

Content Matrix 9.9

## **Advanced Installation Guide**



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Quest Software Inc.  
Attn: LEGAL Dept.  
4 Polaris Way  
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Quest® Content Matrix

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# Introduction

Quest® Content Matrix Console and its additional component, Metalogix SharePoint Extensions Web Service, allow users to migrate their data into SharePoint.

This document provides general users and administrators with a more advanced and detailed guide on installation and configuration of Content Matrix Console and its additional components, as well as providing more information regarding various installation scenarios and creating SharePoint connections. This guide can be used in conjunction with the [Evaluation Guide](#) to review and evaluate Content Matrix, but it should be noted that the installation scenario might be different from what is expected. For a quicker run through of the installation process, please see the [Quick Start Guide](#).

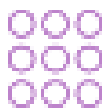
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# Content Matrix Installable Components

Content Matrix consists of a combination of Consoles and a SharePoint WSP. Content Matrix Consoles are the primary UI applications for migrating content to SharePoint. The consoles include:

## Content Matrix Console

Content Matrix Consoles are the primary UI applications for migrating content to SharePoint. The consoles include:



- Content Matrix Console – SharePoint Edition
- Content Matrix Console - FileShare Edition
- Content Matrix Console – Public Folder Edition

## Metalogix Extensions Web Service WSP



The Metalogix Extensions Web Services (MEWS) is a web service wrapper around the SharePoint Server Object Model that provides full fidelity and increased speed for migrations. We recommend installing MEWS on either the source or target server in a SharePoint to SharePoint migration depending on your scenario.

# System Requirements

The following tables describe the hardware, software, and access requirements for Content Matrix Console. If our requirements are equivalent to, or less restrictive than a SharePoint requirement, it will not be described here.

## Hardware Requirements

Component	Minimum Requirement	Recommended
Processor	Intel Core i7	Intel Core i9, X-Series or higher
Memory	16 GB	32 GB
Disk Drives	Dual hybrid disk drives C: OS and Program Files D: Data Files	Dual SSD drives C: OS and Program Files D: Data Files
Network Card	100 Mbps	1Gbps

## Software Requirements

Component	Requirement
Operating System	<p>Any of the following Microsoft-supported versions:</p> <ul style="list-style-type: none"><li>• Windows Server 2022</li><li>• Windows Server 2019</li><li>• Windows Server 2016</li><li>• Windows Server 2012 and 2012 R2</li><li>• Windows 11</li><li>• Windows 10</li></ul> <p>NOTE: While it is possible to run Content Matrix on an earlier version of the operating system, support cannot be guaranteed.</p>

Component	Requirement
Database	<p>Any of the following Microsoft-supported versions:</p> <ul style="list-style-type: none"> <li>• SQL Server 2022</li> <li>• SQL Server 2019</li> <li>• SQL Server 2016</li> <li>• SQL Server 2014</li> <li>• SQL Server 2012</li> <li>• A SQL Server hosted in Azure</li> </ul> <p>NOTES:</p> <ul style="list-style-type: none"> <li>▪ While it is possible to run Content Matrix on an earlier version of SQL Server, support cannot be guaranteed.</li> <li>▪ The use of SQL CE in a production environment is discouraged because of the following limitations: <ul style="list-style-type: none"> <li>• It uses a single .lst file that is less robust and reliable and may be corrupted after the database reaches 4 GB.</li> <li>• Data compression is not supported.</li> <li>• Support for large objects is limited.</li> <li>• Microsoft support for SQL CE has ended.</li> </ul> </li> </ul> <p>If you still want to use SQL CE, then SQL Server Compact 4.0 must be installed on the machine. You can download a copy from <a href="#">Microsoft</a>.</p>
Windows PowerShell	<p>Content Matrix Console has the ability to run migrations using a pre-configured PowerShell console, provided that PowerShell Version 3.0 or later is installed prior to Content Matrix.</p>
.NET Framework	<p>Microsoft .NET Framework 4.7.2 (for each machine on which the Content Matrix Console is installed)</p> <p>NOTE: Content Matrix cannot make a local Object Model (OM) connection on a SharePoint 2007 or 2010 environment, because SharePoint 2007 and 2010 require an earlier version of the .NET Framework (v.3.5), which prohibits Content Matrix from completing the connection. Because of this, any migration 'jobs' configured to connect to SharePoint 2007 and 2010 environments using a Local OM connection type will cease to work, and these jobs will need to be recreated for use over a different adapter type such as MEWS or DB.</p>

# Account Requirements

The below requirements are the standard set of requirements if you are installing Content Matrix on a non-SharePoint machine (i.e. installing on a machine that is not running SharePoint, but has access to the source and target environments).

If you are installing the Content Matrix client application directly on a target SharePoint Server or Web Front End (WFE), then you would need the same permissions that are required for installing the Metalogix Extensions Web Service (MEWS).

Component	Requirement
Installing User	<p>The user account installing on a SharePoint server, will require <b>Local Administrator</b> permissions on the local machine.</p> <p>NOTE: The user account that is installing on a client machine only needs permissions to install a client application. Content Matrix Installer will attempt to elevate permissions as part of the installation process.</p>
Application Pool Accounts	<p>If connecting to a remote, on premises instance of SharePoint the Metalogix Extensions Web Service can be used (for SharePoint 2007 or later). This is a SharePoint solution file that is installed and will use the Application pool user account. See the <a href="#">Installing and Configuring the Content Matrix SharePoint WSPs</a> section of this document for more details and permission specifications.</p>
Connecting/Migrating Users	<p>Permissions for connecting to SharePoint and migrating content vary, depending on the type of connection being made and the content being migrated. See <a href="#">User Account Access Requirements</a> for details.</p>

## URLs that Need to be Unblocked

The following URLs need to be unblocked by your firewall for Content Matrix to connect/perform migrations.

Purpose	URL
Connection to Quest license server	<ul style="list-style-type: none"><li>• <a href="https://license.metalogix.com">https://license.metalogix.com</a></li><li>• <a href="https://license.metalogix.net">https://license.metalogix.net</a></li></ul>
Migrating to SharePoint Online	<ul style="list-style-type: none"><li>• <a href="https://login.windows.net">https://login.windows.net</a></li></ul>

Purpose	URL
	<ul style="list-style-type: none"> <li>• <a href="https://login.microsoftonline.com">https://login.microsoftonline.com</a></li> </ul> <p>When migrating using the Import Pipeline, the following URLs must also be unblocked for diagnostic and logging purposes:</p> <ul style="list-style-type: none"> <li>• <a href="https://blob.core.windows.net">*blob.core.windows.net</a></li> <li>• <a href="https://queue.core.windows.net">*queue.core.windows.net</a></li> </ul> <p>NOTE: When migrating using the Import Pipeline, the Azure endpoint URL depends on the provided Azure storage connection string. Refer to the following Microsoft article for more information: <a href="https://docs.microsoft.com/en-gb/office365/enterprise/URLs-and-ip-address-ranges?redirectSourcePath=%252farticle%252foffice-365-URLs-and-ip-address-ranges-8548a211-3fe7-47cb-abb1-355ea5aa88a2">https://docs.microsoft.com/en-gb/office365/enterprise/URLs-and-ip-address-ranges?redirectSourcePath=%252farticle%252foffice-365-URLs-and-ip-address-ranges-8548a211-3fe7-47cb-abb1-355ea5aa88a2</a></p>
Migrating Nintex Forms and/or workflows to SharePoint Online	<ul style="list-style-type: none"> <li>• <a href="https://discovery.nintexO365.com">https://discovery.nintexO365.com</a> (Forms and workflows)</li> <li>• <a href="https://nintex.onmetalogix.com">https://nintex.onmetalogix.com</a> (workflows only)</li> </ul>

## Ports that Need to be Open

The following ports need to be open for Content Matrix to connect/perform migrations.

Purpose	Port(s)															
Connection to SQL Server	<p>1433</p> <p>NOTE: By default, Microsoft Windows enables the Windows Firewall, which closes port 1433 to prevent Internet computers from connecting to a default instance of SQL Server on your computer. Connections to the default instance using TCP/IP are not possible unless you reopen port 1433.</p>															
Connection to SharePoint on premises Web applications	<p>The port for each Web application to which you want to connect.</p> <p>These can be found on the Central Administration &gt; Application Management &gt; Manage Web Applications page.</p> <table><tr><th>Name</th><th>URL</th><th>Port</th></tr><tr><td>SharePoint - 80</td><td>http://qax-sp13-a-wfe/</td><td>80</td></tr><tr><td>Host-Named SC</td><td>http://qax-sp13-a-wfe:11111/</td><td>11111</td></tr><tr><td>ControlPoint</td><td>http://qax-sp13-a-wfe:1818/</td><td>1818</td></tr><tr><td>SharePoint Central Administration v4</td><td>http://qax-sp13-a-wfe:1919/</td><td>1919</td></tr></table>	Name	URL	Port	SharePoint - 80	http://qax-sp13-a-wfe/	80	Host-Named SC	http://qax-sp13-a-wfe:11111/	11111	ControlPoint	http://qax-sp13-a-wfe:1818/	1818	SharePoint Central Administration v4	http://qax-sp13-a-wfe:1919/	1919
Name	URL	Port														
SharePoint - 80	http://qax-sp13-a-wfe/	80														
Host-Named SC	http://qax-sp13-a-wfe:11111/	11111														
ControlPoint	http://qax-sp13-a-wfe:1818/	1818														
SharePoint Central Administration v4	http://qax-sp13-a-wfe:1919/	1919														

# Supported Source and Target SharePoint Versions

Content Matrix Console supports the following versions of SharePoint.

NOTE: With Content Matrix SharePoint Edition, you can migrate into a target version of SharePoint that is *the same or later* than the version of SharePoint on the source. (Migration from a later version of SharePoint to an earlier version is supported for documents and list items only.)

Source Version (SharePoint Edition)*	Target Version (All Editions)				
	SharePoint 2013 (Foundation and Server)	SharePoint 2016	SharePoint 2019	SharePoint Server Subscription Edition	Microsoft 365 (SharePoint Online)
SharePoint 2007 (WSS and MOSS)	✓	✓	✓		✓
SharePoint 2010 (Foundation and Server)	✓	✓	✓		✓
SharePoint 2013 (Foundation and Server)	✓	✓	✓	✓	✓
SharePoint 2016		✓	✓	✓	✓
SharePoint 2019			✓	✓	✓
SharePoint Server Subscription Edition				✓	✓

\* While it may be possible to migrate from earlier versions of SharePoint (e.g., SharePoint 2003), some long out-of-date functionality may present special challenges when migrating to a supported target. However, Quest Professional Services can provide assistance.

## If you want to migrate from a SharePoint Online source to a SharePoint Online target:

Quest offers [On Demand Migration](#), which specializes in Microsoft 365 and SharePoint Online migrations.

## Connecting and Migrating Account Requirements

### OAuth Authentication Permissions

The first time that OAuth Authentication is selected when connecting to SharePoint Online, the Content Matrix SharePoint Client application must be registered for the tenant. Instructions are available in the Using Microsoft 365 OAuth Authentication section of the user documentation.

It is recommended that an account with the **Global Administrator** role be used to register the application, because a Global Administrator can provide consent on behalf of the entire organization.

In the event that a Global Administrator does not register the application, users with the **Application Administrator** role can register the application for their own account only.

**IMPORTANT:** For an Application Administrator, the Content Matrix SharePoint Client application records current SharePoint permissions as part of the registration process. Therefore, a user who registers as an Application Administrator must already have the appropriate permissions to connect and perform migrations using OAuth authentication. For example, at the time of registration, a user who is going to make tenant-level connections must also be a SharePoint Administrator if they want the app to allow them to access to all site collections within the tenant and to be able to Paste as a Site Collection. Similarly, a user who will be migrating Managed Metadata must also be a Term Store Administrator at the time of registration.

### Connecting and Migrating Account Permissions

The following table provides an overview of the minimum account permissions required to connect to SharePoint and perform various Content Matrix operations.

Operation	SharePoint				SQL		
	Global Admin	Farm/ SharePoint Admin	Site Collection Admin	Term Store Admin	db_owner on SP Databases	Reader on SP Content Database*	Execute on SP Content Database*
<i>Connecting to SharePoint</i>							
SharePoint 2013, 2016, or 2019/Subscription Edition Database						✓	✓

Operation	SharePoint				SQL		
	Global Admin	Farm/ SharePoint Admin	Site Collection Admin	Term Store Admin	db_owner on SP Databases	Reader on SP Content Database*	Execute on SP Content Database*
Connection							
SharePoint 2007 or 2010 Database Connection						✓	
Local Object Model Connection			✓		✓		
Remote Object Model Connection			✓				
Client side Object Model Connection (Site Level)			✓				
Microsoft 365 Tenant Connection		✓	✓				
<b>Migration Actions(SharePoint Edition)</b>							
Deploying Nintex Apps to SharePoint Online	✓						
Migrating as a Site Collection		✓					
Migrating Managed Metadata				✓ **			

\* For a SharePoint 2013, 2016, or 2019/Subscription Edition database connection, the combination of Reader and Execute is the minimum set of permissions required, but the combination of db\_dataReader and SPDataAccess can also be used.

\*\* For a source farm, read permissions to the term store may be sufficient (depending on your environment), but it is recommended that Term Store Administrator permissions be set.

# Installation

This section describes various installation scenarios, as well as how to install the Content Matrix Console client application(s) and the Extensions Web Service.

## Basic Installation Scenarios for Content Matrix Console

One of the more powerful aspects of Content Matrix Console is its flexibility for installation scenarios. Each Edition of Content Matrix Console has multiple scenarios that can be utilized to help with system installation limitations and optimization for performance.

There are three basic scenarios that can be applied when installing Content Matrix Console:

1. **Installing the console directly on the Source system.** This scenario is most likely with SharePoint Edition since the ECM (Electronic Content Management) Editions are sufficiently different enough from SharePoint that installing the console on these systems provide any real benefit for migration performance.
2. **Installing the console directly on the Target system.** In most cases this can be the most beneficial since it will help reduce the network traffic when communicating with the target SharePoint environment during a migration, which helps improve migration performance. Another benefit of this scenario is that it provides the client application with direct access to the local SharePoint Object Model (OM), giving Content Matrix greater fidelity when migrating content. This scenario is not possible when migrating to a target SharePoint Cloud environment.

Many companies have internal policies in place that restrict or limit the installation of any software directly on the server, usually due to general security and/or software quality concerns. Depending on the policy, this could mean that all software must go through an approval/testing phase before it is allowed to be installed on the server. The testing/approval process can take anywhere from a few days to a few months depending on the organization. This can be a hindrance if any short timelines are involved with a migration. These strict limitations could also completely prevent any third party software from being installed on a server directly.

3. **Installing the console on a third machine that has access to both the Source and Target systems.** This is the most common use case for most customers. This scenario allows users to install, run, and even upgrade their version of Content Matrix without needing to access the source or target environments. And with the use of the Metalogix Extensions Web Service (installed on the target SharePoint environment) users can install the client on their own machine and still have remote access to the SharePoint Object Model for any on premises installations, providing the same level of fidelity that the local OM connection would give if Content Matrix was installed locally on the target SharePoint server or a Web Front End (WFE).

Connections to other source environments are all roughly similar and only have one method for direct connection. However, there are multiple connection types for SharePoint. These connection types consist of:

- **SharePoint Database Connection** – This is a read-only connection directly to a SharePoint Database (DB). This connection type is only used in SharePoint Edition for connection to a SharePoint on premises source environment, and is valid for any version.
- **SharePoint Local Object Model Connection** – This connection can only be made when Content Matrix is installed directly on the target SharePoint server or WFE. It accesses the SharePoint OM locally on the machine, which allows it to preserve more existing metadata and grant deeper access for some Content Matrix features.
- **SharePoint Remote Object Model Connection** – This connection requires the installation of the Metalogix Extensions Web Service on the target SharePoint environment. The Extensions Web Service allows Content Matrix to have a remote connection to the SharePoint OM. This grants all of the same access for features and metadata that is available from the Local OM connection (see above). This connection type is available for on premises installation.
- **SharePoint Client Side Object Model (CSOM) Connection** – This connection is used when connecting to Microsoft 365 environments.

Please see the Connecting to SharePoint section of the appropriate edition of the user documentation for complete details.

## Scenario based Installation Examples for Content Matrix Console

Now that we have a better idea of the basic installation scenarios and the possible SharePoint connection adapters that might be involved, we can look at some examples. The below example center around Content Matrix Console – SharePoint Edition, since the SharePoint to SharePoint case can be the most varied.

- For migrations to **on premises** SharePoint servers, click [here](#) to view recommended installation configurations.
- For migrations to **Cloud-based** SharePoint servers, click [here](#) to view recommended installation configurations.

## On-premises Target Server Installation Scenarios

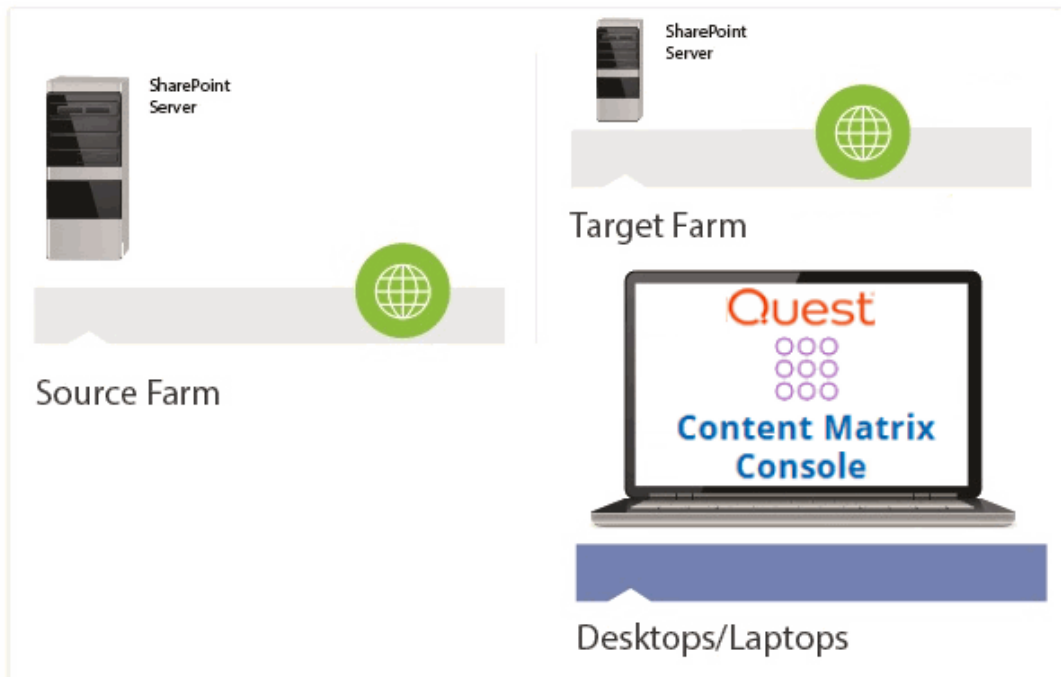
Quest recommends one of the following installation options for SharePoint to SharePoint **on premises** migrations:

- I. Install the Metalogix Extensions Web Service (MEWS) on a Web Front End (WFE) server of the Source SharePoint Farm.
- II. For up to two users, install the Content Matrix Console on a WFE of the Target SharePoint Farm:



OR

- III. For three or more users install the Content Matrix Console on each user's Desktop/Laptop, and install MEWS on a WFE of the Target SharePoint Farm:



## Cloud-based Target Server Installation Scenarios

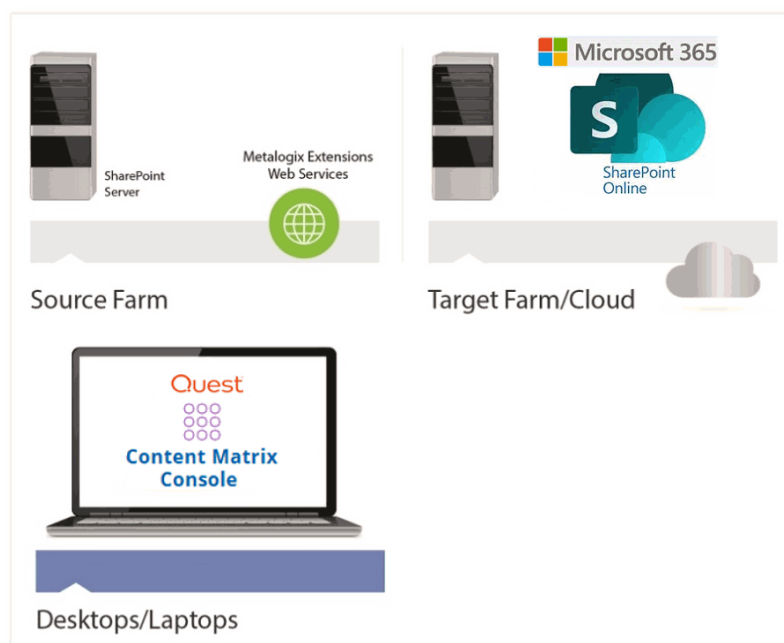
Quest recommends one of the following installation options for SharePoint to SharePoint **on premises to Cloud based migrations**:

- I. For up to two users, install the Content Matrix Console on a Web Front End (WFE) of the Source SharePoint Farm:



OR

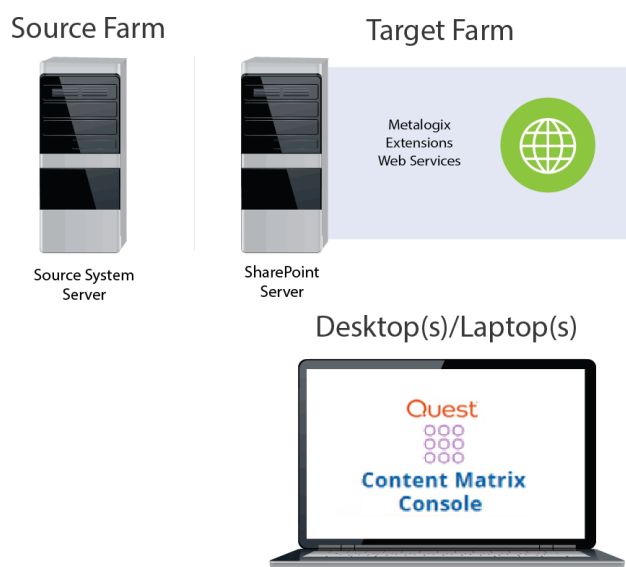
- II. For three or more users install the Content Matrix Console on each user's desktop/laptop, and install MEWS on a WFE of the source SharePoint farm.



## Non-SharePoint to SharePoint Migration Installation Scenarios

Quest recommends one of the following installation options for migrations from **Exchange Public Folders to SharePoint on premises**:

- I. For up to two users, install both the Content Matrix Console on a WFE on the Target SharePoint Farm.



OR

- II. For three or more users install the Content Matrix Console on each user's Desktop/Laptop, and install MEWS and the Content Matrix Console on a WFE of the Target SharePoint Farm.

Metalogix recommends one of the following installation options for migrations from Exchange Public Folders and to SharePoint Online migrations:

- I. For up to two users, install the Content Matrix Console on the server of the source system if these have sufficient RAM
- II. For three or more users or when the source system or file share server does not have sufficient RAM, install the Content Matrix Console on each user's desktop/laptop.

## Installing the Content Matrix Consoles

This section describes the installation steps for the Content Matrix Consoles.

**NOTE:** Consoles for all editions of Content Matrix will automatically be installed. However, you will only be able to use the Consoles that are covered by your license.

Content Matrix Consoles can be installed on any computer that meets the minimum hardware and software requirements for each component that is installed, provided that the computer also has access to the source and target environments (for connection purposes). For an on premises installation, the machine must have access to the SharePoint environments but does not require that SharePoint is installed on it directly, and it does not have to be a WFE.

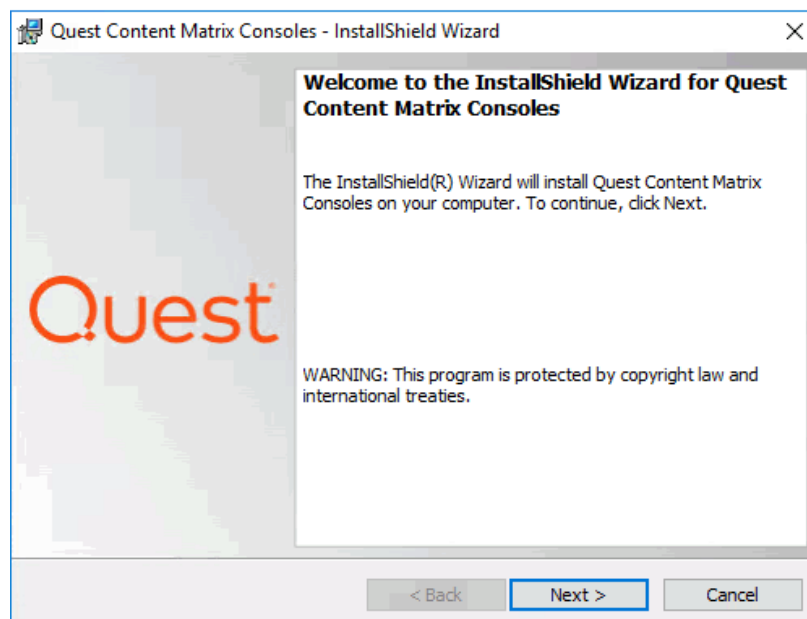
Before running an installation of the Content Matrix Consoles, please see [Basic Installation Scenarios](#) to better determine what installation scenario works best for you. This will help you determine the best location for you to install the Content Matrix Console(s).

**NOTE:** You can also install the Content Matrix Consoles [silently](#), using Command Prompt.

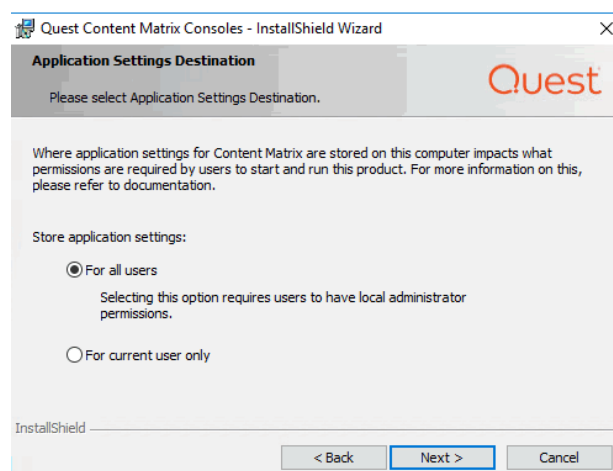
## To install the Content Matrix Consoles:

1. Copy the **Quest Content Matrix Consoles.exe** file to the machine on which you want to install.
2. Close all open applications, including your browser.
3. Double-click **Quest Content Matrix Consoles.exe** to start the installation process.

NOTE: Because this installer requires an elevated set of permissions to run, if you do not have the required permissions a message will open informing you that elevated permissions are required. To run the installer with these elevated permissions, select the installer file, right-click and select the **Run as administrator** option.

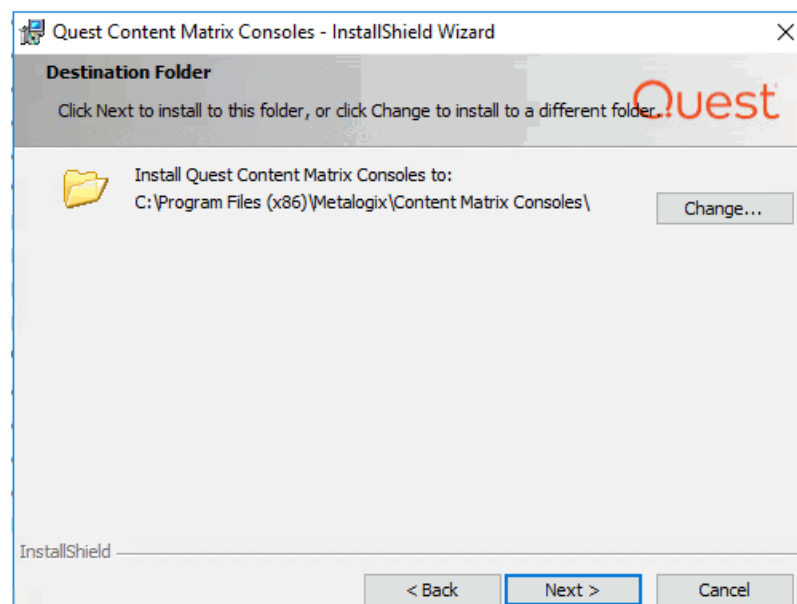


4. Click **[Next]**.
5. Read and accept the License Agreement terms then click **[Next]**.
6. Use the information in the following table to determine the appropriate **Application Settings Destination** option to select.



If you want to ...	Select ...
require all users of the machine to be a local administrator in order to run Content Matrix Console	<p><b>For All Users.</b></p> <p>NOTE: If you select this option:</p> <ul style="list-style-type: none"> <li>program data will be stored in <b>C:\ProgramData\Metalogix</b></li> </ul> <p>AND</p> <ul style="list-style-type: none"> <li>only the first user who launches Content Matrix for the first time will be required to <a href="#">enter a license key</a>.</li> </ul>
allow all users of the machine to run Content Matrix Console without being a local administrator	<p><b>For current user only.</b></p> <p>NOTE: If you select this option, when each user launches Content Matrix for the first time:</p> <ul style="list-style-type: none"> <li>program data will be stored in <b>C:\Users\&lt;username&gt;\AppData\Roaming\Metalogix\Common*</b></li> </ul> <p>AND</p> <ul style="list-style-type: none"> <li>each user be required to <a href="#">enter and activate a license key</a>.</li> </ul> <p>* If you are upgrading from a version earlier than 9.3 and select this option, program data will automatically be copied from C:\ProgramData\Metalogix to the new file location.</p>

7. Click **[Next]**.



By default the installation Wizard will install all of the selected Content Matrix client applications under C:\Program Files (x86)\Metalogix.

You can, however, click **[Change]** and select a different directory.

8. Click **[Next]**.

9. Click **[Install]**.

The installation process will run, and Editions of Content Matrix Console will be installed.

10. Click **Quit** to exit the Installation Wizard.

## If you want to use a SharePoint database connection on a machine that does not have SharePoint installed:

The machine must have dependencies for the version of SharePoint you want connect to installed on the machine. After installing Content Matrix, open the Console from the ribbon toolbar, choose **Connections > Connect to SharePoint Database**. A pop-up will display with a link to a Support Knowledge Base article with instructions for installing the dependencies.

## Installing Content Matrix Consoles Silently

As an alternative to installing Content Matrix Consoles via the UI, you can use Command Prompt to install them silently.

### To install Content Matrix Consoles silently using default options:

1. Open a Command Prompt as an Administrator.
2. Switch to the directory where the file **Content Matrix Consoles.exe** is located.
3. Use the information in the table below to determine the appropriate action to take.

If you want to ...	Then type...
use the default user setting <b>For all users</b> (meaning that the user must be a local administrator for the machine where the Consoles are installed)	<code>"Content Matrix Consoles.exe" /S /v/qn</code>
change the user setting to <b>For current user only</b> (meaning all users of the machine to run Content Matrix Consoles without being a local administrator)	Type <code>"Content Matrix Consoles.exe" /S /v/qn /v "ISUNDERCURRENTUSER=1" /</code>

4. Press <Enter>.

## Installing the Content Matrix SharePoint WSPs

This section will walk you through the process of installing the server components (Content Matrix SharePoint WSPs) on a target on premises SharePoint farm.

When installing the Content Matrix WSPs you should note that an IIS Reset will need to be performed when the solution (WSP) file is deployed through the SharePoint farm. This is a requirement of SharePoint, and not of Quest. In most cases this IIS Reset is automatically done as part of the solution deployment. For more general information on this issue, please see the following MicrosoftTechNet article: [http://technet.microsoft.com/en-ca/library/cc2v=office.14\).aspx#DeployFarmSolutions](http://technet.microsoft.com/en-ca/library/cc2v=office.14).aspx#DeployFarmSolutions).

There are a number of methods that can be used to try and mitigate any downtime when deploying a SharePoint farm solution. One of these methods is to schedule the solution deployment for a time period that will have low impact to the environment's users.

### Special Note About Content Matrix License Check

Prior to version 8.8, it was a licensing requirement that you install Content Matrix Organizer or License Check to support writing content to an on premises SharePoint farm. As of version 9.0, the Organizer option is no longer available, and you will be required to install License Check *only* if you have a Content Under Management (CUM)-type license (beginning with the digits 823) that was issued prior to version 8.8. The License Check installer (**Quest Content Matrix License Check.exe**) is available in the installation zip file.

NOTE: A license beginning with 823 cannot be used for File Share Edition since its reintroduction in version 9.9. If you have this license type and want to use File Share Edition, contact [Quest Support](#) to obtain a new license that covers all licensed Editions or a separate license for File Share Edition.

## The Metalogix Extensions Web Service

The Metalogix SharePoint Extensions Web Service enables both Read and Write access to remote SharePoint instances. This remote connection accesses the content through the remote SharePoint installation's Object Model (OM). The Extensions Web Service can be installed using the **Metalogix SharePoint Extensions Web Service Setup.exe** file that is included in the installation zip file.

Once the Extensions Web Service is installed on one SharePoint Web Front End (WFE) it will automatically be pushed to any other SharePoint WFEs on the farm as a SharePoint solution file (WSP). When the Web Service has been deployed it can be managed as a SharePoint web solution, and can be accessed through the farm's Central Administration page, to administer, disable, or uninstall the Web Service.

The Extensions Web Service component can be installed in any SharePoint on premises environment, and is supported on both 32-bit and 64-bit servers.

The Extensions Web Service helps to enable some migrations features through the remote access to the SharePoint OM, so it is recommended to have them deployed if possible.

After installation, the Web Service will run under the “app pool” user account. This means that any user running a migration with Content Matrix will only need to have general access to the content that is being migrated, in the SharePoint UI.

## Activating the License Key

You will be prompted to input an Activation License Key when launching the Content Matrix Console:

- for the first time after it has been installed if an existing license is not detected

OR

- after your license has expired.

NOTE: If users are not required to be local administrators on the machine where Content Matrix is installed, every user who launches a Console needs to enter a license key. If users are required to be a local administrator, only the first user who launches a Console needs to enter a license key.

**IMPORTANT:** During installation, all Editions of the Console (SharePoint, File Share, and Public Folder) are installed. However, the license will only be activated for Editions that are covered by it. If an Edition is not covered by the license, the message *Invalid license: License key is not valid for the given product.* will display in the Activate License Key dialog. A license key that starts with 823, 824 or 827 will not work with File Share Edition since its reintroduction in version 9.9.

If you are performing an online activation, you can also do it [silently](#), using Powershell.

### To enter a license key:

1. In the **Activate License Key** dialog, select **I have a license key**, and enter the license key provided by Quest (the key can be copied and pasted into the provided space).

NOTE: If you are updating from a Content Matrix installation **older than version 6**, select the **I am updating from an older version and have an old-style key** option, and enter the key in the provided space (or paste into the first field from your clipboard).

2. Select the appropriate activation method.

NOTE: Most systems can use the Online activation method **as long as** the system has internet access. If you are unable to use the online activation method due to security settings or lack of internet access, the Offline activation option can be used.

## Online Activation

NOTE: In order to activate your license, the following URL must be unblocked by your firewall:  
<https://license.metalogix.com>

1. After entering the license key, select **Online activation**.

If you need to authenticate the key through a proxy (not a common practice), click **Set Proxy** then enter the **Server name/IP** and **port number** for the proxy, as well as any necessary **credentials** to access it.

2. Click **[Next]**.

Content Matrix will contact the licensing server and attempt to authenticate the license key, after which, on successful activation, a 'Congratulations!' message will be returned, and the license key will be active and in use.

3. Click **[Finish]** to complete the process.

# Offline Activation

NOTE: The offline activation option is generally used in cases where you cannot use the online activation due to security settings or lack of internet access. This option will still require some internet access, but allows for the authentication to be done from another machine that is not as restricted by security or has a connection to the internet.

1. Select **Offline activation**.
2. Click **[Next]**.  
A **Generate Activation Request** dialog displays with a different key. This key can be copied from the window, or the **Save to file** option can be used to save the key into a text file (in case it needs to be copied to another machine).
3. Copy the **Activation URL** (listed under the Activation Request) to a web browser that has internet access.  
Alternately if the system the Content Matrix Console is on does have internet access through a Web browser, click **Go** to automatically open a web browser to this URL.
4. On a machine that has internet access, use the Activation URL to navigate to the Offline Activation page.
5. Either:
  - Enter the key into the **Activation data** text box.OR
  - If the key was saved to a file, select **Browse** and navigate to the file.
6. Click **[Activate]**.  
Upon successful activation, a new key displays in the text box.
7. Do one of the following:
  - To save the key as a DAT file, click **[Download file]**.OR
  - To copy the key to the clipboard (if the license will be activated on the same machine), click **[Copy text]**.
8. Click **[OK]** to continue.
9. Return to the Activate License dialog.
10. If the Generate Activation Request window is still active, click **[Next]**. to the **Enter your Activation Response** window.
11. Use one of the following options:
  - If you copied the key to the clipboard on the same machine, paste it into the window.
  - If you saved the key to a DAT file, navigate to, and select the DAT file.
12. Click **[Next]**. The license key will be active and in use.

13. Click **[Finish]** to complete the process.

## Activating the License Key Silently

You can activate your Content Matrix license using PowerShell. Follow the steps below.

**NOTE:** This method can only be used for *online* activations.

1. Open the Content Matrix PowerShell Console.
2. Run the following cmdlet, which includes specifying the Content Matrix Console Edition for which you want to activate the license.

```
if (Get-Command Set-MetalogixJobPrerequisites -ErrorAction  
SilentlyContinue){ Set-MetalogixJobPrerequisites -Value "Content Matrix  
Console - <Edition_name>" }
```

**NOTE:** Valid values for <Edition Name> are SharePoint Edition, FileShare Edition and Public Folder Edition. If your license covers more than one Edition, it is only necessary to activate one. The license activation will automatically be applied to any other Edition for which you are licensed.

3. Run the **Set-MetalogixLicense** cmdlet. Note that additional parameters are required if a proxy server is used.

### **Without proxy server:**

```
Set-MetalogixLicense -Key "<license_key>"
```

### **With proxy server:**

```
Set-MetalogixLicense -Key "<license_key>" -ServerUrl  
"<proxy_server_IP_address>" -Port "<proxy_port_number>" -UserName  
"<user_account>" -Password "<password>"
```

**NOTE:** When entering the license key, include hyphens.

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## Confirming the Metalogix Extensions Web Service Installation

While there are no settings that need to be configured for the Metalogix Extensions Web Service, there is a way to confirm that it is installed correctly and is working.

### To confirm that the Metalogix Extensions Web Services is installed and working:

After installing the Extensions Web Service, you should check to make sure that it was installed correctly. To do this you can attempt to connect to the web service page in a browser window by entering: **[YourSiteURL]/\_vti\_bin/ml/[Extensions Web Service version number]/mlspextensions.asmx**. For example, if the Extensions Web Service (version 9.4.0.1) is installed on a server named SharePointServ, then you would enter:

**SharePointServ/\_vti\_bin/ml/9.4.0.1/mlspextensions.asmx.**

If this command does not successfully connect to the Metalogix Extensions Web Service web page, then it may mean that the Web Service was not installed on all Web Front Ends for this farm.

Another method that can be used to check if the Extensions Web Service was installed is to go to the Solution Management page in Central Administration and see if the metalogix.sharepoint.adapters.extensions.X.X.X.X.wsp file is listed (where "X" is replaced by the version number). Users can find the Solution Management page at:

- SharePoint 2007 - **Central Administration > Operations > Solution Management.**
- SharePoint 2010 or later - **Central Administration > System Settings > Farm Management > Manage farm solutions.**

You can also remove the Metalogix Extensions Web Service by retracting the metalogix.sharepoint.adapters.extensions

# Selecting the SQL Database You Want to Connect to

The first time you launch the Content Matrix Console you will be prompted to select the SQL database that you want to connect to. Options are:

- Connect to Job Database (SQL Server)\*

\* NOTE: Distributed Migration is not supported for File Share or Public Folder Editions, so the option Connect to Distributed Database (SQL Server) is not available. In order to use this option in SharePoint Edition, Distributed Migration must be configured. Refer to the SharePoint Edition documentation for details.

- Connect to New Job List (SQL Server Compact 4.0\* Required)
- Connect to Existing Job List (SQL Server Compact 4.0\* Required)

NOTE: The use of SQL CE in a production environment is discouraged because of the following limitations:

- It uses a single .lst file that is less robust and reliable and may be corrupted after the database reaches 4 GB.
- Data compression is not supported.
- Support for large objects is limited.
- Microsoft support for SQL CE has ended.

If you still want to use SQL CE, SQL Server Compact 4.0 must already be installed on your machine. You can download it from [Microsoft](#), install it, then restart the Console.

## To create or connect to a full SQL database:

Refer to the edition-specific documentation for details.

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# Upgrading from a Version Earlier Than 9.4

Because of changes made in version 9.4 to consolidate all editions, you cannot upgrade the Content Matrix Console(s) from an earlier version. You can remove the earlier version either before or after [installing version 9.4](#).

NOTE: If you have upgraded from version 9.3 or earlier and are using SQL CE (.lst) files but SQL Server Compact is not installed, a pop-up will display the first time you open the Content Matrix Console after the upgrade. You will be given the option of either installing SQL Compact 4.0 or selecting a different Job database. See [Selecting the Database You Want to Connect to](#).

## Additional Documentation

Content Matrix documentation ships with the application, but is also available online at <https://support.quest.com/content-matrix/technical-documents>.

Additional documentation is described below.

Document	Description
Content Matrix Evaluation Guide	The Evaluation Guide will guide you through various Content Matrix Console migration actions. This is provided for the purpose of evaluating and reviewing Content Matrix to migrate your content into SharePoint. Prospective clients are encouraged to use this guide for basic testing.
Quick Start Guide for Content Matrix Console	<p>The Quick Start Guide provides a quick explanation of how to install the Content Matrix Console, and its additional components.</p> <p>This document helps get you installed and set up under a specific scenario in order to start Evaluation testing.</p>
Content Matrix Edition-specific Help	<p>Content Matrix Console is comprised of migration “Editions,” and each of these Editions has its own set of “Help” documentation:</p> <p>This documentation can be found within the client application itself by going to Help in the ribbon menu, and selecting Help Topics (this is the same for all Editions, and provides you with general directions and information on all of the available migrations and actions.</p> <p>There are also Online versions of the most current Help files on the Quest website at at <a href="https://support.quest.com/content-matrix/technical-documents">https://support.quest.com/content-matrix/technical-documents</a>.</p>
Content Matrix Release Notes	For every release of Content Matrix, there is also a set of Release Notes. These notes list all of the new features and fixes that have been included in the release build. This list

Document	Description
	also includes all of the features and fixes for Content Matrix.

## About Us

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Microsoft 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Around the globe, more than 130,000 companies and 95% of the Fortune 500 count on Quest to deliver proactive management and monitoring for the next enterprise initiative, find the next solution for complex Microsoft challenges and stay ahead of the next threat. Quest Software. Where next meets now. For more information, visit [www.quest.com](http://www.quest.com).

## Technical Support Resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
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- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

# Contacting Quest

For sales or other inquiries, visit [www.quest.com/contact](http://www.quest.com/contact).