

Metalogix® ControlPoint 8.6

## **Advanced Installation Guide**



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Metalogix® ControlPoint

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# Preface

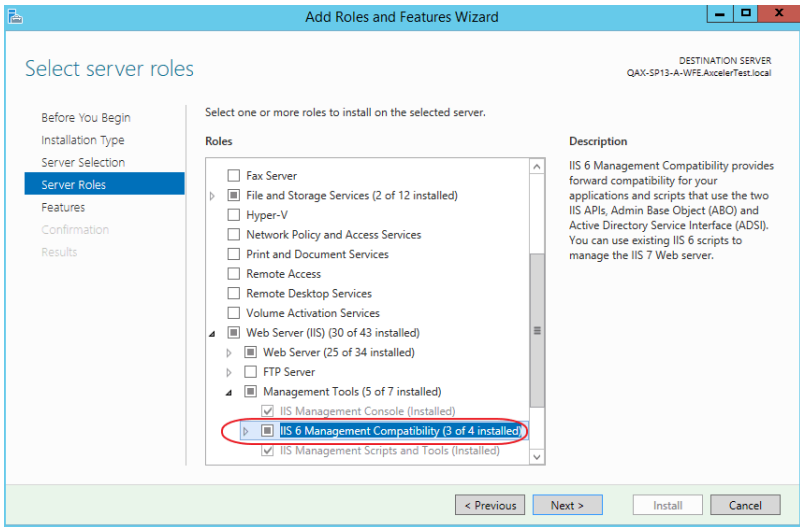
This guide contains comprehensive instructions for installing and configuring Metalogix ControlPoint, a Web-based application that offers a proactive, integrated solution for SharePoint administration, security, and governance.

NOTE: This guide applies specifically to the installation of ControlPoint for SharePoint on premises farms. If you are installing ControlPoint to manage SharePoint Online in an Office 365 tenant environment, refer to the *Metalogix ControlPoint for Office 365 Installation Guide*.

# System Requirements

## Server Requirements

The server requirements depend on your version of SharePoint, as described in the following table.

SharePoint Version	Requirements
SharePoint 2019	<ul style="list-style-type: none"> <li>• <b>Windows Server</b> 2016 or 2019 with           <ul style="list-style-type: none"> <li>▪ IIS activated</li> </ul> </li> <li>AND</li> <li>▪ the Server Role <b>IIS 6 Management Compatibility</b> enabled.</li> </ul>  <ul style="list-style-type: none"> <li>• <b>SharePoint 2019</b> web front-end.</li> <li>• <b>Microsoft SQL Server:</b> SQL Server 2016 RTM           <p>NOTE: ControlPoint can use the same SQL Server instance as SharePoint, but it can also use a separate instance or separate server.</p> </li> <li>• <b>.NET framework version 3.5</b> (for use by the installer), in addition to the .NET version required for SharePoint.</li> </ul>

SharePoint Version	Requirements
SharePoint 2016	<ul style="list-style-type: none"> <li>• <b>Windows Server</b> 2012 R2 (64-bit) or 2016 with IIS activated.</li> <li>• <b>SharePoint 2016</b> web front-end. <ul style="list-style-type: none"> <li>NOTE: To run ControlPoint Activity analyses in a SharePoint 2016 Server environment, SharePoint Usage must be enabled.</li> </ul> </li> <li>• <b>Microsoft SQL Server:</b> SQL Server 2014 SP1 (64 bit) or 2016 <ul style="list-style-type: none"> <li>NOTE: ControlPoint can use the same SQL Server instance as SharePoint, but it can also use a separate instance or separate server.</li> </ul> </li> <li>• <b>.NET framework version 3.5</b> (for use by the installer), in addition to the .NET version required for SharePoint.</li> </ul>
SharePoint 2013	<ul style="list-style-type: none"> <li>• <b>Windows Server</b> 2012 (64-bit), with IIS activated.</li> <li>• <b>SharePoint 2013 (Foundation or Server)</b> web front-end. <ul style="list-style-type: none"> <li>NOTE: To run ControlPoint Activity analyses in a SharePoint 2013 Server environment, SharePoint Usage must be enabled.</li> </ul> </li> <li>• <b>Microsoft SQL Server:</b> SQL 2012, or 2014 <ul style="list-style-type: none"> <li>NOTE: ControlPoint can use the same SQL Server instance as SharePoint, but it can also use a separate instance or separate server.</li> </ul> </li> <li>• <b>.NET framework version 3.5</b> (for use by the installer), in addition to the .NET version required for SharePoint.</li> </ul>
SharePoint 2010	<ul style="list-style-type: none"> <li>• <b>Windows Server</b> 2012 64-bit, with IIS activated.</li> <li>• <b>SharePoint 2010 (Foundation or Server)</b> web front-end. <ul style="list-style-type: none"> <li>NOTE: To run fully functional ControlPoint Activity analyses in a SharePoint 2010 Server environment, the Web Analytics service must be used by all Web applications in the farm.</li> </ul> </li> <li>• <b>Microsoft SQL Server:</b> SQL Server 2012 <ul style="list-style-type: none"> <li>NOTE: ControlPoint can use the same SQL Server instance as SharePoint, but it can also use a separate instance or separate server.</li> </ul> </li> <li>• <b>.NET framework version 3.5, Service Pack 1 or higher.</b></li> </ul>

## Additional Considerations for Multi-Farm Installations

When a multi-farm environment is being established, the first farm on which ControlPoint is installed will create the shared ControlPoint Service (xcAdmin) database and will record the shared

license into the database for the sake of all subsequent farms. See also [Using ControlPoint to Manage Multiple Farms](#).

## Web Application Requirements for "Non-Standard" Installations

In the Standard (and recommended) installation scenario, the ControlPoint Configuration Site resides in its own dedicated Web application, which is created as part of the installation process. However, it would be necessary to ControlPoint into an *existing* Web application (which is also known as a Non-Standard installation) only if any of the following conditions apply:

- You are using SharePoint with Custom Claims providers, including ADFS.
- You need to use Windows Claims to log onto ControlPoint.
- You are unable to create an additional Web Application.

If you *are* planning to install ControlPoint into an existing Web application, the Web application into must be configured to allow Windows-based authentication (which may be in the context of Claims) in addition to any other authentication providers.

If possible, it is recommended that you create a separate Web Application specifically for use by ControlPoint. This will allow for a cleaner isolation of the permissions, processing requirements, and configuration choices required by ControlPoint. However, installation into an existing Web application used for other purposes is fully supported.

## Installation and Service Account Requirements

- **The account used to *install* ControlPoint:**

- must be a member of the local Administrator's group on the machine where it is installed
- must be a Farm Administrator, and
- should be added to the security server role `sysadmin` in:
  - the SQL server(s) used for SharePoint content databases, and
  - the SQL server used for the ControlPoint Services (xcAdmin) database.

- **The account that will be used to *run* ControlPoint** (that is the Service Account of the Web Application that hosts the ControlPoint Configuration Site) must be:

- a member of the local Administrator's group on all of the Web front-end machines in the farm.
- a Farm Administrator.
- a domain account if any database resides on a different server(s) from the server on which you will be installing ControlPoint.

#### IMPORTANT NOTES:

- The account used to install ControlPoint and the ControlPoint Service Account must both be either local or domain accounts. This is necessary to enable the installer to verify the existence of the Service account. If the server on which you are installing ControlPoint is not your database server (that is, your databases reside on a different server), then the Service Account must be a domain account.
- In accordance with SharePoint Best Practices, the ControlPoint Service Account should not be the SharePoint Farm Account (that is, the account used to run Central Administration), as the performance of some ControlPoint operations may be negatively impacted.
- If you will be [configuring ControlPoint Discovery and/or SCM Services](#), the Service Account must meet all of the requirements of the ControlPoint Service Account, as well as permission to **Log on as a Service**.

## Compatible Browsers

ControlPoint users must use a compatible **Web browser**:

- **Microsoft Internet Explorer (IE)** version 10 or later, running in Compatibility View

NOTES:

- With IE 10:
  - ControlPoint must be run with the 'AutoComplete User names and passwords on forms' option disabled.
  - When launching ControlPoint from a server, IE Enhanced Security Configuration (ESC) on that server must be off.
- When using Internet Explorer build 11.0.9600.18617, report results do not fill the entire results section.
- **Microsoft Edge**
- **Mozilla Firefox** (latest public release)
- **Google Chrome** (latest public release)



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# Using ControlPoint to Manage Multiple Farms

If you want to use ControlPoint to manage multiple farms and/or O365 tenants, a copy of the ControlPoint application must be installed on a server in each environment. Each farm has:

- its own ControlPoint menus (including any customized menus), and
- its own ControlPoint security model, which determines administrators' access to ControlPoint menu items.

You have the option of installing ControlPoint either:

- as **separate, single-farm installations**, which means that each farm has:
  - its own ControlPoint Service (xcAdmin) databases, and
  - its own ControlPoint license activation code
- as a **multi-farm installation**, which means that farms share:
  - the same ControlPoint Service (xcAdmin) database, which allows ControlPoint users to navigate among and operate on other farms and makes it easier to switch from one farm to another from within the ControlPoint application interface, and
  - a common ControlPoint license activation code.

**IMPORTANT:** Install the same version of ControlPoint on all farms in a multi-farm installation, as updates to the ControlPoint Service (xcAdmin) database may not be compatible with earlier versions.

## Factors to Consider When Choosing the Appropriate Installation Type for your SharePoint Environment

The optimal installation type depends on a number of factors, including how your SharePoint environment is configured, the size of your farms, and whether there is connectivity between them.

Single-farm installations are preferable if

- farms are in different domains that do not have a two-way trust relationship
- farms are on different WANs or network segments where bandwidth is limited or connectivity between farms is not maintained
- SQL server resources are limited and scalability of the xcAdmin database is a concern, and/or
- different groups of people are responsible for managing different farms.

If you choose this approach, you will need to bookmark each of the farms if you want to easily switch between them. You will still be able to copy and move sites across farms, but you will have to enter the destination site's url instead of selecting it from a list.

Consider a multi-farm installation if:

- you want to be able to:
  - navigate through and operate on more than one farm using a single application interface
  - run ControlPoint actions and analyses on more than one farm in a single operation, and/or
  - quickly switch between farms from the ControlPoint application interface
- farms are in the same domain or in domains with at least a two-way trust relationship
- farms are on the same WAN or network segment (that is, bandwidth is adequate and connectivity between farms is maintained)
- your SQL server is robust enough that scalability of the xcAdmin database is not an issue
- the same group of people is responsible for managing all farms.

For farms that utilize a common instance of SQL server, you will *need to* perform a multi-farm installation. When installing ControlPoint in this circumstance, be sure to provide a unique name for the content database used by the Web application that hosts the ControlPoint Configuration Site collection for each farm.

You can of course use different installation types to suit the needs of different farms. For example, you may want to use a multi-farm installation for QA and development farms and single farm installations for production farms.

## Installation Guidelines

Installation Type	Guidelines
single-farm installations	<ul style="list-style-type: none"><li>• Contact <a href="#">Quest Support</a> to obtain a license activation code for each additional farm.</li><li>• For each farm, complete the entire installation process, which includes:<ul style="list-style-type: none"><li>▪ specifying the location where you want to create the ControlPoint Service (xcAdmin) database for the farm, and</li><li>▪ activating a separate ControlPoint license for each farm.</li></ul></li></ul>
a multi-farm installation	<ul style="list-style-type: none"><li>• Install ControlPoint in the first farm, which includes:<ul style="list-style-type: none"><li>▪ specifying the location where you want to create the ControlPoint Service (xcAdmin) database that will be shared by all farms, and</li><li>▪ activating your ControlPoint license.</li></ul></li></ul>

Installation Type	Guidelines
	<ul style="list-style-type: none"> <li>For additional farms, perform a complete installation and when you specify the location of the xcAdmin database, be certain to specify the server on which you created the database for the first farm.</li> </ul> <p>NOTE: Make sure that all farms in a multi-farm environment are running the same version of ControlPoint.</p>

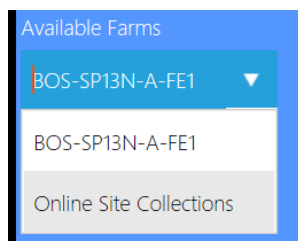
## Special Considerations When Using Different Editions of ControlPoint in a Multi-Farm Environment

If all farms in a multi-farm environment have the same edition of ControlPoint (Standard, Non-Standard, or Online) installed, any one of the farms can be the home farm, and all farms will display in the SharePoint Hierarchy, which enables you to perform operations on multiple farms.

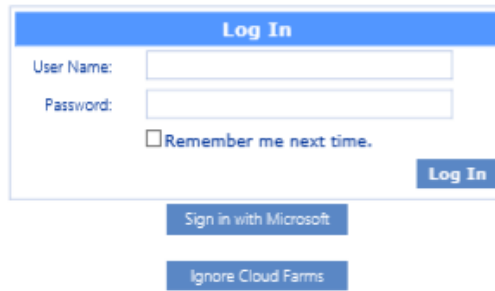
However, for multi-farm environments that have different editions of ControlPoint installed, some limitations apply if you want to be able to display multiple farms in the SharePoint Hierarchy and perform multi-farm operations.

If the multi-farm installation ...	Then for multiple farms to display in the SharePoint Hierarchy ...
includes ControlPoint Standard along with Non-Standard and/or ControlPoint Online	a Standard farm must be the home farm.
consists of only Non-Standard and ControlPoint Online	a Non-Standard farm must be the home farm.

NOTE: Regardless of whether or not all farms display in the SharePoint Hierarchy, you will always be able to change the active farm by selecting from the Available Farms drop-down.



Additionally, if you log into a multi-farm environment that includes both ControlPoint on premises and ControlPoint Online, you will be prompted to log into ControlPoint Online using your Microsoft Office 365 credentials.

A screenshot of a 'Log In' dialog box. The dialog has a blue header bar with the text 'Log In'. Below the header, there are two input fields: 'User Name:' and 'Password:'. Below the 'Password:' field, there is a checkbox labeled 'Remember me next time.'. To the right of the input fields, there is a blue button labeled 'Log In'. Below the dialog box, there are two more buttons: 'Sign in with Microsoft' and 'Ignore Cloud Farms'.

If you want to load on-premises farms only, you can dismiss the dialog by clicking **[Ignore Cloud Farms]**.

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# First Time Installation and Configuration

Within each farm being managed, Metalogix ControlPoint is installed and runs as a .NET application. Typically, it uses its own Web application (ControlPoint) which creates its own content database, but it can be installed into an [existing Web application](#).

The ControlPoint installer also creates a separate Service database (xcAdmin) for configuration information and analysis data. This Service database may be installed either on the same database server as all other SharePoint databases or on a separate server.

NOTE: You can install ControlPoint on any Web front-end server machine in your farm. It is recommended, however, that you install ControlPoint on the machine on which you want to run the most resource-intensive ControlPoint processes. The machine name of the server on which you install ControlPoint is the name that ControlPoint will use by default as the farm name in the ControlPoint application interface. You can, however, change the display name of the farm at a later time. By default, the machine on which you install ControlPoint will be used for background processes such as Discovery and scheduled reports and actions.

If you are upgrading from a previous version of ControlPoint, follow the instructions for [Upgrading from a Previous Version of ControlPoint](#).

## IMPORTANT: Using ControlPoint with Claims-Based Authentication

Even if your SharePoint farm uses Claims-based authentication, the ControlPoint Web application is created as a non-Claims-enabled application and should be left as a non-Claims-enabled application. If the ControlPoint Web application is Claims-enabled after installation, ControlPoint actions and analyses may fail to operate properly. In this scenario, you may want to use the option to [install into an existing Web application \(i.e., a Non-Standard installation\)](#).

## Before You Begin

- The machine on which you are installing ControlPoint must meet [System Requirements](#).
- Make sure the machine on which you are installing ControlPoint has access to the Internet, which is necessary to permit activation of your ControlPoint license and to download the .NET framework, if necessary.
- Have the following information ready (you may wish to record it in the spaces provided):
  - The ControlPoint Service Account—that is, the account under which the ControlPoint Web application will run. (This is normally a domain account, but if you are running an

evaluation version of the product—and the database is on the same machine as ControlPoint—you may use a local account.)

**Account:** \_\_\_\_\_

**Password:** \_\_\_\_\_

- Depending on whether you want the installer to create a new Web application for the ControlPoint Configuration Site or create it in an existing Web application:
  - For a new Web application, the port number that you want the ControlPoint Web application to use. (The default is 1818, but you can set it to any available value. It is strongly recommended that you *not* install ControlPoint on Port 80, as you may encounter complications during setup. If you are using host headers and want to redirect ControlPoint to a port that is currently in use (including Port 80), you can do so after installing the application.)

**Port Number:** \_\_\_\_\_

**The SharePoint Content Database Server Name:**

\_\_\_\_\_

(This is where the content database for the ControlPoint Web application will reside.)

OR

- The name of the existing Web application that you want to use to host the ControlPoint Configuration Site.

**Web Application Name:** \_\_\_\_\_

- The user name and (optionally) email address of the primary ControlPoint Application Administrator. (This individual will be set as the initial Site Collection Administrator in the ControlPoint site collection).

**ControlPoint Application Administrator Account Name:**

\_\_\_\_\_

- The Name of the SQL server that will host the ControlPoint Service database, as well as the authentication method to be used:

**Database Server Name:** \_\_\_\_\_

**Windows Authentication**

OR

**SQL Server ID** \_\_\_\_\_ **Password** \_\_\_\_\_

- **The ControlPoint license activation code:**

\_\_\_\_\_

NOTE: If you do not already have a license activation code, [contact Quest](#) to obtain one.

## First Time Installation and Configuration Process

The ControlPoint first time installation and configuration process consists of the following stages:

- A. [Install the ControlPoint files.](#)
- B. [Configure the ControlPoint application and deploy SharePoint solutions.](#)
- C. Optionally, [configure ControlPoint Services.](#)

NOTE: If you are using ControlPoint to manage multiple farms, you must complete the entire installation and configuration process for each farm.

## Installing ControlPoint Files

It is recommended that you temporarily disable virus checkers on all Web front end servers in the farm as they can slow the solution deployment enough to trigger timeout errors.

### To install ControlPoint Files:

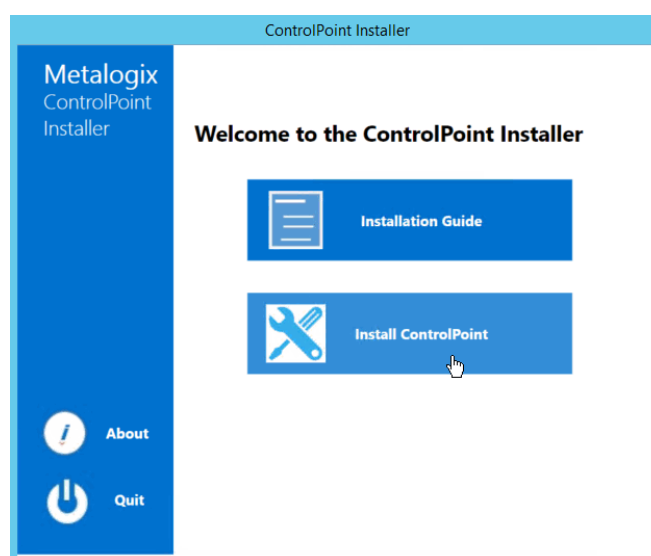
REMINDER: If UAC enabled on your server, you may have to "Run as Administrator."

- 1 Unzip the downloaded zip file then launch the installer (**Metalogix ControlPoint Installer.exe**).

NOTE: Make sure you keep the entire downloaded folder intact as there are files that are required by the installer.

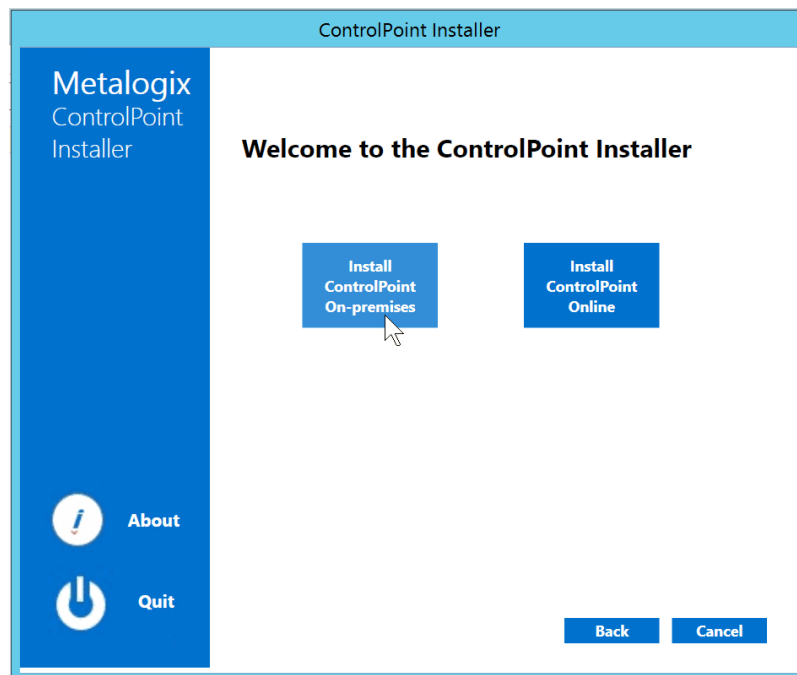
A splash screen displays, followed by the ControlPoint Installer Welcome screen.

- 2 Click **Install ControlPoint**.

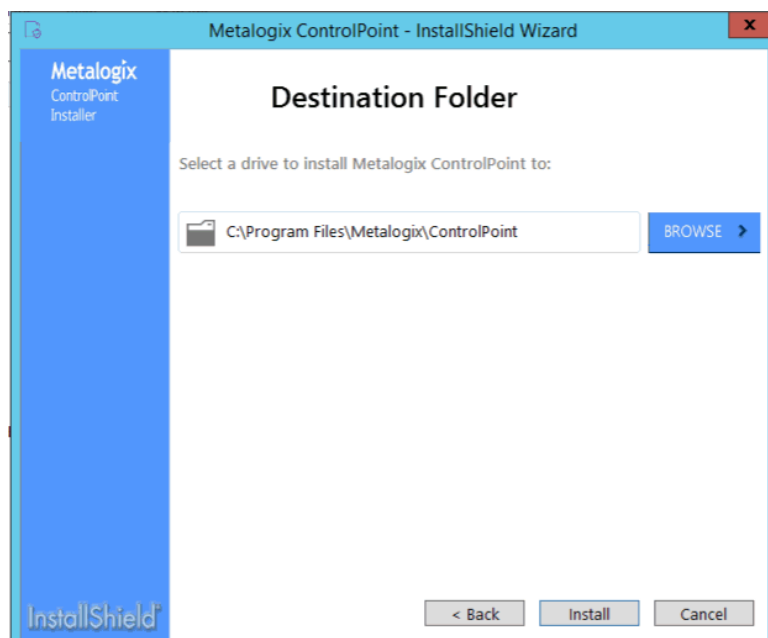


The License Agreement dialog displays.

- 3 Read the license agreement. Click **I accept the terms of the license agreement**, then click **[Next]**.
- 4 Click **Install ControlPoint On-premises**.



- 5 When the Metalogix ControlPoint InstallShield Welcome dialog displays, click **[Next]**. The InstallShield Wizard specifies a default install directory (**C:\Program Files\Metalogix\ControlPoint**), but you can click **[BROWSE]** and select a different one.

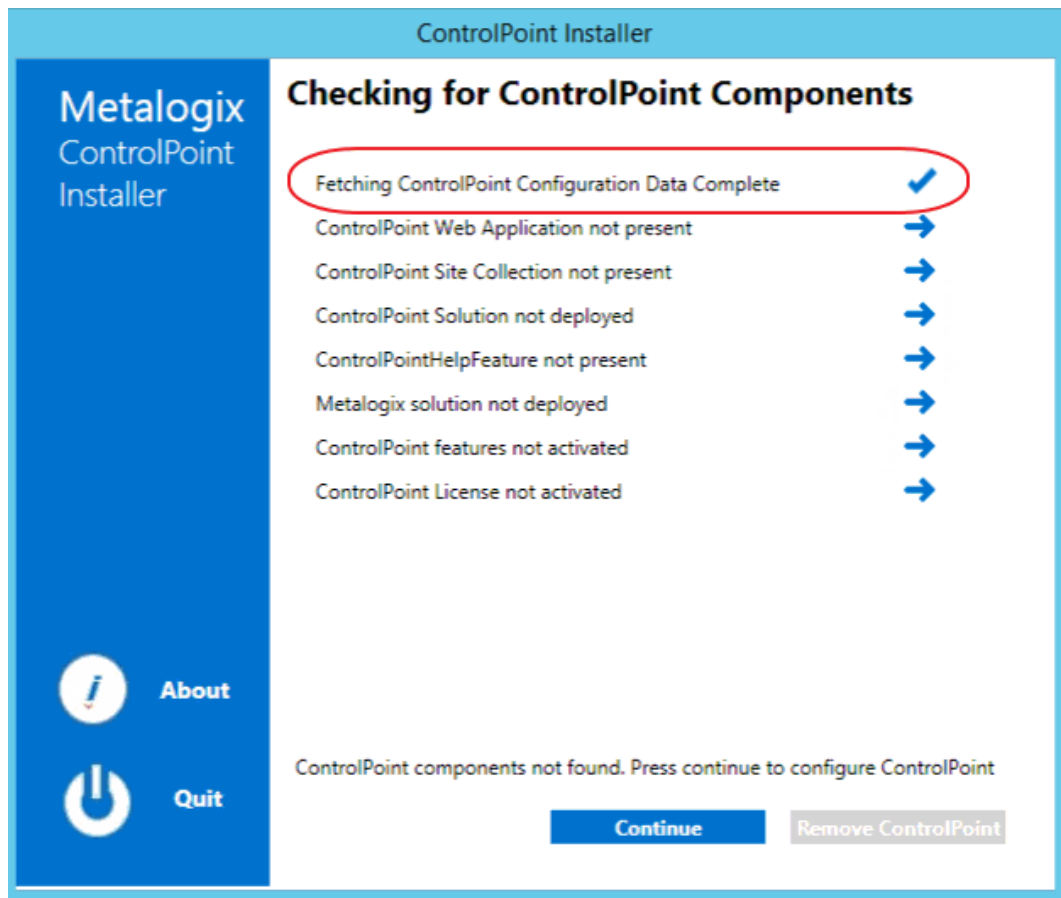


NOTE: This directory is where the installer will place the files needed to complete the installation. If you choose to change the default directory, you should *not* use the SharePoint hive.

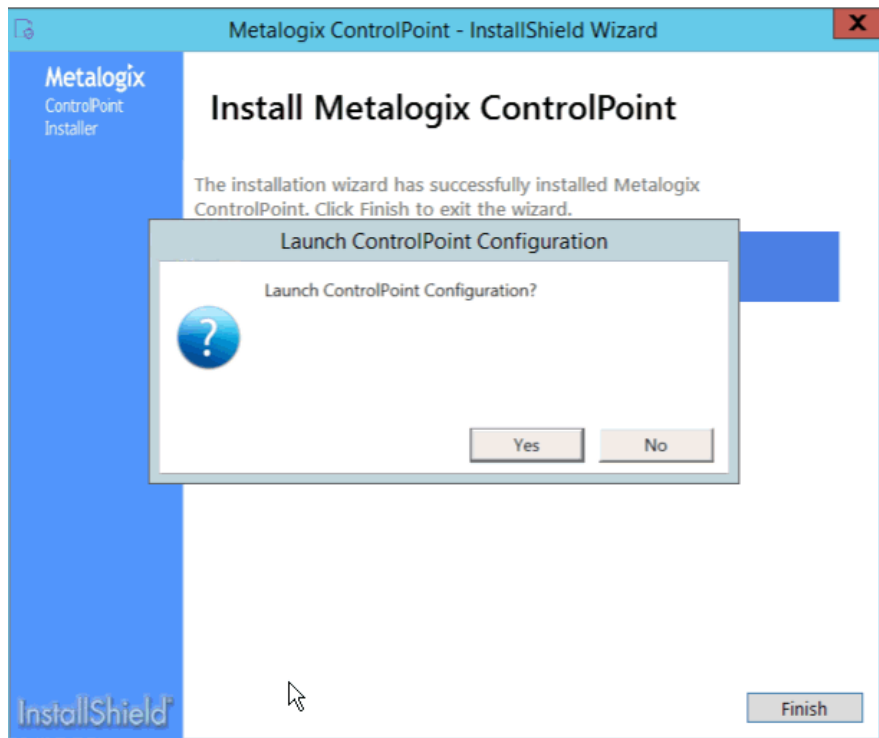
- 6 Click **[Install]**.



The installer checks for ControlPoint Components. Note that, for a first time installation, only **Fetching ControlPoint Configuration Data** will display a check mark. All other options will display a right-pointing arrow.



The Configuration Wizard installs the ControlPoint files to the specified Destination Folder. When completed, a pop-up displays asking whether you want to configure ControlPoint.



NOTE: If you want to configure the ControlPoint application at a later time, click **[No]**. You can launch the ControlPoint Configuration Wizard from the Start menu or a Desktop shortcut.

7 Click **[Finish]**.

## Next Steps

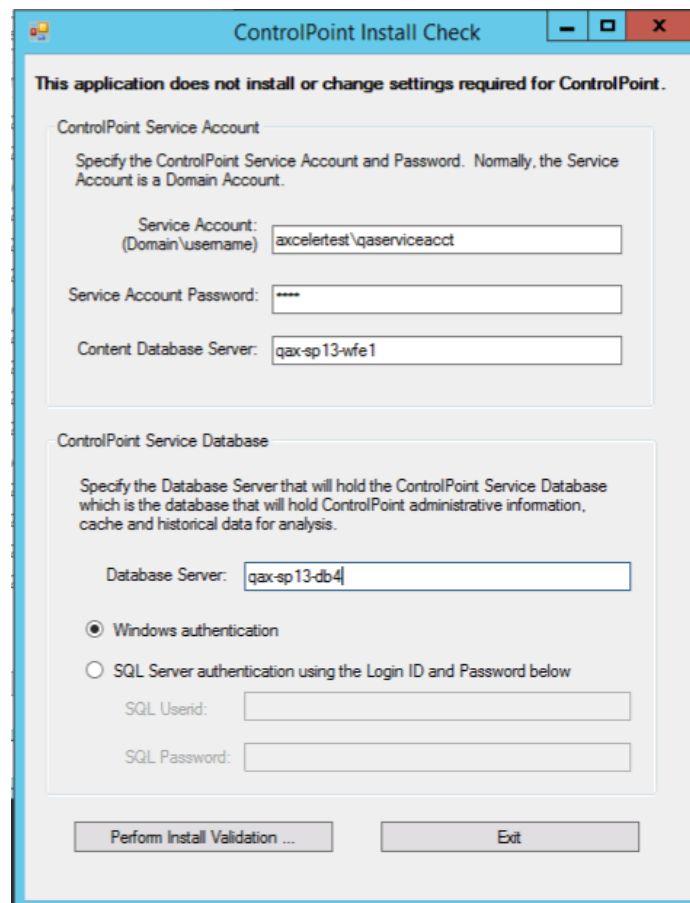
It is strongly recommended that you perform a [pre-installation validation check](#) before [Configuring the ControlPoint Application and Deploying SharePoint Solutions](#).

# Performing a Pre-Installation Validation Check

After installing ControlPoint files, but before configuring ControlPoint for the first time, it is strongly recommended that you run the ControlPoint Install Check, which is located in the following folder: **C:\Program Files\Metalogix\ControlPoint\Support\PreinstallValidation**. When you run this utility (by double-clicking ControlPointInstallCheck.exe), you are prompted to enter the following information:

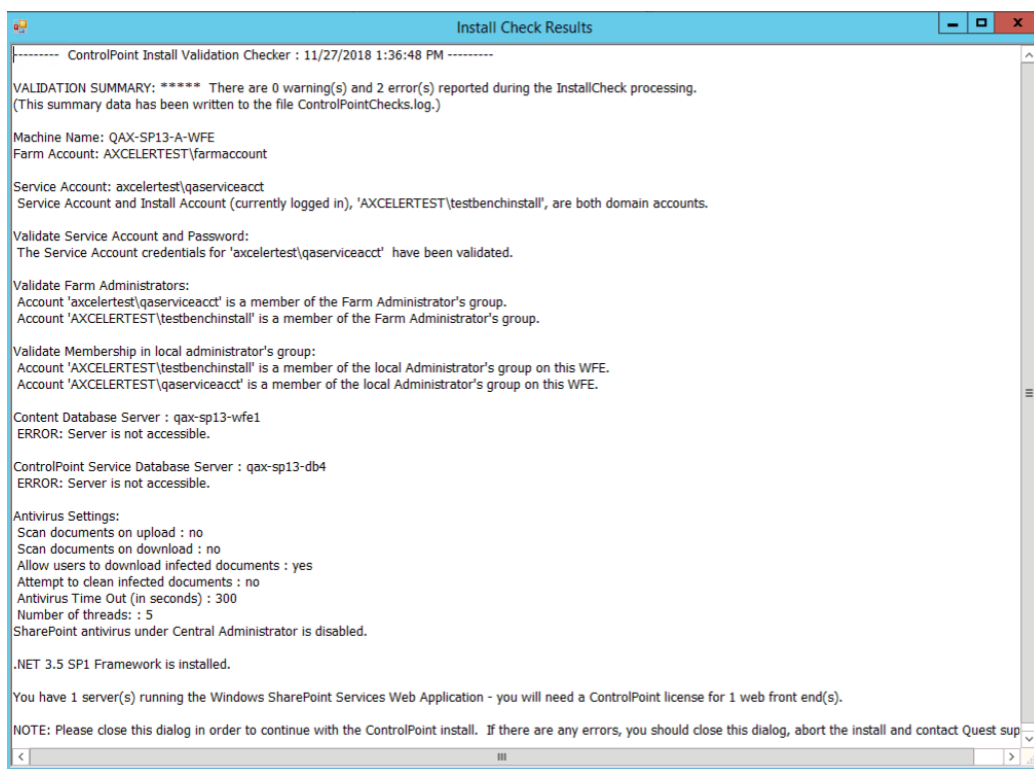
- ControlPoint Service Account name and password
- SharePoint Content Database Server name
- ControlPoint Service Database Server name.

NOTE: If UAC is enabled, it may be necessary to Run as Administrator.



The image shows a Windows-style dialog box titled "ControlPoint Install Check". At the top, a message states: "This application does not install or change settings required for ControlPoint." Below this, there are two main sections. The first section, "ControlPoint Service Account", instructs the user to "Specify the ControlPoint Service Account and Password. Normally, the Service Account is a Domain Account." It contains three input fields: "Service Account: (Domain\username)" with the value "axcelertest\qaserviceacct", "Service Account Password:" with masked characters "\*\*\*\*", and "Content Database Server:" with the value "qax-sp13-wfe1". The second section, "ControlPoint Service Database", instructs the user to "Specify the Database Server that will hold the ControlPoint Service Database which is the database that will hold ControlPoint administrative information, cache and historical data for analysis." It contains a "Database Server:" field with the value "qax-sp13-db4". Below this section are two radio buttons: "Windows authentication" (which is selected) and "SQL Server authentication using the Login ID and Password below". The SQL authentication section has "SQL Userid:" and "SQL Password:" fields, both of which are empty. At the bottom of the dialog are two buttons: "Perform Install Validation ..." and "Exit".

When you click **[Perform Install Validation]**, the utility verifies that key system requirements are met. At the conclusion of the verification check, a summary of results displays.



If any errors are reported in the Validation Summary, you can correct them before attempting to configure ControlPoint.

## Configuring the ControlPoint Application and Deploying SharePoint Solutions

After ControlPoint file are installed the application must be configured.

### Summary of ControlPoint Configuration Process

The ControlPoint Configuration Wizard carries out the following tasks:

- A. **Validates License:** Checks the validity of the license key you enter as well as the terms of the license.
- B. **Creates ControlPoint Service database:** Creates the ControlPoint Service database (xcAdmin) on the selected database server. This database is where administrative information and cached data used for analysis and reporting is collected. (Note that in a multi-farm installation, this database is shared among farms.)
- C. **Creates ControlPoint Web application** (if applicable): If you choose to have the installer create a new Web application to host the ControlPoint Configuration site collection, installs the ControlPoint Web application within SharePoint, which includes the creation of a content database for the Web application.

- D. **Creates ControlPoint Site Collection:** Creates the ControlPoint Configuration Site Collection within the ControlPoint Web application or an existing Web application (depending on the option you choose), and assigns an initial Site Collection Administrator.

NOTE: If you change the host name, the Configuration Wizard will also create the bindings in IIS, create alternate access mappings in Central Administration, and update the ControlPoint Setting 'Inbound ControlPoint Url' to use the host header.

- E. **Deploys ControlPoint WSPs to your SharePoint farm:** Installs the ControlPoint application features, which includes:

- installation of ControlPoint menus and the ControlPoint Settings list into the ControlPoint Configuration Site, and
- creation of the IIS Virtual Directory on the Web front-end server.

NOTE: As is the case with other SharePoint Solution deployments, upon completion all running application pools will be recycled.

- F. **Activates License:** Activates your ControlPoint license.

- G. **Windows Service Configuration** (optional): If you elect to use server-side Windows Services, installs and configures the service(s) you selected.

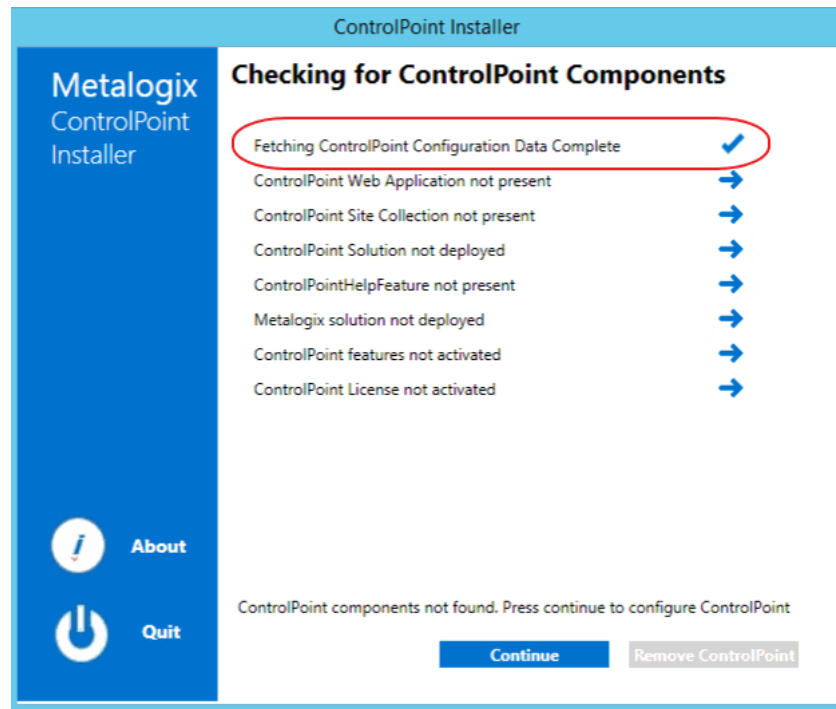
## To configure the ControlPoint application:

- 1 Use the information in the following table to determine the appropriate action to take.

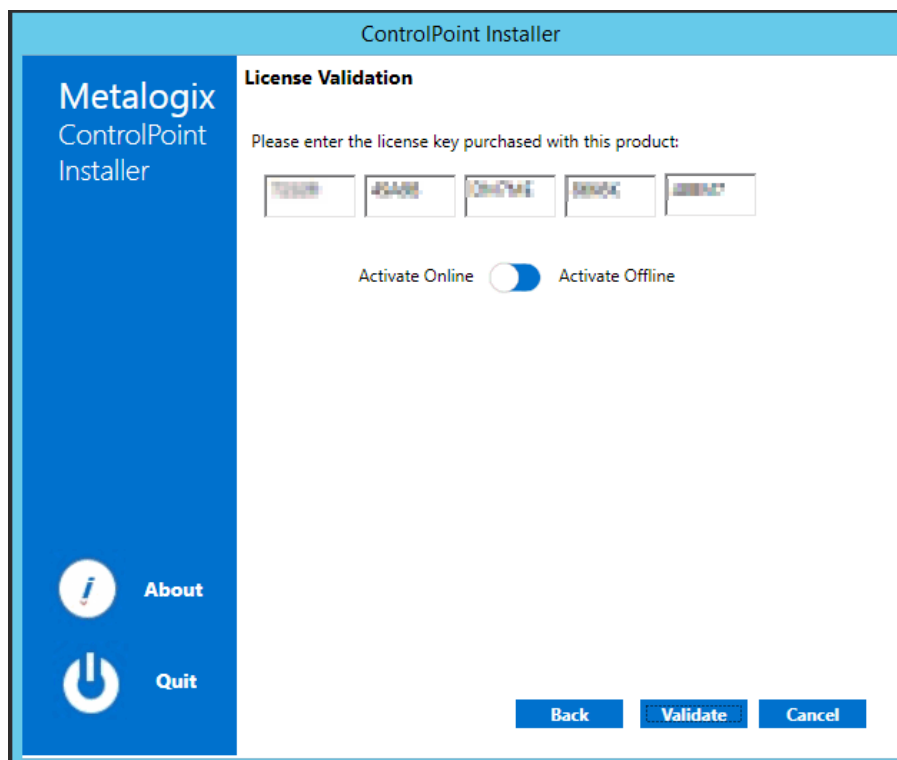
If ...	Then ...
you are starting directly from the ControlPoint installer (that is, after performing the install you chose to <b>Launch ControlPoint Configuration</b>	go to the next step.
after installing ControlPoint you chose to configure at a later time (that is, after performing the install you chose not to <b>Launch ControlPoint Configuration</b> .	double-click the ControlPoint Configuration desktop icon.

The installer checks your environment for the presence of installed components.

NOTE: For a first time installation, once the components check is complete only the Fetching ControlPoint Configuration Data box should be checked (✓). All other options will appear with a right-facing arrow. (→)



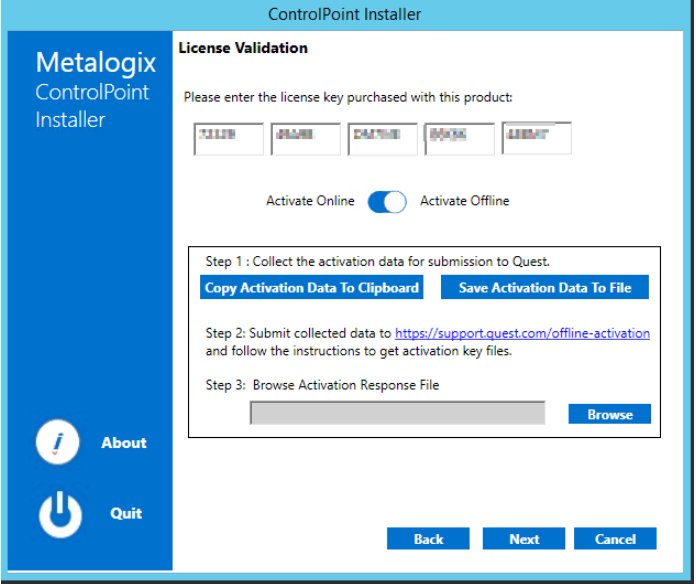
- 2 Click **[Continue]**.
- 3 Enter the license key provided by Quest.



- 4 Use the information in the following to determine the appropriate **License Validation** option to select.

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. 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.

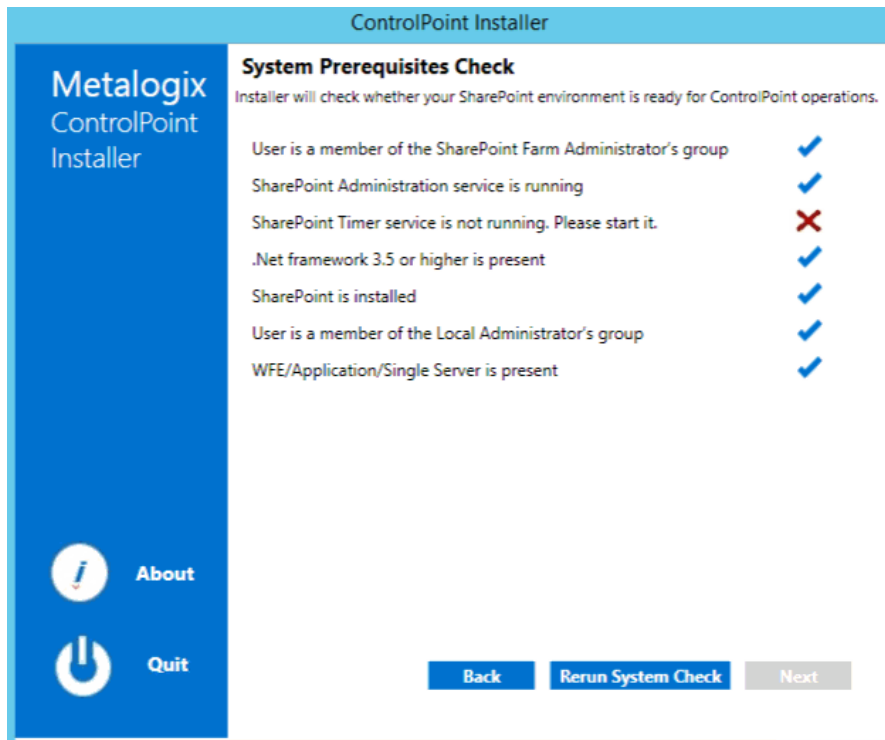
If you want to validate the license...	Then ...
online	accept the default option ( <b>Activate Online</b> ).
offline	<p>a) Select <b>Activate Offline</b>.</p>  <p>The <b>Offline Activation</b> window displays. You can either <b>Copy Activation Data To Clipboard</b> or use the <b>Save Activation Data To File</b> option to save the key into a text file (in case it needs to be copied to another machine).</p> <p>b) From a machine that has internet access, go to <a href="https://support.quest.com/offline-activation">https://support.quest.com/offline-activation</a>.</p> <p>c) Follow the instructions on the Offline Activation web page to activate your license, using the <b>Upload activation data</b> option.</p> <p>NOTE: Remember to save the Activation File to a location that is accessible by the machine on which you are installing ControlPoint.</p> <p>d) Return to the ControlPoint Installer License Validation dialog.</p> <p>e) Use the <b>Step 3: Browser Activation Response File</b> option to select the file returned by Quest.</p>

5 Click [**Validate**].

If the license is validated successfully a License Validation pop-up displays the terms and current status of the license.

- 6 Dismiss the pop-up and click **[Next]**.

The System Prerequisite check begins. Any item that fails the check is identified by a red **X**.



NOTE: If you fix the problem immediately, you can then **Rerun the System Check**. If you choose to **Quit** and fix the problem at a later time, the next time you launch the ControlPoint Configuration Wizard, it will start from the beginning.

- 7 When all system prerequisites checks have completed successfully, click **[Next]** to display the **Create the ControlPoint Service (xcAdmin) Database** dialog.

- 8 Specify the **Database Server** where you want to place the ControlPoint Service (xcAdmin) database:

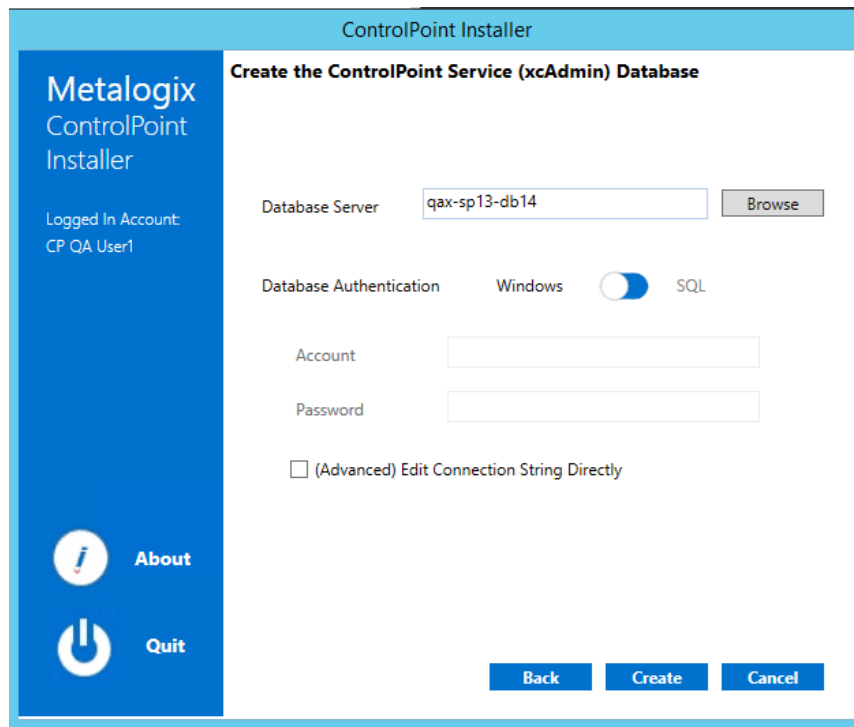
- enter the server name

OR

- click **[Browse]** to choose a different database server

If you are installing on an additional farm in a multi-farm installation, make sure you specify the server on which the xcAdmin database has been created for the first farm. (If the database you specified has already been created, you will be asked whether you want to use it.)

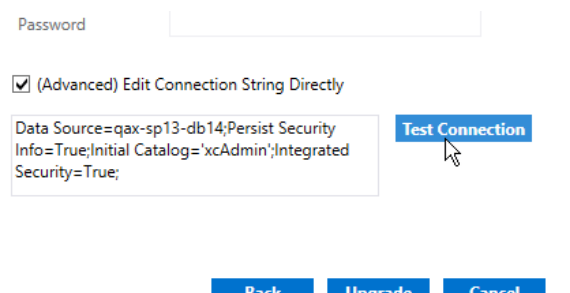




NOTE: If you are using SQL Express for development or evaluation purposes, the Database Server instance name is typically entered as <server\_machine\_name>\SQLExpress.

- 9 Specify the authentication method you want to use. (If you select SQL Server authentication, you will be prompted to enter the **Account** and **Password**.)
- 10 If you want to view, update, and/or test the xcAdmin database connection string:
  - a) Click the **(Advanced) Edit Connection String Directly** box.

NOTE: If you are choosing to reuse an existing xcAdmin database, you will be unable to *update* the connection string and the field will be disabled. If you need to update the connection string after completing the installation, do so via the ControlPoint Setting **SQL Server Connection String for xcAdmin Database**. Refer to the *ControlPoint Administration Guide* for details.

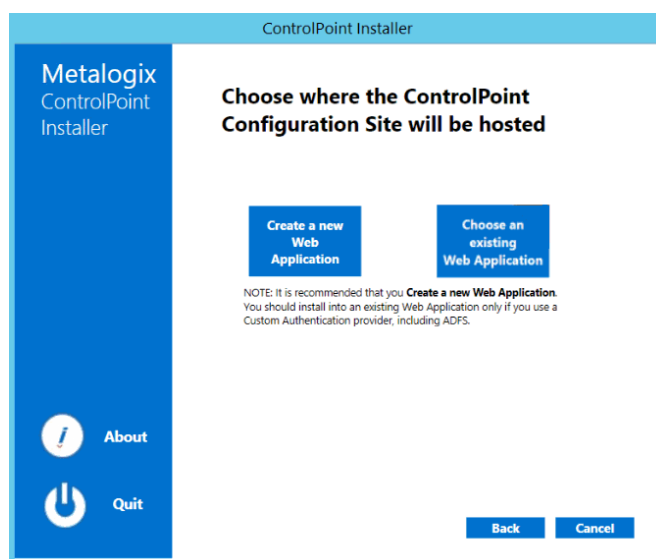


**IMPORTANT:** Update the connection string *only* if your SQL connection requires the addition of one or more custom keywords. For example, if you are using authentication with encryption and a self-signed server certificate, you would need to add **Encrypt=yes;TrustServerCertificate** to the string. Refer to the Microsoft article [Using Connection String Keywords with SQL Server Native Client](#) for more information.

- b) Click **[Test Connection]**.

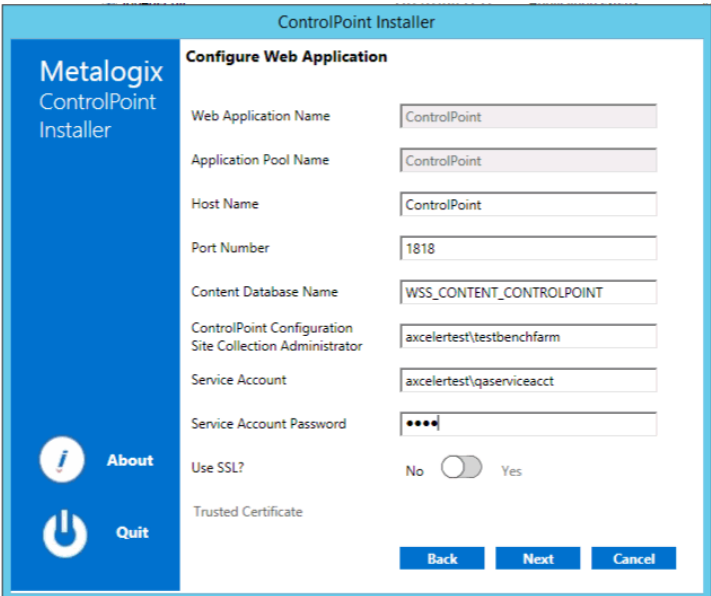
Note that, if the connection is not successful, the parameter that caused it to fail will be identified.

- 11 Click **[Create]** (or if you are using an existing xcAdmin database, **[Update]**).
- 12 After the installer has created the new database (or updated an existing database), click **[Next]**.
- 13 Use the information in the following table to determine the appropriate action to take to **Choose where the ControlPoint Configuration Site will be hosted**.



NOTE: It is recommended that you *always* Create a new Web Application, [unless special circumstances apply](#).

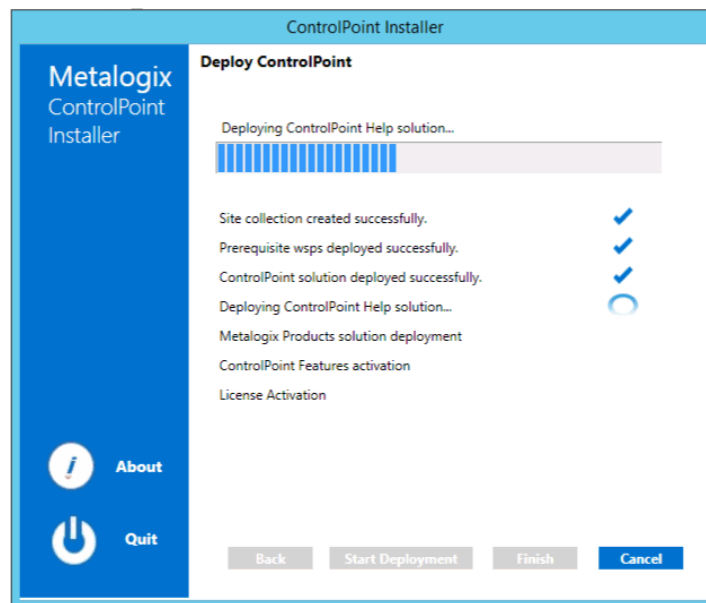
If you want to ...	Then ...
create a new Web application to host the ControlPoint Configuration Site Collection	<p>a) Select <b>Create a new Web Application</b>.</p> <p>b) For <b>Host Name</b>, if different from the default (the machine name), enter the host header (alias) that will be used.</p> <p>NOTE: If a host header is entered, the installer will create both the alternate access mappings in Central Administration and bindings in IIS.</p> <p>c) For <b>Port</b>, either</p> <ul style="list-style-type: none"> <li>▪ accept the default value (1818)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>▪ enter a different, unused Port number. (It is strongly recommended that you <i>not</i> install ControlPoint on Port 80, as you will encounter complications during setup. If you are using host headers and want to redirect ControlPoint to a port that is</li> </ul>

If you want to ...	Then ...
	<p>currently in use (including Port 80), you can do so after completing the installation.</p> <p>d) If different than the default (the currently logged in account), specify the <b>Service Account</b> under which you want the ControlPoint Web application to run.</p> <p>REMINDER: If your databases reside on a different server, then the Service Account must be a domain account.</p> <p>e) For <b>Content Database Name</b>, either</p> <ul style="list-style-type: none"> <li>accept the default value (WSS_CONTENT_CONTROLPOINT)</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>enter a different content database name</li> </ul> <p>f) Specify a <b>ControlPoint Configuration Site Collection Administrator</b> account and <b>Service Account</b>, and enter the <b>Service Account Password</b>.</p> <p>g) If the server is configured for SSL and you want it to be used to access ControlPoint, for <b>Use SSL?</b> select <b>Yes</b>, then select a <b>Trusted Certificate</b>.</p> 
create the ControlPoint Configuration Site Collection in an existing Web application	<p>a) Select <b>Choose an existing Web Application</b>.</p> <p>b) Select an existing Web application from the list, then click <b>[Proceed]</b>.</p>

If you want to ...	Then ...
	<div data-bbox="683 293 1369 864"> </div> <p>The Configure Web Application dialog is populated with the configuration settings for the selected server. (Note that ControlPoint uses the selected Web application's Application Pool identity account as the Service Account).</p> <p>c) Specify a <b>ControlPoint Configuration Site Collection Administrator</b> account.</p> <p>d) If the server is configured for SSL and you want it to be used to access ControlPoint, for <b>Use SSL?</b> select <b>Yes</b>, then select a <b>Trusted Certificate</b>.</p> <div data-bbox="667 1330 1385 1924"> </div>

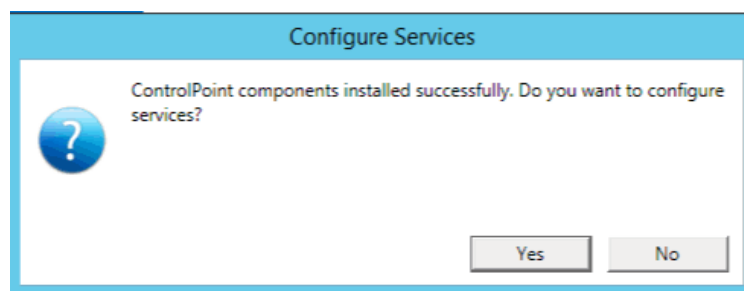
14 Click **[Next]**.

15 Click **[Start Deployment]**.



16 When the deployment has completed, click **[Finish]**.

The Configure Services dialog displays, asking if you want to configure services.



17 If you want to configure services immediately, click **[Yes]** and continue with [Configuring ControlPoint Services](#).

NOTE: You can also configure services at a later time by launching the Configuration Wizard from the server on which ControlPoint is installed.

## Configuring ControlPoint Services

Toward the end of ControlPoint configuration process you have the option to configure the following Windows service(s):

- The **ControlPoint Discovery Service** is an alternative to the (default) ControlPoint Full Discovery timer job, which runs from SharePoint Central Administration. The ControlPoint Discovery Service runs as a Windows Service, and is especially suited to very large SharePoint environments as it can significantly reduce Discovery run time.

AND/OR

- If Sensitive Content Manager is installed in your environment, **ControlPoint Sensitive Content Manager (SCM) Services** will allow you to use it within ControlPoint:

- as a means of checking for:
  - Content Analysis (CA) jobs ready to be uploaded from ControlPoint to Sensitive Content Manager for scanning.

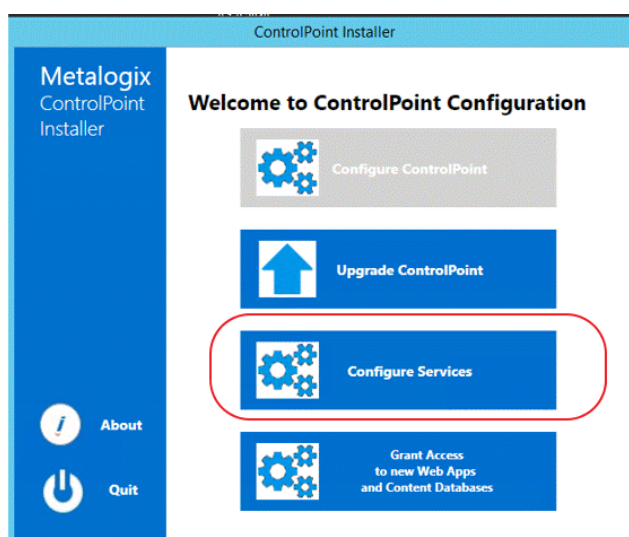
AND

- Scan results ready to be downloaded from Sensitive Content Manager to ControlPoint for further action.

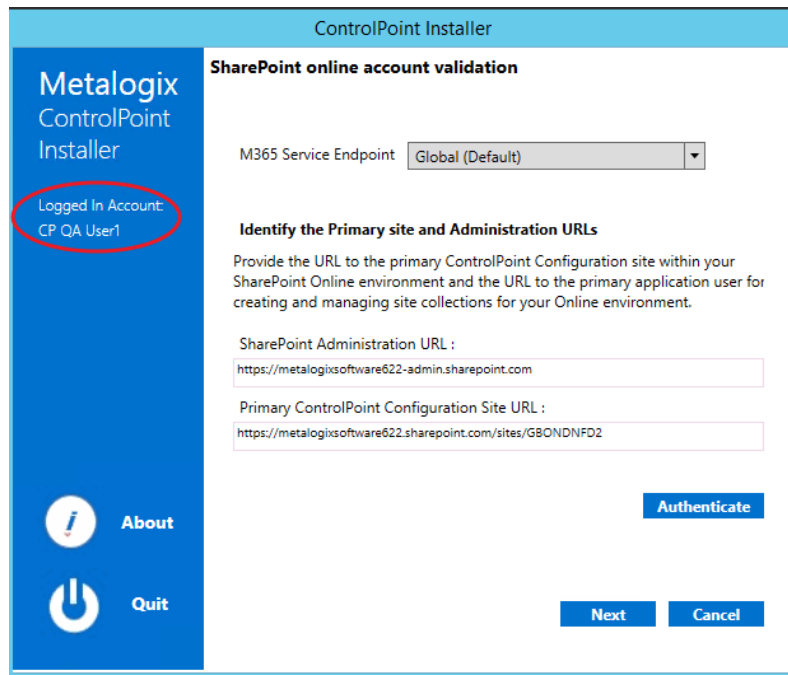
AND

- Because they support multi-threading, SCM Services are especially suited to very large content analysis jobs.

NOTE: If you want to configure services at a later time, you can do so by launching the Configuration Wizard from the server on which ControlPoint is installed (using the same used to install the ControlPoint application). After you have verified the Wizard has finished checking installed components, select **Configure Services**.

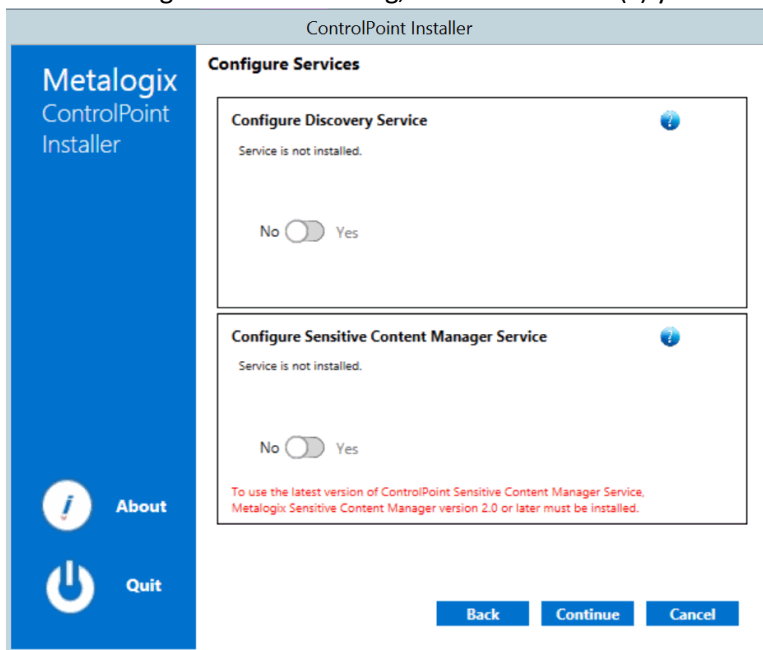


If you do choose to perform this action at later time, you will be prompted to complete the **SharePoint online account validation dialog** and authenticate using the Office 365 account used at the time ControlPoint was installed (which must be a Global Administrator for the tenant).



## To configure ControlPoint Services:

- 1 On the Configure Services dialog, select the service(s) you want to configure.



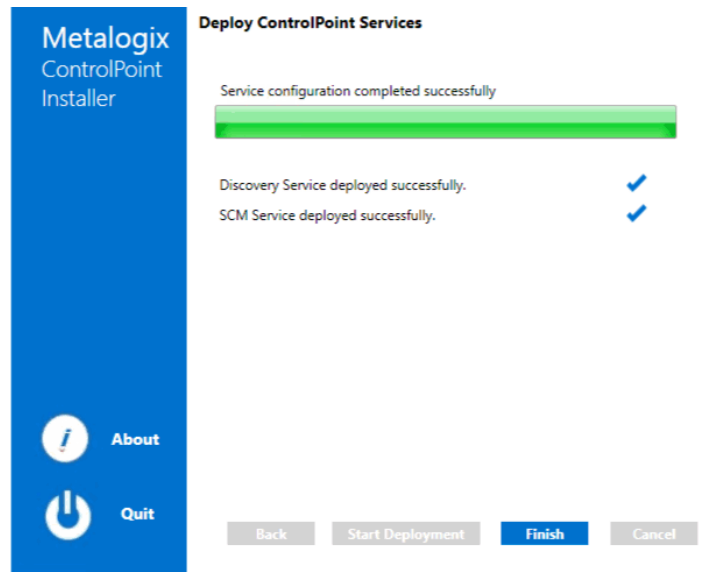
### IMPORTANT:

- The Service Account must meet all of the requirements of the ControlPoint Service Account, as well as permission to **Run as a Service**.
- Keep in mind that the latest version of ControlPoint Sensitive Content Manager Service will only work with version 2.0 or later of Metalogix Sensitive Content Manager.

- 2 Select the service(s) you want to configure.

- 3 Click **[Continue]**.
- 4 Click **[Start Deployment]**.

The installer deploys the selected Windows service(s).



- 5 When the services have been successfully deployed, click **[Finish]**.

## Additional Setup Requirement for the ControlPoint Discovery Service

Before you can use the ControlPoint Discovery Service for the first time, you must also perform the following configuration tasks on the General tab of the Discovery Setup application (located, by default, in the folder `C:\Program`

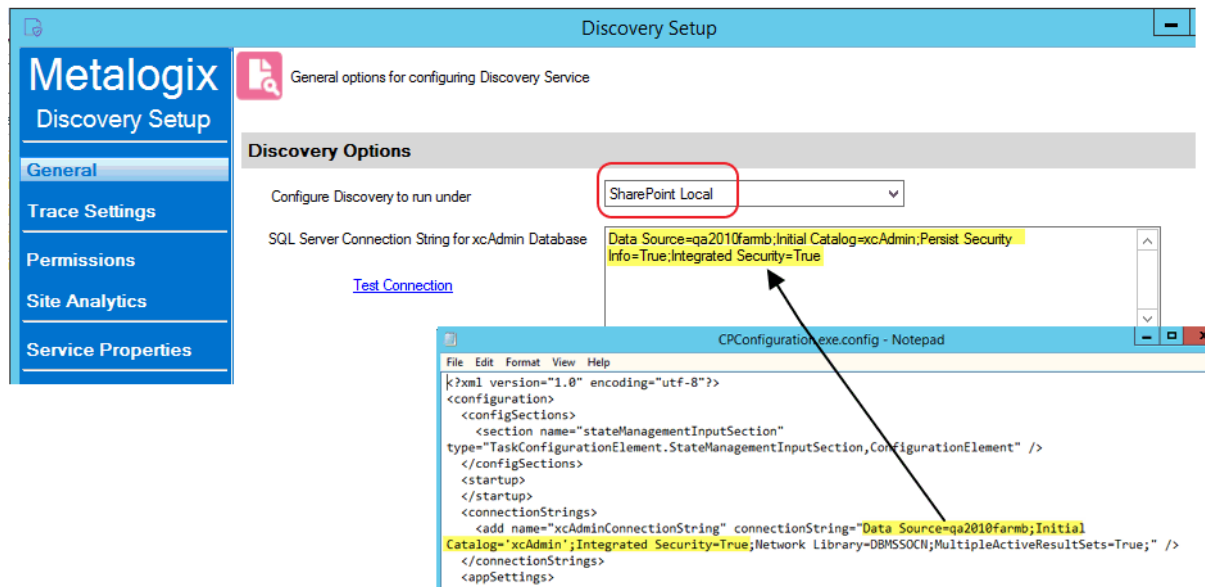
`Files\Metalogix\ControlPoint\ControlPointFeatures\Services\Discovery`):

- For **Configure Discovery to run under**, select **SharePoint Local**, and
- Add the **SQL Server Connection String for xcAdmin Database**.

NOTE: You can copy the Connection String from the file **CPConfiguration.exe.config**, located, by default, in the folder `C:\Program`

`Files\Metalogix\ControlPoint\ControlPointFeatures`. Use the portion of the string that starts with the words **Data Source** and ends with **Integrated Security = <value>**.





You can also change a service's default settings from its Setup application. Refer to the *ControlPoint Administration Guide* for complete details.

## Additional ControlPoint Configuration Tasks

if you have more than one Web front-end server in your farm, once the ControlPoint application has been installed and configured on the first Web front-end server in your SharePoint farm, SharePoint automatically propagates the ControlPoint application to all of them. However, you will need to [Configure ControlPoint for each additional Web front-end server in your farm](#), both when installing ControlPoint for the first time and whenever a new Web front-end server has been *added* to your farm).

You can perform the following tasks as needed:

- If you have not already done so during the installation of the ControlPoint application, manually configure host headers and/or alternate access mappings.
- If you use alternate authentication providers in your farm, configure ControlPoint to recognize them.

**REMINDER:** Each farm in a multi-farm installation has its own copy of the ControlPoint application. Therefore, if you have installed ControlPoint on multiple farms, you must perform the entire configuration and setup process for each farm.

For information on performing additional ControlPoint management tasks (such as managing ControlPoint users and groups, and making ControlPoint available to business users), refer to *The ControlPoint Administration Guide*.

## Configuring ControlPoint for Additional Web Front-End Servers

If you have more than one Web front-end server in your farm, SharePoint automatically propagates the ControlPoint application to all of them.

### Enabling Session Affinity for Load Balancing

If the ControlPoint application is to be accessed behind a load balancer, Session Affinity (“Sticky Sessions”) should be enabled for the ControlPoint Web Application on each server. Otherwise, ControlPoint analyses may fail to complete. (Note that the method for enabling Site Affinity will vary, depending on your load balancer).

---

# Launching ControlPoint

Use one of the following options to start the ControlPoint application.

## From your workstation browser:

Enter **http://<server\_machine\_name>:<port\_number>** or **<host\_name>/\_layouts/axceler/xcMain.aspx**.

(The server machine name is the name of the machine on which ControlPoint is installed. 1818 is the default port number for the ControlPoint Web application.)

NOTE: If you are a ControlPoint Application Administrator logging in for the first time, complete the login screen using the account that was designated as the ControlPoint Site Collection Administrator account at the time the ControlPoint application was installed.

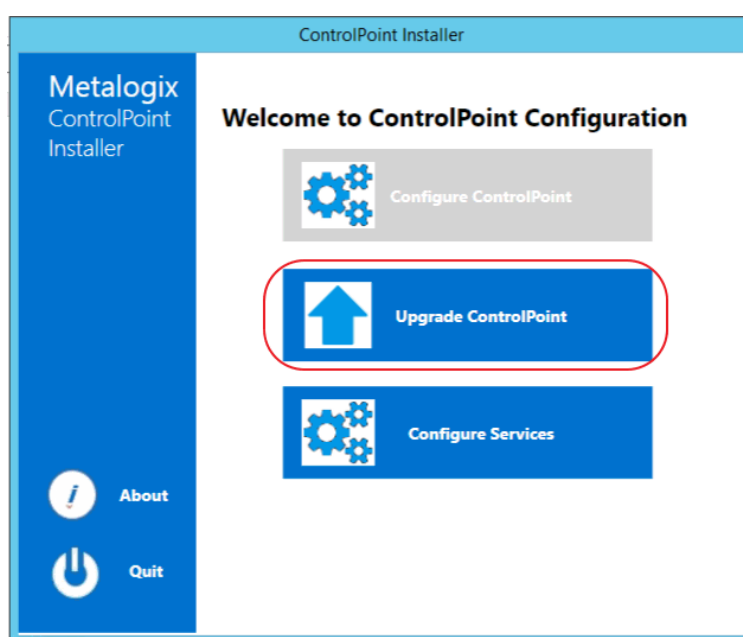
## From the server on which ControlPoint is installed:

- 1 Log into the server using the account that was designated as the ControlPoint Service Account at the time the ControlPoint application was installed.
- 2 From the Windows Start menu, choose **Metalogix > ControlPoint > Launch ControlPoint Application** or click the **Launch ControlPoint** desktop icon.

# Upgrading from a Previous Version of ControlPoint

If you are upgrading from an earlier version of ControlPoint, the upgrade process is the same as that for [First Time Installation and Configuration](#), with the following exceptions:

- after installing the new files, you will be given the option to **Upgrade ControlPoint**



- the license key, ControlPoint Service (xcAdmin) database, and ControlPoint Configuration site will be retained and updated, and
- You will be unable to overwrite the ControlPoint Service Account or connection string.

**NOTE:** If you need to update the connection string after an upgrade, you can do so via the ControlPoint Configuration Setting SQL Server Connection String for xcAdmin Database (xcAdmin ConnectionString). Refer to the *ControlPoint Administration Guide* for details.]

- if you have installed Discovery and/or Sensitive Content Manager Services prior to version 8.3, they will be recreated in the folder `C:\Program Files\Metalogix\ControlPoint\ControlPointFeatures\Services`, and all settings (including the Connection String), will be preserved.
- If, prior to version 8.0, you installed ControlPoint into an existing Web application, it is no longer necessary to use a separate, scripted installation kit to perform an upgrade.

**IMPORTANT:** If you are upgrading ControlPoint Sensitive Content Manager Service, version 2.0 or later of Metalogix Sensitive Content Manager must be also be installed if you want to continue to

use it. An earlier version of Metalogix Sensitive Content Manager will not work with version 8.5 of ControlPoint, and the Schedule Job option is no longer available for use as an alternative to the ControlPoint Sensitive Content Manager Service.

## Updating the xcAdmin Database After SharePoint Has Been Upgraded via a "Database Attach"

If your SharePoint environment has been upgraded using the "database attach" method, you can use the ControlPoint Database Recovery utility to make data that has been collected in the ControlPoint Service (xcAdmin) database available for use in the upgraded environment. The utility accomplishes this by mapping Farm- and Web Application-level GUIDs in the original environment to those in the upgraded environment.

In order to perform this procedure, Discovery must have been run on both the source and upgraded farms. Instructions can be found in the *Metalogix ControlPoint Administration Guide*.

### Data That Can Be Recovered

For any portion of the farm on which the ControlPoint Discovery job has been run, the utility can recover:

- historical information, including site collection storage and activity
- definitions of ControlPoint Policies

NOTE: It will be necessary to *re-register* those policies, which will enable the event handlers that actually perform the enforcement.

- Group associations used by the Manage (Linked) SharePoint Groups operation.

NOTE: Associated (linked) group will continue to display in ControlPoint, regardless of whether the content database in which they reside has been migrated.

- Information reported in the ControlPoint Task Audit.
- Scheduled ControlPoint operations.

#### EXCEPTIONS:

- Scheduled jobs to restore permissions will remain but will fail because permissions backups are not recovered.
- Set Site Properties operations will run if the operation includes the setting of icons or theme.
- For Set List Properties operations, the template URL may not be properly reset for the new environment.
- Any job that references content that has not been migrated will fail until that content that *has* been migrated.

## Data That Cannot Be Recovered

The utility will *not* recover the following:

- User-specific information (such as last temporary location use in Copy/Move operations).
- Permissions backups.

## Prerequisites

Before running the ControlPoint Database Recovery Utility, ensure that:

- the upgraded farm has been created
- ControlPoint has been installed and configured on the upgraded farm (with the existing xcAdmin database specified as the ControlPoint Service (xcAdmin) Database)
- The xcAdmin database is accessible to software running on the upgraded farm
- The content databases for which you want to run the utility have been attached and imported

NOTE: If you are attaching content databases in stages, the utility can be re-run as needed. Remember to also run Manage ControlPoint Licenses for newly attached content databases.

- ControlPoint Discovery has been run on all portions of the upgraded farm for which you want to recover xcAdmin data

The utility assumes that if more than one content database is associated with a Web application, those content databases will continue to be associated with the same Web application. If content databases are reorganized or regrouped, the utility will not work properly.

## To run the ControlPoint Database Recovery Utility:

- 1 Launch a browser session and enter the following url:

**http://<server\_name>:<port\_number>/\_layouts/axceler/xcControlPointDatabaseRecovery.aspx**

where <server\_name> is the name of either the server you are upgrading *to* or the server you are upgrading *from* and <port\_number> is the number of the port that hosts the ControlPoint Web application (1818 is the ControlPoint default value).

ControlPoint Database Recovery > Select parameter(s) to act on

Current Farm

Recovered Farm

<Select>

<Select>

- From the **Current Farm** drop-down, select the farm *to which* content databases have been imported (that is, the upgraded farm)..

### Current Farm

NOTE: If the upgraded farm does not appear in the drop-down, make sure that:

- the ControlPoint Service (xcAdmin) database of the old farm has been designated as the Database Server for the upgraded farm, and
  - Discovery has been run on some portion of the upgraded farm.
- From the **Recovered Farm** drop-down, select the farm *from which* the content databases were imported.

### Recovered Farm

Two sets of drop-downs display, which enable you to map Web applications in the old farm with corresponding Web applications in the upgraded farm.

- 4 For each Web application whose ControlPoint xAdmin data you want to recover, map the **Current Web Application** to its corresponding **Recovered Web Application**.

Current Farm	Recovered Farm
2013SharePoint (cc62398c-a49d-4b84-a4f0-d72e9610dca1)	2010SharePoint (9b6967dd-1205-4294-a660-b75e710cede4)
Current Web Application	Recovered Web Application
<Select>	<Select>
<Select>	<Select>
<Select>	<Select>
<Select>	<Select>
<Select>	<Select>
<Select>	<Select>
<Select>	<Select>
<Select>	<Select>
<Select>	<Select>

Note that the **Recovered Farm** list may include the names of Web applications that no longer exist.

- 5 When you have finished mapping Web applications, click **[Run Now]**.

Note that it may take some time for the progress indicator to appear. When the operation is completed, a ControlPoint Task Audit is generated for the action and displays in the Results section.



# Moving ControlPoint to A Different Web Front-End Server

If the need arises to move the ControlPoint application from the Web front-end server on which it was originally installed (for example, the machine may have become nonoperational or is being decommissioned), you can install it on a different Web front-end server using the following procedure.

## To move ControlPoint to a different Web front-end server:

- 1 In Central Administration, change the url in the default zone for the ControlPoint Web application to a url that includes the new machine name and port number that has already been specified for the ControlPoint Web application (1818 is the ControlPoint default).

## Edit Internal URLs

### Edit Internal URL

Change the zone that this URL is associated with.

URL protocol, host and port

Zone

**NOTE:** It is important to complete this step *before* installing on the new Web front-end to allow the installer to recognize that the Web application that hosts the ControlPoint Configuration Site Collection exists within the context of the new machine name.

- 2 Install, configure, and activate ControlPoint on the new Web front-end using the instructions for [First Time Installation and Configuration](#). Provide all of the same information used for the original installation— Service Account credentials, port number, location of the ControlPoint Service database, and so on.

The installer will find and re-use the existing ControlPoint Configuration site and ControlPoint Service (xcAdmin) database, so all settings and historical data will be preserved.

---

# Removing (Uninstalling) ControlPoint

Use the following procedure if you want to remove ControlPoint from your farm.

Note that you will have the option to either retain or remove the following components (you may want to keep some components if, for example you plan to reinstall ControlPoint at a later time or want to archive the data):

- the ControlPoint Services (xcAdmin) database

NOTE: Remember to retain the xcAdmin Database if you are using ControlPoint in a multi-farm environment and want to continue to use it to manage other farms

- the ControlPoint Web Application and Site Collection
- any existing ControlPoint policies

## When removing installed components:

Make sure that you:

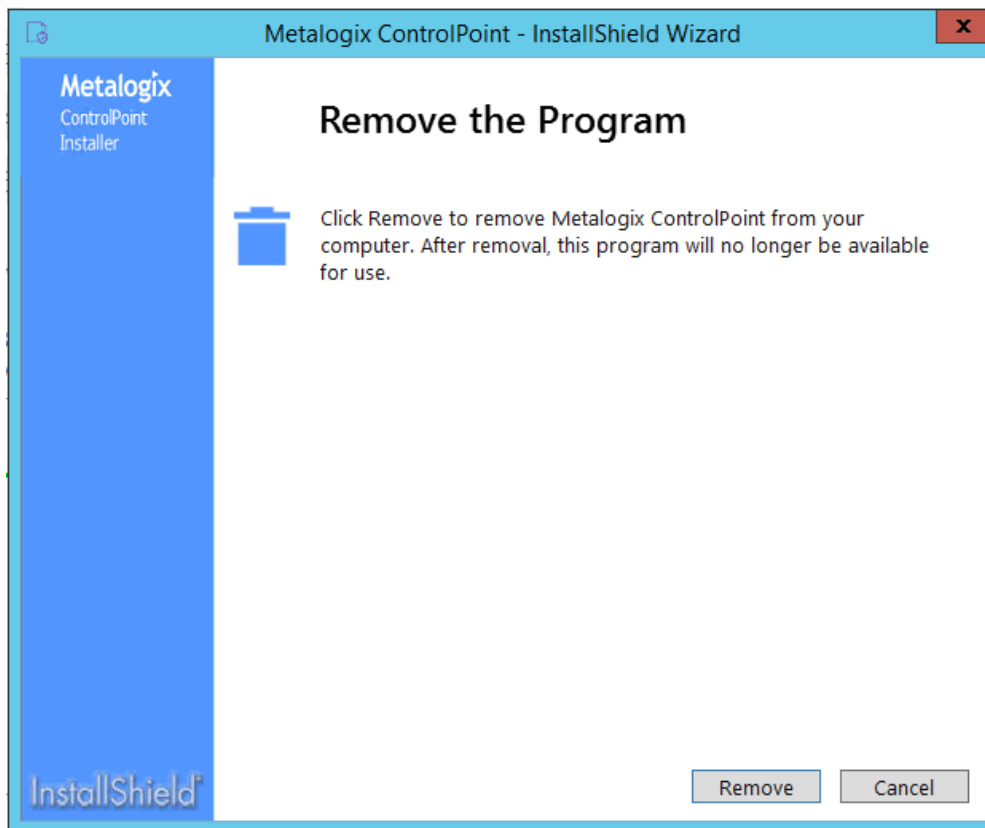
- run the installer on the Web front-end server on which the original installation was performed, and
- log in using the account from which the original installation was run.

## To launch the installer:

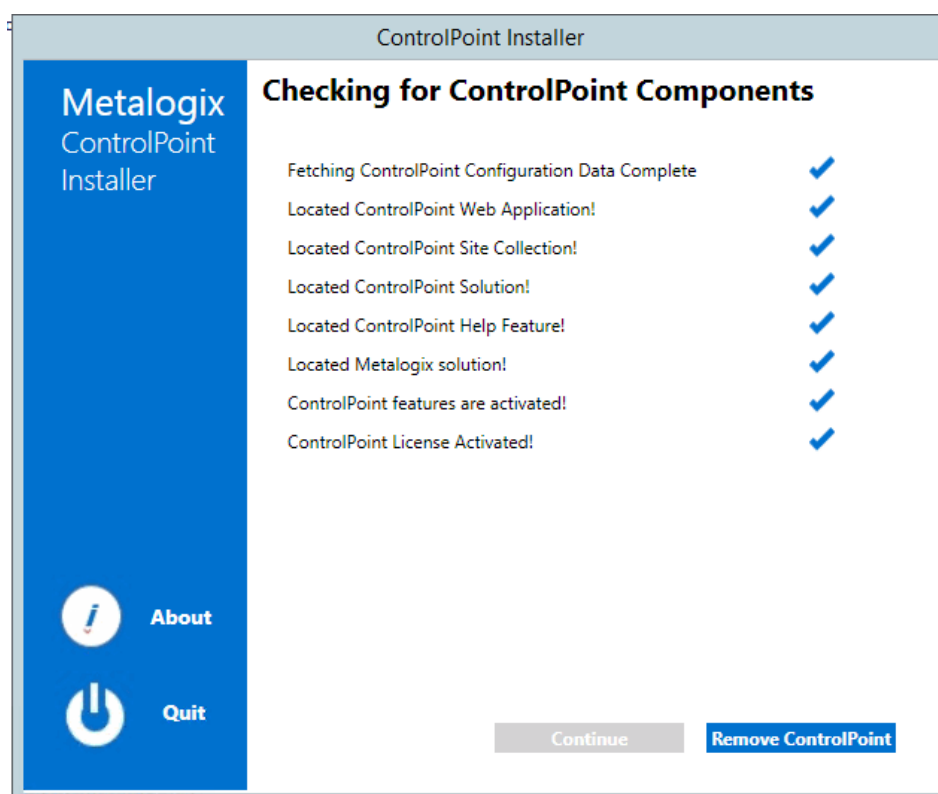
From the Control Panel Programs and Features select **Metalogix ControlPoint** and choose **Uninstall**.

## To remove (uninstall) ControlPoint:

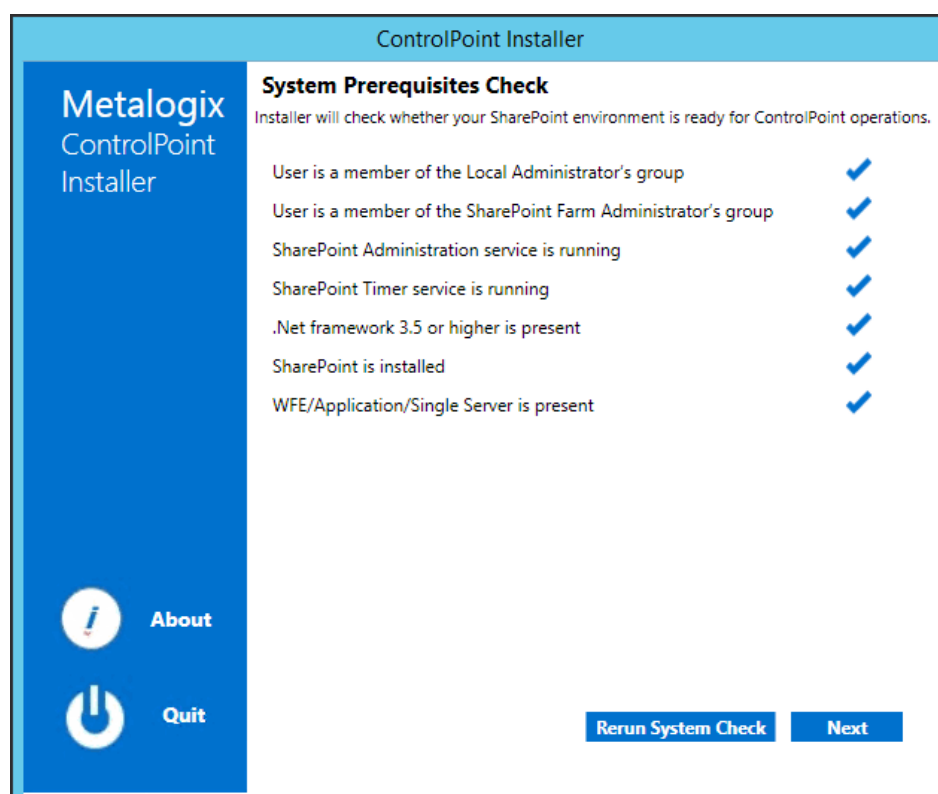
- 1 From the Remove Program dialog click **[Remove]**.



The installer checks for ControlPoint Components.

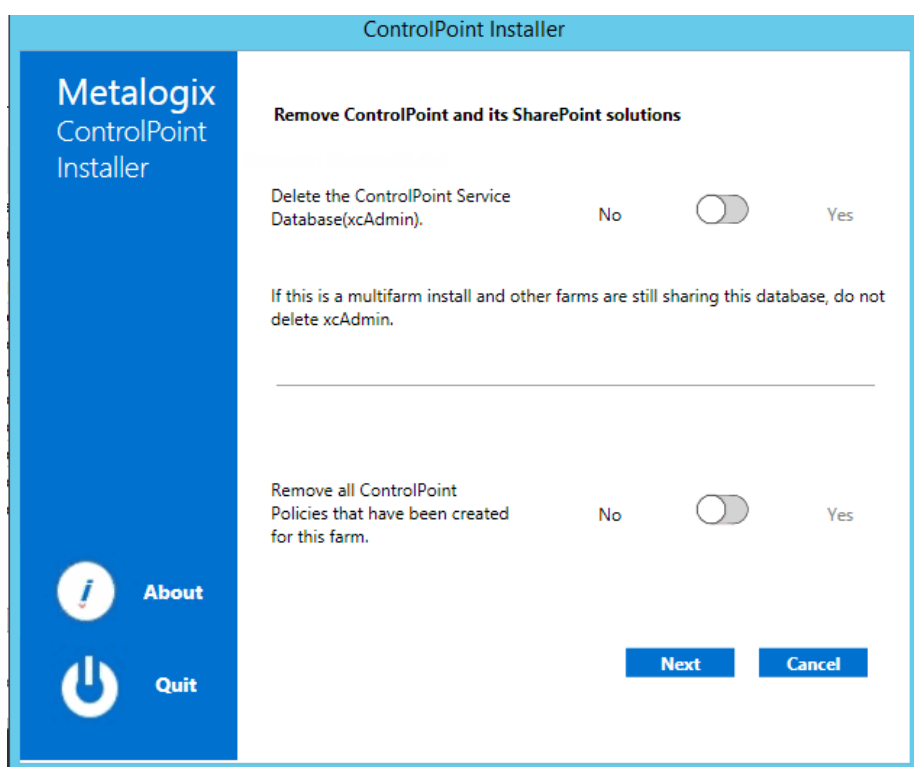


- Click **[Remove ControlPoint]** to display the system Prerequisites Check dialog.



NOTE: If any of the components to not pass the system check, you will have the opportunity to fix them and then **[Rerun System Check]**.

- Click **[Next]** to display the **Remove ControlPoint and its SharePoint solutions** dialog.



- 4 Use the information in the following table to determine the appropriate options to select for **Delete the ControlPoint Service Database (xcAdmin)**.

If ...	Then ...
<ul style="list-style-type: none"> <li>you are using ControlPoint in a multi-farm environment and want to continue to use it to manage other farms</li> </ul> OR <ul style="list-style-type: none"> <li>you plan to reinstall ControlPoint in your environment</li> </ul>	for <b>Delete the ControlPoint Service Database (xcAdmin)</b> , select <b>No</b> .
<ul style="list-style-type: none"> <li>you are permanently removing ControlPoint from a single-farm environment</li> </ul> OR <ul style="list-style-type: none"> <li>you have a multi-farm installation of ControlPoint and you want to permanently remove the application from all farms</li> </ul>	for <b>Delete the ControlPoint Service Database (xcAdmin)</b> , select <b>Yes</b> .

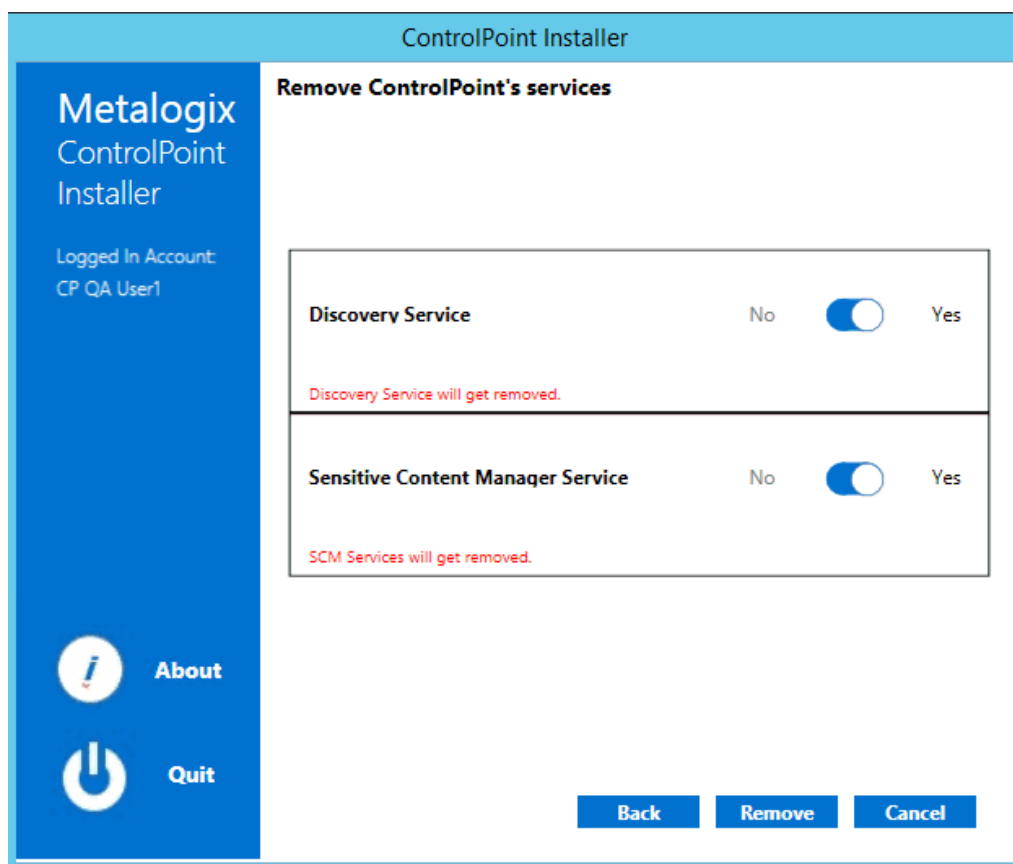
- 5 Use the information in the following table to determine the appropriate option to select for **Remove all ControlPoint Policies that have been created for the farm**.

If ...	Then ...
<ul style="list-style-type: none"> <li>you plan to reinstall ControlPoint in your</li> </ul>	for <b>Remove all ControlPoint Policies that have been created for the farm</b> , select <b>No</b> .

If ...	Then ...
environment and you want any existing ControlPoint Policies OR <ul style="list-style-type: none"> <li>no ControlPoint Policies have been created for your farm</li> </ul>	NOTE: If you chose to Delete the ControlPoint Services Database (xcAdmin), you will be unable to select this option.
you are permanently removing ControlPoint from the farms	for <b>Remove all ControlPoint Policies that have been created for the farm</b> , select <b>Yes</b> .

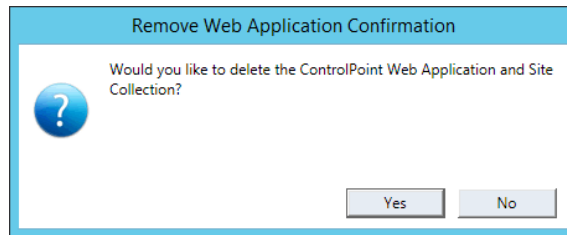
6 Click **[Next]**.

NOTE: If you have configured the ControlPoint SCM Service and/or Discovery Service, you will then be prompted to **Remove ControlPoint's services**. Note that the only selectable option is **Yes** (that is, these services cannot be retained if the ControlPoint application is not also installed).



7. Use the information in the following table to determine the appropriate option to select for **Remove Web Application Confirmation**.

NOTE: If you installed ControlPoint into an *existing* Web application (which is also known as a Non-Standard installation) a **Remove Site Collection Confirmation** prompt displays instead.



If ...	Then ...
you plan to reinstall ControlPoint in your environment and you want to retain ControlPoint permissions and any customizations made to menus and settings	click <b>[No]</b> .
you are permanently removing ControlPoint and/or you do not want to retain ControlPoint permissions and customizations	click <b>[Yes]</b> .

- 7 Click **[Complete]** to begin the ControlPoint Uninstallation.
- 8 When the *The program unistall is complete.* message displays, click **[Finish]**.

---

# The ControlPoint Installation Logs

The following installation log files are located on the machine on which ControlPoint was installed for the farm, in the directory `C:\Program Files\Metalogix\ControlPoint\ControlPointFeatures\Logs`:

- `RollingAppenderDebugInfo` tracks the progress of the installation.
- `RollingAppenderWarnErrorFatal.txt` and `log.txt` record errors encountered during the installation.



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## 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 Office 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).

## Contacting Quest

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## 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
- 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