** in the main window of the ShareFile MP Configuration

tool.

4. In the Citrix Management Pack Configuration window, in the Proxy Configuration tab, click **Add**.

5. In the Add Network proxy user account window, click **Enable Proxy**.

6. In the Proxy Server group box, type the following data in the respective text boxes or select appropriate values:

- Proxy server address in either of the following formats:
  - <ProxyComputerFQDN>
  - <ProxyComputerIPAddress>The http:// prefix is added automatically.
- Port number that the proxy server uses for connections
- Proxy server authentication mode

7. In the StorageZone Controllers group box, enter the IP addresses of the StorageZones Controller computers that are using the proxy server.

8. If you selected Basic or NTLM authentication mode, in the Credentials group box, type the following data in the respective text boxes:

- User name and password of the user account used for authenticating
- Domain of the user account (if the NTLM authentication mode is selected)

The screenshot shows the 'Add Network proxy user account' dialog box. The 'Enable Proxy' checkbox is checked. Under 'Proxy Server', the 'Address' field contains 'dmzproxy.company.com', the 'Port' field contains '54321', and the 'Authentication mode' dropdown is set to 'Basic'. Under 'StorageZone Controllers', the 'StorageZone Controller IP Address' field contains '123.234.123.234' and the 'Add' button is visible. Below this, a list box contains the IP address '123.234.123.234' and the 'Remove' button is visible. Under 'Credentials', the 'Username' field contains 'jdoe', the 'Password' and 'Confirm password' fields are masked with asterisks. The 'OK' and 'Cancel' buttons are at the bottom.

9. Verify that the provided data matches the values configured in the Networking page of the ShareFile StorageZones Controller console. Click **OK**.

10. For each additional proxy server that you want to provide data for, click **Add** and repeat steps 4 through 9.

11. *Optional.* To modify the configuration data of an entry, click **Modify**. In the Add Network proxy user account window,

modify the data as required, and then click **OK**.

12. *Optional*. To remove configuration data for a proxy server, select its entry, click **Remove**, and then click **Yes**.

13. Click **OK** to apply the configuration changes and close the window.

**Note:** If you modify configuration data for ShareFile account where Citrix SCOM Management Pack for ShareFile Agent is already installed on the StorageZones Controller computers, run the *Update Configuration on Citrix MPSHF Agent* task from the SCOM Operations console to refresh the local configuration data.

## Installing the product on the StorageZones Controller computers

On the ShareFile StorageZones Controller computers, only ShareFile Management Pack Agent must be installed. You can install it either by using an SCOM task or manually.

To install Citrix SCOM Management Pack for ShareFile Agent on a ShareFile StorageZones Controller computer remotely, by using an SCOM task, do the following:

1. Launch the SCOM Operations console and connect to the management server.
2. In the **Monitoring** view, in the left pane, expand **Citrix Library**, and then click **ShareFile StorageZone Controller Computers**.
3. In the ShareFile StorageZones Controller Computers pane, select a ShareFile StorageZones Controller computer from the ShareFile StorageZones Controller Computers list.
4. In the Tasks pane, expand **ShareFile StorageZones Controller Computer Role Tasks**, and then click **Install Citrix MPSHF Agent**.
5. In the Run Task – Install Citrix MPSHF Agent dialog box, adjust the task parameters as follows:
  - **UpgradeAgent:** This option, when set to **true**, causes uninstallation of the existing Citrix SCOM Management Pack for ShareFile Agent from the agent-managed computer before the current version is installed. Before such uninstallation, SCOM agent must be put into maintenance mode.  
Default value: **false**
  - **Debug:** You may not alter this option.  
Default value: **false**
  - **AgentInstallationSource:** This option defines the location of the Management Pack agent installation package and its configuration files. Specify the value according to the relationship between the agent-managed computer and the SCOM management server:
    - If SCOM agent on the agent-managed computer reports only to the management server where Citrix SCOM Management Pack for Sharefile is installed, leave the value empty. The location is automatically determined based on data retrieved from the agent-managed computer. In most cases, the retrieved location host name matches the host name of the management server computer where the installation task is invoked.
    - If the agent-managed computer is managed by some other management server or the computer hosts a multi-homed SCOM agent instance, specify the host name of the management server computer where Citrix SCOM Management Pack for Sharefile is installed.
    - If the agent-managed computer does not have access to the *CitrixMPShare* shared folder on the management server computer, specify the alternative location of the Management Pack agent installation package and its agent configuration files in the UNC format. A prerequisite is that these files are copied from the *CitrixMPShare* shared folder to a location the agent-managed computer has access to.  
Default value: (empty)
  - **AgentInstallationDestination:** This option defines the Management Pack agent's program installation directory on the agent-managed computer. If no value is specified, the Management Pack agent is installed to the *%ProgramFiles%\Citrix\ShareFile MP Agent* directory.

Default value: (empty)

6. Click **Run** to invoke the installation process.
7. Observe the output the task generates. If the task reports no errors, the installation on the ShareFile StorageZones Controller computer is correct.

**Tip:** The task initially performs a prerequisite check. If any of the installation prerequisites are not fulfilled, the process is interrupted before the actual installation begins. In this case, invoke the **Check Installation Prerequisites for Citrix MPSHF Agent** task to pinpoint the problematic prerequisite.

**Tip:** The Agent installation task can be run on multiple selected ShareFile StorageZones Controller computers.

To install Citrix SCOM Management Pack for ShareFile Agent on a ShareFile StorageZones Controller computer locally, by using the Setup Wizard, do the following:

1. Log on to the ShareFile StorageZones Controller computer. Use a user account that has local administrative privileges.
2. Copy the *MPSHFAgent.exe* file from the `%ProgramData%\Citrix\CitrixMPShare\ShareFile MP` directory on the management server computer to a location on the StorageZones Controller computer.
3. In Windows Explorer, locate the *MPSHFAgent.exe* file, and double-click it to invoke the installation process. Wait for the Setup Wizard to appear.
4. In the Welcome page of the Setup Wizard, click **Next**.
5. In the License Agreement page, carefully read the end user license agreement. If you accept the terms of the agreement, select the **I accept the terms in the License Agreement** option, and click **Next**.
6. In the Destination Folder page, define the ShareFile Management Pack Agent installation folder for binary files. Citrix recommends that you install the binary files to the default folder.

Proceed as follows:

- To install the product binary files to the default folder listed in the Setup Wizard, no special actions are required.
- To install the product to a different folder, follow the substeps:
  1. Click **Change**.
  2. In the Browse For Folder dialog box, browse to the desired installation folder, select it, and click **OK**.

Click **Next**.

7. In the Destination Data Folder page, define the Citrix SCOM Management Pack for ShareFile Agent installation folder for data files. Citrix recommends that you install the data files to the default folder.

Proceed as follows:

- To install the product data files to the default folder listed in the Setup Wizard, no special actions are required.
- To install the product to a different folder, follow the substeps:
  1. Click **Change**.
  2. In the Browse For Folder dialog box, browse to the desired installation folder, select it, and click **OK**.

Click **Next**.

8. In the Agent Service Account page of the Setup Wizard, in the respective text boxes, type the domain, username, and password of the user account that you choose for running the Citrix SCOM Management Pack for ShareFile Agent service. Click **Install**. The Setup Wizard starts copying the installation files.

9. After the installation completes, the installation completion page appears.

10. Click **Finish** to close the Setup Wizard.

## Verifying the installation and configuration on the StorageZones Controller computers

To verify that the Citrix SCOM Management Pack for ShareFile Agent installation and configuration on a ShareFile StorageZones Controller computer are correct, do the following:

1. Launch the SCOM Operations console and connect to the management server.
2. In the **Monitoring** view, in the left pane, expand **Citrix Library**, and then click **ShareFile StorageZones Controller Computers**.
3. In the ShareFile StorageZones Controller Computers pane, select a ShareFile StorageZones Controller computer (on which Citrix SCOM Management Pack for ShareFile Agent was just installed) from the ShareFile StorageZones Controller Computers list.
4. In the Tasks pane, expand **Actions**, and then click **Check Requirements and Configuration for Citrix MPSHF Agent**.
5. Observe the output the task generates. If all checks are denoted successful, the installation and configuration on the ShareFile StorageZones Controller computer are correct.

# Uninstall

This chapter contains instructions that you must follow to effectively uninstall Citrix SCOM Management Pack for ShareFile. Perform all procedures in the documented order of precedence.

## Uninstalling the product from the StorageZones Controller computers

You can uninstall Citrix SCOM Management Pack for ShareFile from the ShareFile StorageZones Controller computers either by using an SCOM task or manually.

To uninstall Citrix SCOM Management Pack for ShareFile Agent from a ShareFile StorageZones Controller computer by using an SCOM task, do the following:

1. Launch the SCOM Operations console and connect to the management server.
2. In the **Monitoring** view, expand **Citrix Library**, and then click **ShareFile StorageZones Controller Computers**.
3. In the ShareFile StorageZones Controller Computers pane, select a ShareFile StorageZones Controller computer from the ShareFile StorageZones Controller Computers list.
4. In the Tasks pane, expand **Actions**, and then click **Uninstall Citrix MPSHF Agent**.
5. In the Run Task – Uninstall Citrix MPSHF Agent dialog box, click **Run** to invoke the uninstallation process.
6. Repeat steps 3 to 5 for each additional ShareFile StorageZones Controller computer.

**Tip:** The agent uninstallation task can be run on multiple selected ShareFile StorageZones Controller computers.

To uninstall Citrix SCOM Management Pack for ShareFile Agent from a ShareFile StorageZones Controller computer manually, do the following:

1. Log on to the ShareFile StorageZones Controller computer. Use a user account that has local administrative privileges and SCOM administrative privileges.
2. Make sure that no product folders or files are in use by any user.
3. Go to **Start > Control Panel** and click **Programs and Features** (actions of this step may differ on operating systems earlier than Windows Server 2016).

4. Right-click **Citrix SCOM Management Pack for ShareFile Agent** and select **Uninstall**. Wait for the Setup Wizard to appear.
5. In the Welcome page of the Setup Wizard, click **Uninstall**.
6. In the Uninstalling the product page, the Setup Wizard reports the uninstallation progress.
7. In the Completion page of the Setup Wizard, click **Finish**.

### Removing dependent management packs (customizations)

**Important:** Perform this procedure only if you have customized the management packs included in the product.

To remove the customizations that you made to the management packs included in Citrix SCOM Management Pack for ShareFile, do the following:

1. Launch the SCOM Operations console and connect to the management server.
2. In the **Administration** view, expand **Administration > Management Packs** and click **Installed Management Packs** (the navigation pane structure may differ in SCOM versions earlier than 2016).
3. In the results pane, locate the management packs that depend on the management packs included in Citrix SCOM Management Pack for ShareFile.
4. For each such dependent management pack (except for *Microsoft.SystemCenter.SecureReferenceOverride*), follow the steps:
  1. Right-click it and then click **Delete**.
  2. On the message stating that deleting the management pack might affect the scoping of some user roles, click **Yes**.

### Removing included management packs

To remove the management packs included in Citrix SCOM Management Pack for ShareFile, do the following:

1. Launch the SCOM Operations console and connect to the management server.
2. In the **Administration** view, expand **Administration > Management Packs** and click **Installed Management Packs** (the navigation pane structure may differ in SCOM versions earlier than 2016).
3. Remove references to the included management packs from the *Microsoft.SystemCenter.SecureReferenceOverride* management pack. To do this, perform the following steps:
  1. Identify which included management packs are referenced. In the **Administration > Management Packs** context of the SCOM Operations console, right-click **Microsoft.SystemCenter.SecureReferenceOverride** and select **Properties**. In the dialog box, click the **Dependencies** tab.
  2. For each such referenced management pack, find out its ID. Right-click the referenced management pack. In the dialog box, take note of the value in the ID text box on the General tab.
  3. Export the *Microsoft.SystemCenter.SecureReferenceOverride* management pack.
  4. Make a copy of the file you exported the management pack to.
  5. Edit the originally exported file: use the IDs to find and remove all dependencies to the management packs from the *Manifest > References* context (the Reference elements) and the *Monitoring > Overrides* context (the *SecureReferenceOverride* elements).

**Tip:** For better tracking, increase the management pack version by adjusting the value of the *Version* element within the *Identity* element.
  6. Import back the altered *Microsoft.SystemCenter.SecureReferenceOverride* management pack from the modified file.
4. In the results pane, right-click **Citrix Management Pack for ShareFile**, and then select **Delete**.
5. On the message stating that deleting the management pack might affect the scoping of some user roles, click **Yes**.
6. Check if other Citrix SCOM Management Pack products are installed on the management server computer. If none of them is installed, repeat steps 4 and 5 with **Citrix Management Pack Library**.

## Uninstalling the product from the SCOM management server computer

To uninstall Citrix SCOM Management Pack for ShareFile from the SCOM management server computer, do the following:

1. Log on to the management server computer. Use a user account that has local administrative privileges and SCOM administrative privileges.
2. Make sure that no product folders or files are in use by any user.
3. Check if the .mpb file that was installed by the product is locked by any program, for example, SCOM Operations console or Windows PowerShell. This includes programs in both active and disconnected sessions. If the file is locked, exit the locking program, for example, exit the SCOM Operations console or close the Windows PowerShell window.  
**Tip:** To check if a file is locked, try renaming it and then reverting to its original file name. Inability to rename the file indicates a locking program. You can identify it by using the Handle utility of Sysinternals Suite (see the [Handle](#) webpage on the Microsoft TechNet website).
4. Go to **Start > Control Panel** and click **Programs and Features** (actions of this step may differ on operating systems earlier than Windows Server 2016).
5. Right-click **Citrix SCOM Management Pack for ShareFile** and select **Uninstall**. Wait for the Setup Wizard to appear.
6. In the Welcome page of the Setup Wizard, click **Uninstall**.
7. In the Uninstalling the product page, the Setup Wizard reports the uninstallation progress.
8. In the Completion page of the Setup Wizard, click **Finish**.
9. Delete the `%ProgramData%\Citrix\CitrixMPShare\ShareFile MP` folder.  
**Caution:** This action permanently deletes the Agent configuration data. You will be unable to reuse it at a later time.
10. Check if other Citrix SCOM Management Pack products are installed on the management server computer. If none of them is installed, follow the steps:
  1. Stop sharing the `CitrixMPShare` shared folder.
  2. Delete the `%ProgramData%\Citrix\CitrixMPShare` folder.
  3. Using an operating system administrative tool, delete the local `CitrixMPShareUsers` user group.

# Optimize

Nov 27, 2017

## Optional configuration

### Tuning thresholds for performance monitors and rules

Some monitors and rules have default thresholds that might need additional tuning to suit your environment. You should evaluate monitors and rules to determine whether the default thresholds are appropriate for your environment. If a default threshold is not appropriate for your environment, you should baseline the relevant performance counters, and then adjust the threshold by overriding them.

For a complete list of monitors and rules, see the [Citrix SCOM Management Pack for ShareFile Reference Guide](#).

### Discovering objects

For general information about discovering objects in SCOM, see the [Object Discoveries in Operations Manager 2007](#) web page on the Microsoft TechNet website.

The following table lists the object types that Citrix SCOM Management Pack for ShareFile discovers in the monitored environment.

Object type	Description
Account	A ShareFile user account object.
Service	A Windows service object on the StorageZone Controller computer.
Service Group	A group of Windows service objects on the StorageZone Controller computer.
ShareFile Root	The root object of Citrix SCOM Management Pack for ShareFile topology.
SSL Certificate	A SSL certificate object on the StorageZone Controller computer.
SSL Certificate Group	A group of SSL certificate objects on the StorageZone Controller computer.
StorageZone (Azure)	A StorageZone object that is using Microsoft Azure storage.

StorageZone (Local)	A StorageZone object that is using a locally maintained network file share.
StorageZone Controller	A StorageZone Controller object.
StorageZone Group (Citrix)	A group of Citrix-managed StorageZone objects.
StorageZone Group (Private)	A group of customer-managed StorageZone objects.

## Manually importing included management packs into SCOM

For general instructions about how to import management packs into SCOM, see the [How to Import an Operations Manager Management Pack](#) webpage on the Microsoft TechNet website.

To import the sealed management packs for ShareFile manually, do the following:

1. Log on to the management server computer.
2. Launch the SCOM Operations console.
3. In the **Administration** view, click **Management Packs**.
4. In the Tasks pane, expand **Actions**, and then click **Import Management Packs**.
5. In the Import Management Packs dialog box, click **Add**, and then select **Add from disk**.
6. In the Online Catalog Connection dialog box, click **No**.
7. In the Select Management Packs to import dialog box, browse to the folder that contains the following management pack files, select those files, and then click **Open**.

- Comtrade.Citrix.Library.mp
- Comtrade.Citrix.ShareFile.mpb

8. Click **Install**.

## Customizing sealed management packs

Similarly to customizing the default SCOM management pack, you can customize the sealed management packs that ShareFile Management pack provides. For details, see the Microsoft TechNet website:

- For general information about customization of management packs, see the [Customizing Management Packs](#) webpage.
- For instructions on how to customize a management pack, see the [Create a New Management Pack for Customizations](#) webpage.