

Content Matrix 9.9
Quick Start Guide



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Quest® Content Matrix
Updated March 2024
Version 9.9

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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.

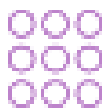
This document is designed to allow you to set up to run the Content Matrix Console so you can use the [Evaluation Guide](#) to review and evaluate Content Matrix. Prospective client are encouraged to use this guide for basic testing. Please see the [Advanced Installation Guide](#) for more specific details on installation information, including other installation scenarios, connection adapters, configuration, and installation.

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">• Windows Server 2022• Windows Server 2019• Windows Server 2016• Windows Server 2012 and 2012 R2• Windows 11• Windows 10 <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"> • SQL Server 2022 • SQL Server 2019 • SQL Server 2016 • SQL Server 2014 • SQL Server 2012 • A SQL Server hosted in Azure <p>NOTES:</p> <ul style="list-style-type: none"> ▪ While it is possible to run Content Matrix on an earlier version of SQL Server, support cannot be guaranteed. ▪ The use of SQL CE in a production environment is discouraged because of the following limitations: <ul style="list-style-type: none"> • 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. <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 Microsoft.</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 Local Administrator 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.</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 User Account Access Requirements in the <i>Content Matrix Advanced Installation Guide</i> 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">• https://license.metalogix.com• https://license.metalogix.net
Migrating to SharePoint Online	<ul style="list-style-type: none">• https://login.windows.net• https://login.microsoftonline.com

Purpose	URL
	<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"> • *blob.core.windows.net • *queue.core.windows.net <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: 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</p>
Migrating Nintex Forms and/or workflows to SharePoint Online	<ul style="list-style-type: none"> • https://discovery.nintexO365.com (Forms and workflows) • https://nintex.onmetalogix.com (workflows only)

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 > Application Management > 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.

Installation

This section describes how to install the Content Matrix Console client application(s) and the Extensions Web Service.

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.

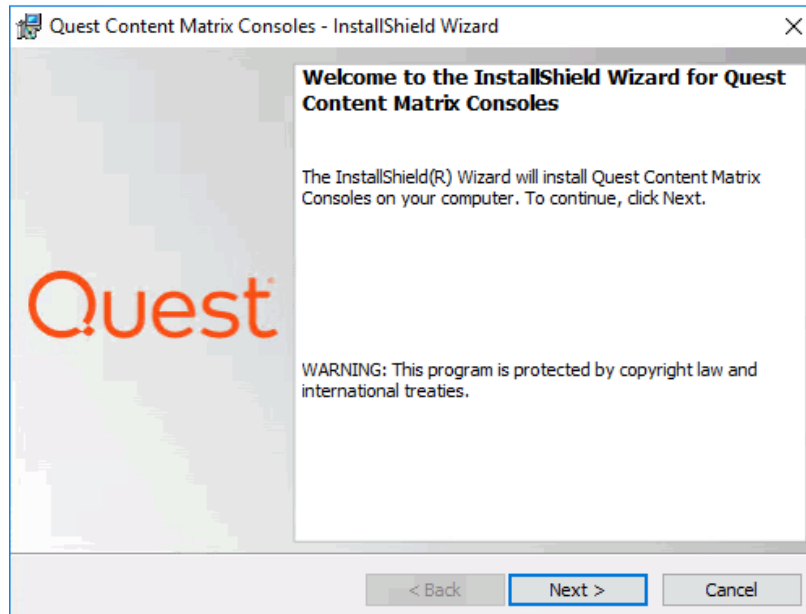
Content Matrix Consoles can be installed on any computer that meets the minimum hardware and software requirements for each component that is installed, provided that the computer also has access to the source and target environments (for connection purposes). For an on premises installation, the machine 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.

Please see the *Content Matrix Advanced Installation Guide* for more details on possible installation scenarios, configurations, SharePoint connection adapters, and additional information on other Content Matrix Console components.

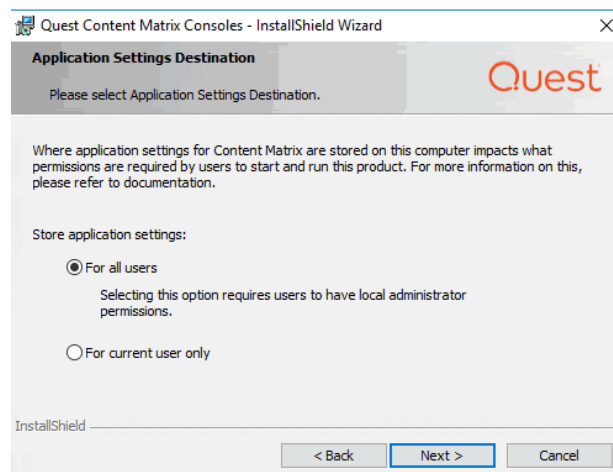
To install the Content Matrix Consoles:

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.



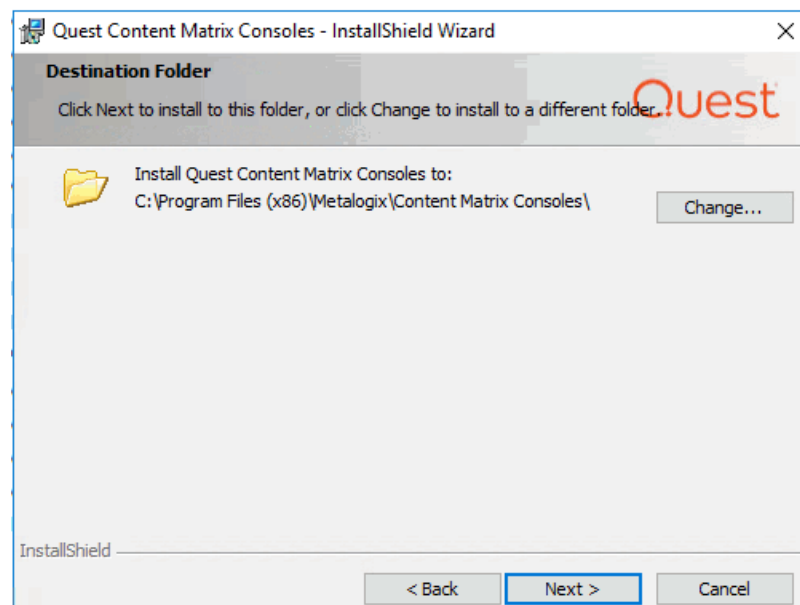
4. Click **[Next]**.
5. Read and accept the License Agreement terms then click **[Next]**.
6. Use the information in the following table to determine the appropriate **Application Settings Destination** option to select.



If you want to ...	Select ...
require all users of the machine to be a local administrator in order to run Content Matrix Console	<p>For All Users.</p> <p>NOTE: If you select this option:</p> <ul style="list-style-type: none"> program data will be stored in C:\ProgramData\Metalogix <p>AND</p> <ul style="list-style-type: none"> only the first user who launches Content Matrix for the first time will be required to enter a license key.

If you want to ...	Select ...
allow all users of the machine to run Content Matrix Console without being a local administrator	<p>For current user only.</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"> program data will be stored in C: \Users\<username>\AppData\Roaming\Metalogix\Co mmon* <p>AND</p> <ul style="list-style-type: none"> each user be required to enter and activate a license key. <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 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.

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 a 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.

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**.
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.

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. Details can be found in the *Content Matrix Advanced Installation Guide*.

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. For evaluation purposes only, you can select Connect to New Job List (SQL Server Compact 4.0* Required), but SQL CE 4.0 must be installed on the machine. You can download it from [Microsoft](#), install it, then restart the Console. For a production environment, it is recommended that you always use a full SQL database. Refer to the edition-specific documentation for details on connecting to a full SQL database.

- 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:

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 in the *Content Matrix Advanced Installation Guide*.

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- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- 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

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