

Metalogix<sup>®</sup> ControlPoint 8.6

## **for Office 365 Installation Guide**



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# Contents

<b>Preface .....</b>	<b>4</b>
<b>System Requirements .....</b>	<b>5</b>
<b>Using ControlPoint to Manage Multiple Farms .....</b>	<b>8</b>
<b>Prerequisite for Using ControlPoint Services with TLS 1.2 .....</b>	<b>12</b>
<b>Using Microsoft Modern Authentication with ControlPoint Online .....</b>	<b>13</b>
<b>First Time Installation and Configuration .....</b>	<b>14</b>
Installing ControlPoint Online Files .....	16
Configuring the ControlPoint Online Application .....	18
Configuring ControlPoint Services .....	28
Registering the ControlPoint Online App for Modern Authentication .....	32
Launching ControlPoint Online .....	34
<b>ControlPoint Full Discovery and Scheduler Jobs .....</b>	<b>35</b>
<b>Upgrading from a Previous Version of ControlPoint Online .....</b>	<b>37</b>
<b>Removing (Uninstalling) ControlPoint Online .....</b>	<b>39</b>
<b>Appendix: Configuring IIS if SharePoint is not Installed .....</b>	<b>44</b>
<b>Troubleshooting .....</b>	<b>47</b>
ControlPoint Log Files .....	47
Installation Log (xcControlPoint.log) .....	47
ControlPoint Administration Log (xcAdmin.log) .....	47
Deployment of ControlPoint Online Configuration Site Fails During Installation .....	48
I am Continually Prompted to Log Into ControlPoint but the Login Never Completes .....	48

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# Preface

This guide contains instructions for installing and configuring Metalogix ControlPoint for Office365 SharePoint Administration (alternatively called ControlPoint Online). ControlPoint Online is a Web-based application that offers a proactive, integrated solution for managing site collections within a hosted SharePoint environment.

# System Requirements

## On-Premises/Azure VM Server Requirements

**IMPORTANT:** To install ControlPoint Online in Azure, you must use a dedicated Azure VM. ControlPoint cannot be installed as an Azure service app.

- **Windows Server 2012 Service Pack 3**, 64-bit, **Windows Server 2016**, or **Windows 2019** with the IIS role configured.

NOTE: The server can be either dedicated to ControlPoint Online or shared with other functions.

- **Microsoft SQL Server:** SQL Server 2012, 2014 SP1 (64 bit), 2016, or 2019 (to host the ControlPoint Services (xcAdmin) database).

NOTE: ControlPoint can use the same SQL Server instance as SharePoint, but it can also use a separate instance or separate server.

- **.NET framework version 4.5** or later (for use by the installer), and **ASP.NET 4.0** or later.
- To use Discovery and/or Sensitive Content Manager Services, **TLS version 1.2** (preferably with **.NET framework version 4.7**).
- **PowerShell version 3.0** or later.

## Account Requirements

- The **account used to install the on-premises components of ControlPoint Online** must be:
  - a member of the local Administrator's group on the machine where ControlPoint Online is installed
  - added to the security server role `sysadmin` in the SQL server that will be hosting the ControlPoint Services (xcAdmin) database
- The account used to **create the ControlPoint Online site and create/register the ControlPoint Online app** (to allow the use of Modern and Multi-Factor Authentication) must be an O365 Global Administrator.
- The **account that will be used to run ControlPoint** (that is the ControlPoint Service Account) must:
  - be a member of the local Administrator's group on the machine where ControlPoint Online is installed

- have a valid **login** for the **SQL server** that will be hosting the ControlPoint Services (xcAdmin) database. (`sysadmin` rights are not required for this account)
- be a **Site Collection Administrator** for each site collection to be managed using ControlPoint.

NOTE: If you will be [configuring ControlPoint Services](#), the account must meet all of the requirements listed above and have permissions to Run as a Service.

## ControlPoint User Requirements

ControlPoint users must:

- be any of the following:
  - members of the Site Collection Administrators group in site collection that will host the ControlPoint Configuration site as well as in every Site Collection they will be managing using ControlPoint Online.

OR

- a Global Administrator in the Office 365 tenant.

OR

- SharePoint Administrator in the Office 365 tenant.

**IMPORTANT:** Global and SharePoint Administrators who are not also Site Collection Administrators can view the entire SharePoint Hierarchy and perform operations on all site collections via ControlPoint but will be unable to access SharePoint content directly.

- use a compatible **Web browser**:
  - Microsoft Edge
  - Mozilla Firefox version 3 or later
  - Google Chrome (latest public release)
  - Microsoft Internet Explorer (IE) version 10 or later

**EXCEPTION:** When using Internet Explorer build 11.0.9600.18617, report results do not fill the entire results section.

Note that some browsers may have limitations.

## SharePoint Requirements

- Prior to ControlPoint Online installation, a site collection must exist in SharePoint Online to host the ControlPoint Online Configuration Site.
- If SharePoint is not installed on the same server as ControlPoint Online, IIS must be configured to allow the ControlPoint Online Configuration Site to run on the server. See [Appendix: Configuring IIS if SharePoint is not Installed](#) for details.

## Supported Authentication Methods

As of version 8.3.1, ControlPoint Online uses Microsoft Modern Authentication to connect to hosted site collections. Authentication can be based on any of the following methods:

- Separate accounts that are **managed within the hosted environment**  
When this method is used, credentials are passed to and must be verified in the hosted environment in order for ControlPoint to be accessed.

OR

- Using **Azure Active Directory**

OR

- Using **Active Directory Federated Services (ADFS)**

When this method is used, ControlPoint will authenticate with the local ADFS and use that identity to communicate with the hosted environment.

**IMPORTANT:** Currently, ControlPoint users cannot be members of an Office 365 group that was created at the tenant level. The only groups whose members can have permissions in ControlPoint are Security groups.

---

# 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 Web application and ControlPoint Configuration site
- 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>

Installation Type	Guidelines
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> <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>

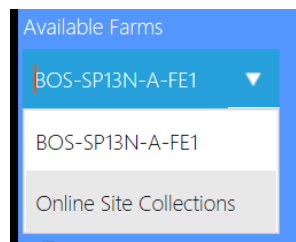
## Special Considerations When Using Different Editions of ControlPoint in a Multi-Farm Environment

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.

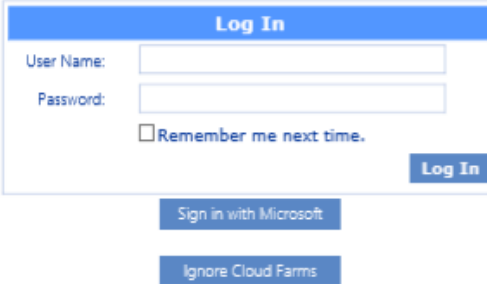
If the multi-farm installation ...	Then for multiple farms to display in the SharePoint Hierarchy ...
includes ControlPoint Standard along with Non-Standard and/or ControlPoint Online	a Standard farm must be the home farm.
consists of only Non-Standard and ControlPoint Online	a Non-Standard farm must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



The image shows a 'Log In' dialog box with a blue header. Inside the dialog, there are two input fields: 'User Name:' and 'Password:'. Below the password field is a checkbox labeled 'Remember me next time.'. A 'Log In' button is located at the bottom right of the dialog. Below the dialog box, there are two additional 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]**.

---

# Prerequisite for Using ControlPoint Services with TLS 1.2

To use Discovery and Sensitive Content Manager services:

- TLS version 1.2 must be enabled on the server where the services are installed

AND

- the .NET Framework must be [configured to support strong cryptography](#) (via the Windows Registry setting **SchUseStrongCrypto**).

Refer to the following Microsoft articles for complete details.

- [Transport Layer Security \(TLS\) best practices with the .NET Framework](#)
- [How to enable TLS 1.2](#)

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# Using Microsoft Modern Authentication with ControlPoint Online

As of version 8.3.1, ControlPoint Online uses [Microsoft Modern Authentication](#) to connect to SharePoint Online. This requires a one-time registration of an app, ControlPoint Online, in the Azure Active Directory, and involves the use of SSL certificates both in IIS (which Microsoft requires to secure the ControlPoint application) and in Azure AD (to allow ControlPoint users to authenticate with Microsoft).

The registration is completed as part as the ControlPoint Online initial installation (or upon an upgrade from version 8.3.0 or earlier). The app can also be registered after the installation, as a separate action. However, ControlPoint Online cannot be run until the app is registered.

NOTE: Once the app is registered, the only time it should ever have to be *re*-registered is if certificate information needs to be changed.

# First Time Installation and Configuration

Metalogix ControlPoint for Office 365 SharePoint Administration (ControlPoint Online) is installed and runs as a .NET application. During installation:

- a dedicated application pool is created in IIS for the primary ControlPoint Configuration site, which is installed under the root site of a hosted site collection
- the ControlPoint Service database (xcAdmin) is created for configuration information and analysis data
- the ControlPoint Online App is registered with Microsoft Azure to allow the use of Modern Authentication

## Before You Begin

- The site collection that will host the ControlPoint Configuration Site must exist on the host and be in the English language.
- 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 if you want to be able to activate your ControlPoint license online.

Have the following information ready (you may wish to record it in the spaces provided):

- The URL for the site collection that will host the primary ControlPoint Configuration Site\* and the URL of the SharePoint Administration site hosting the site collection.

**ControlPoint Configuration Site Collection URL:**

\_\_\_\_\_

**SharePoint Administration Site URL:**

\_\_\_\_\_

\*REMINDER: The ControlPoint Configuration Site must be created in an English-language site collection.

- The name and port number that you want IIS to use to manage the ControlPoint Configuration Site (The default port number is 2828, but you can set it to any available value.)

**Web Site Name:** \_\_\_\_\_

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

- The account under which you want the application pool for the ControlPoint Configuration Site to 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.)

**App Pool Service Account:** \_\_\_\_\_

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

- The email credentials that you want to use as the "from" account for correspondence sent on behalf of ControlPoint.

**Local SMTP Server:** \_\_\_\_\_

**Email address:** \_\_\_\_\_

- The name of the SQL server that will host the ControlPoint Service (xcAdmin) database, as well as the authentication method to be used:  
(This is where the content database for the ControlPoint application will reside.)

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

**Windows Authentication**

OR

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

- **The ControlPoint Online license activation code:** \_\_\_\_\_
- The Site Collection Administrator account that will be used to create the ControlPoint Configuration Site.

**Site Collection Administrator Account:** \_\_\_\_\_

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

NOTE: If you do not already have a license activation code, contact Quest to obtain one.

## First Time Installation and Configuration Process

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

- [Installing the ControlPoint Online Files.](#)
- [Configuring the ControlPoint Online Application.](#)
- Optionally, [configuring ControlPoint Services.](#)
- [Registering the ControlPoint Online app.](#)

# Installing ControlPoint Online 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:

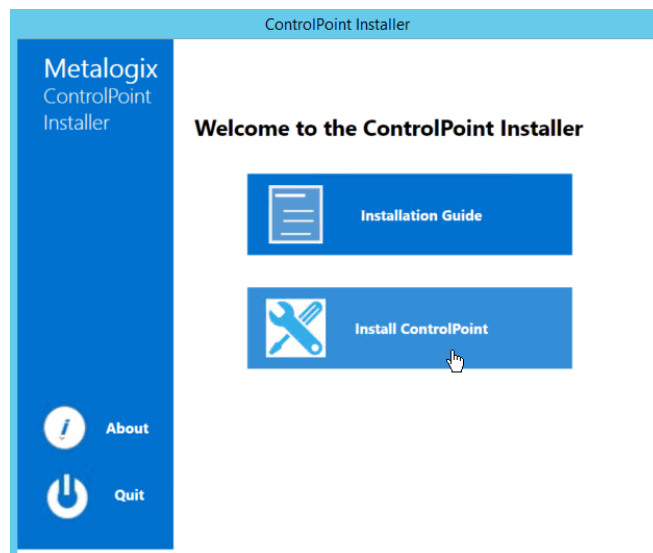
REMINDER: If UAC enabled on your server, you may have to "Run as Administrator."

- 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.

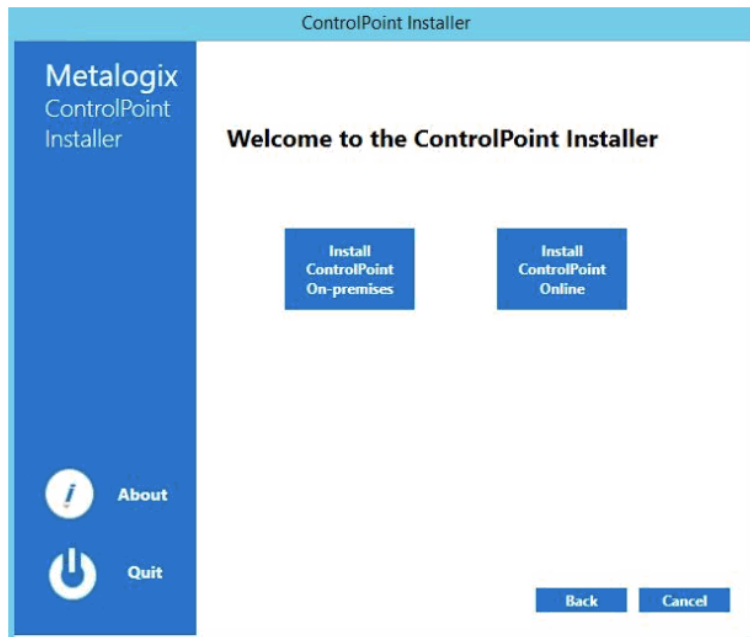
- 2 Click **Install ControlPoint**.



The License Agreement dialog displays.

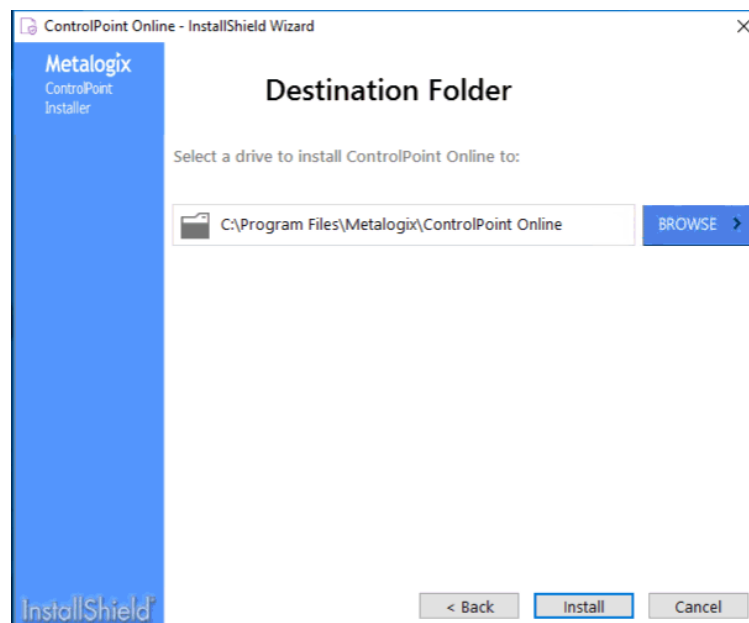
- 3 Read the license agreement. Click **I accept the terms of the license agreement**, then click **[Next]**.
- 4 Select **Install ControlPoint Online**.





NOTE: If SharePoint is not installed or configured on the server, this will be the only selectable option.

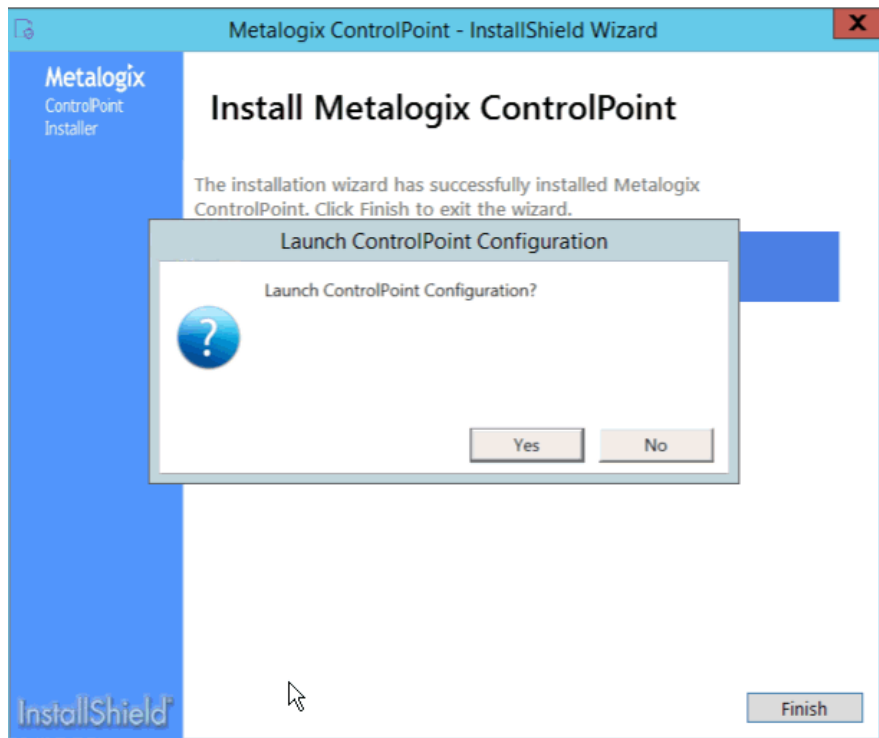
- 5 When the Metalogix ControlPoint InstallShield Welcome dialog displays, click **[Next]**.  
The InstallShield Wizard specifies a default install directory (**C:\Program Files\Metalogix\ControlPoint Online**), but you can click **[BROWSE]** and select a different one.



NOTE: This directory is where the installer will place the files needed to complete the installation.

- 6 Click **[Install]**.

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 Online application at a later time, click **[No]**. You can launch the ControlPoint Online Configuration Wizard from the Start menu or a Desktop shortcut.

7 Click **[Finish]**.

Continue with [Configuring the ControlPoint Online Application](#).

## Configuring the ControlPoint Online Application

metalogixsoftware622-aAfter ControlPoint is installed the application must be configured.

### Summary of ControlPoint Configuration Process

The ControlPoint Configuration Wizard out the following tasks:

- A. **Validates the Office 365 account:** Validates the account that will be used to create the ControlPoint Online Configuration site and creates/registers the ControlPoint Online app. This also allows for the use of Multi-Factor Authentication (MFA).
- B. **Checks for ControlPoint Installed Components.**
- C. **Validates License:** Checks the validity of the license key you enter as well as the terms of the license.

- D. **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.)
- E. **Creates the ControlPoint Online application pool, website, and virtual directory in IIS.**
- F. **Configures the ControlPoint Online website.**

NOTE: If you change the host name, the Configuration Wizard will also create the bindings in IIS, update the redirect URI in the registered ControlPoint Online Application, and updates the ControlPoint Setting 'Inbound ControlPoint Url' to use the host header.
- G. **License Activation:** Activates your ControlPoint license.
- H. **Windows Service Configuration (optional):** If you elect to use server-side Windows Services for Discovery and/or Sensitive Content Manager, installs and configures the service(s) you selected.
- I. **ControlPoint Online Application Registration:** To allow the use of Microsoft Modern Authentication, an app called ControlPoint Online is registered in the Azure Active Directory.

## To configure the ControlPoint Online 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 Online 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 Online Configuration</b>	double-click the ControlPoint Online Configuration desktop icon.

- 2 On the **SharePoint online account validation** dialog:
  - a) Select the applicable **M365 Service Endpoint: Global (Default), GCC, or GCC High.**
  - b) Enter the following urls:
    - For **SharePoint Administration URL**, the url of the primary page for configuring the hosted SharePoint environment.
    - For **Primary ControlPoint Configuration Site URL**, the url of the hosted site collection in which the ControlPoint Configuration site will be created.
  - c) Click **[Authenticate]**.

You will be prompted to sign into the Microsoft Azure portal. Remember, the sign-in account must be both a Global Administrator and a Site Collection Administrator for the site collection that will host the ControlPoint Online Configuration site.

If the validation is successful, the Office 365 account will display as the **Logged In Account** for the remainder of the installation.

ControlPoint Installer

Metalogix ControlPoint Installer

Logged In Account: CP QA User1

SharePoint online account validation

M365 Service Endpoint: Global (Default)

Identify the Primary site and Administration URLs

Provide the URL to the primary ControlPoint Configuration site within your SharePoint Online environment and the URL to the primary application user for creating and managing site collections for your Online environment.

SharePoint Administration URL :  
https://metalogixsoftware622-admin.sharepoint.com

Primary ControlPoint Configuration Site URL :  
https://metalogixsoftware622.sharepoint.com/sites/GBONDNFD2

Authenticate

Next Cancel

3 Click **[Next]**.

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. (→)

ControlPoint Installer

Metalogix ControlPoint Installer

Logged In Account: CP QA User1

Checking for ControlPoint Components

Fetching ControlPoint Configuration Data Complete ✓

MetalogixOnline Application Pool not present →

ControlPoint IIS Website not present →

Virtual Directory not present →

Located ControlPoint O365 Site! →

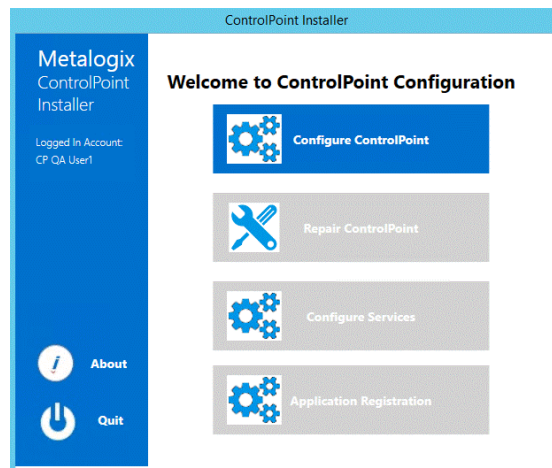
ControlPoint License not activated →

ControlPoint components not found. Press continue to configure ControlPoint

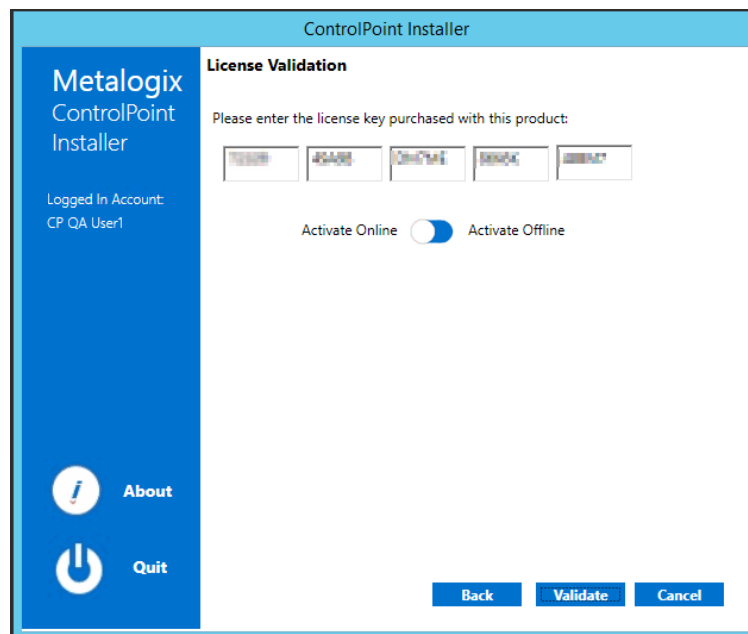
Continue Remove ControlPoint

4 Click **[Continue]**.

- 5 Click **[Configure ControlPoint]**.



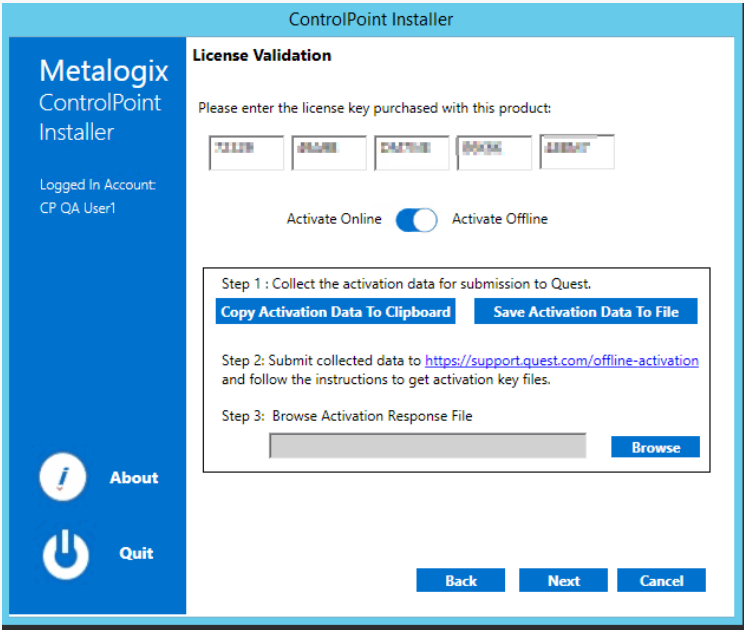
- 6 Enter the license key provided by Quest.



7. 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	a) Select <b>Activate Offline</b> .

If you want to validate the license...	Then ...
	<div data-bbox="627 331 1374 958">  </div> <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> <ol style="list-style-type: none"> <li>From a machine that has internet access, go to <a href="https://support.quest.com/offline-activation">https://support.quest.com/offline-activation</a>.</li> <li>Follow the instructions on the Offline Activation web page to activate your license, using the <b>Upload activation data</b> option.</li> </ol> <div style="border-left: 2px solid #0070C0; padding-left: 10px; margin: 10px 0;"> <p>NOTE: Remember to save the Activation File to a location that is accessible by the machine on which you are installing ControlPoint.</p> </div> <ol style="list-style-type: none"> <li>Return to the ControlPoint Installer License Validation dialog.</li> <li>Use the <b>Step 3: Browser Activation Response File</b> option to select the file returned by Quest.</li> </ol>

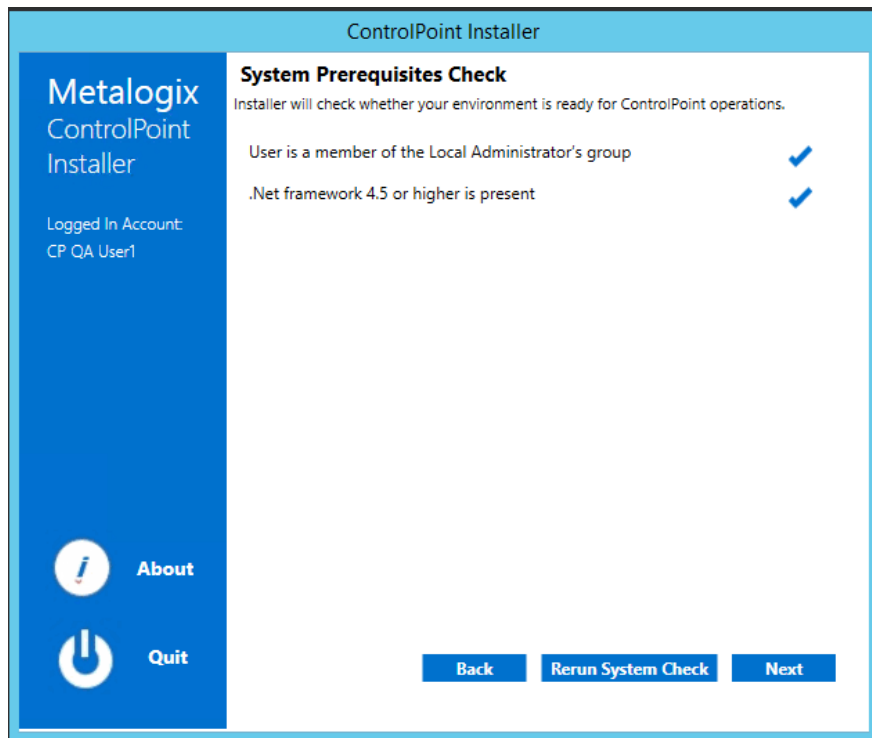
8 Click **[Validate]**.

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

9 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.



10. When all system prerequisites checks have completed successfully, click **[Next]** to display the IIS Configuration dialog.

11 Complete the dialog as follows:

- a) For **Web Site Name**, if different from the default (ControlPoint Online), enter the name that you want IIS to use to manage the site.

NOTE: The name that is entered in this field is for IIS purposes only. The name of the site will appear in SharePoint and ControlPoint under the name ControlPoint Configuration Site.

- b) For **Port number**, either:

- accept the default value (2828)

OR

- enter a different, unused Port number.

- c) For **Host Name**, if different from the default (the machine name), enter the host header (alias) that will be used.

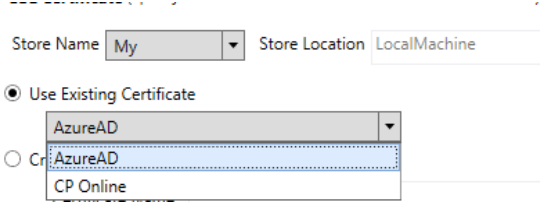
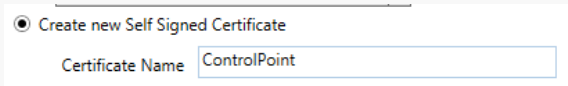
NOTE: If a host header is entered, the installer will also create the bindings in IIS.

- d) Enter the name and password of the Service Account under which you want the application pool that will host the ControlPoint Configuration Site to run.

REMINDER: If your databases reside on a different server, then the Service Account must be a domain account.

- e) For **SSL Certificate** (which Microsoft requires to secure the ControlPoint application), use one of the options described in the following table.

NOTE: The certificate must be located in either the Personal or WebHost store.

If you want to ...	Then ...
use an existing certificate	<ul style="list-style-type: none"> <li>Select a <b>Store Name</b>; either My (for the Personal Store) or WebHosting, from the drop-down.</li> </ul> <p>The <b>Use Existing Certificate</b> drop-down will be populated with available certificates in the selected store.</p> <ul style="list-style-type: none"> <li>Make sure <b>Use Existing Certificate</b> is selected, then select a certificate from the drop-down.</li> </ul>  <p>NOTE: If the ControlPoint Installer cannot find a Certificate in the Store, this option will be disabled.</p>
create a new <i>self-signed</i> certificate (default option)	<p>Select <b>Create new Self Signed Certificate</b>, then enter a <b>Certificate Name</b>.</p>  <p>The ControlPoint installer will create a self-signed certificate file in the local machine Personal store.</p>



ControlPoint Installer

**Metalogix ControlPoint Installer**

Logged In Account:  
CP QA User1

**About**

**Quit**

**IIS Configuration**

**Configure the ControlPoint Online Client Website**

Create 'ControlPoint' Application using Application Pool in IIS

WebSite Name : ControlPoint Online

Port Number : 2828

Host Name : CPO

Specify the service account and password to be used for the application pool. Normally the service account should be a Domain Account.

Service Account(Domain\Username) : axcelertest\qaserviceacct

Password : .....

**SSL Certificate** (Specify the SSL Certificate to use for Modern authentication.)

Store Name My Store Location LocalMachine

☐ Use Existing Certificate

CPO

☒ Create new Self Signed Certificate

Certificate Name

Back Next Cancel

- 12 Click **[Next]** to display the Create the ControlPoint Service (xcAdmin) Database dialog.
- 13 Specify the **Database Server** where you want to host the ControlPoint Service (xcAdmin) database:
  - enter the server name
  - OR
  - click **[Browse]** to choose a different database server.

ControlPoint Installer

**Metalogix ControlPoint Installer**

Logged In Account:  
CP QA User1

**About**

**Quit**

**Create the ControlPoint Service (xcAdmin) Database**

Database Server qax-sp13-db14 Browse

Database Authentication Windows SQL

Account

Password

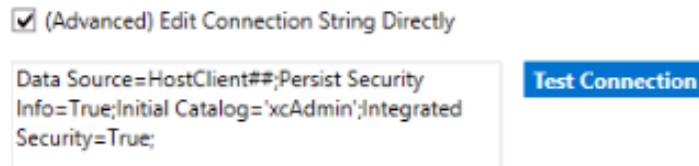
☐ (Advanced) Edit Connection String Directly

xcAdmin database has been upgraded successfully

Back Next Cancel

- 14 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, you can do so by updating the parameter `<connectionStrings>` in the **CPConfiguration.exe.config** file. Refer to the *ControlPoint for Office 365 Administration Guide* for details.

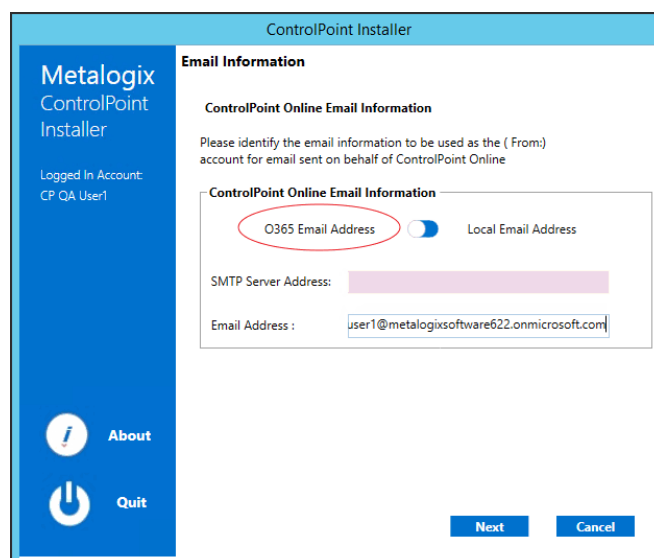


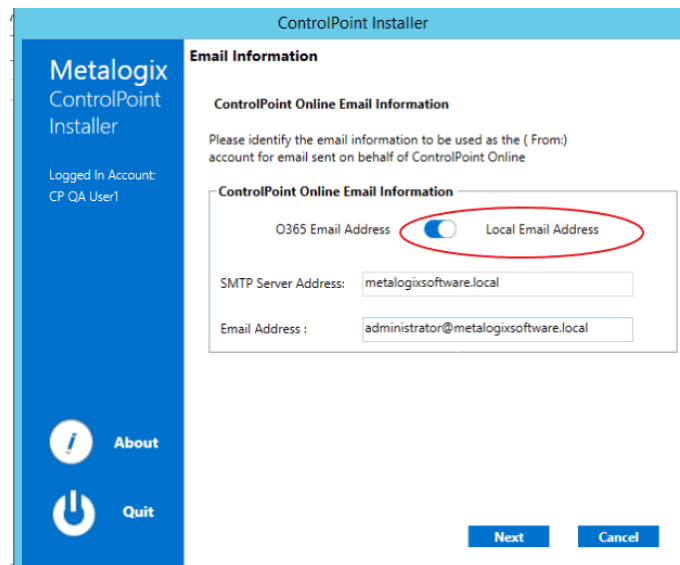
**IMPORTANT:** Update the connection string *only* if your SQL connection requires the addition of one or more custom keywords. For example, if you are using authentication with encryption and a self-signed server certificate, you would need to add **Encrypt=yes;TrustServerCertificate** to the string.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

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

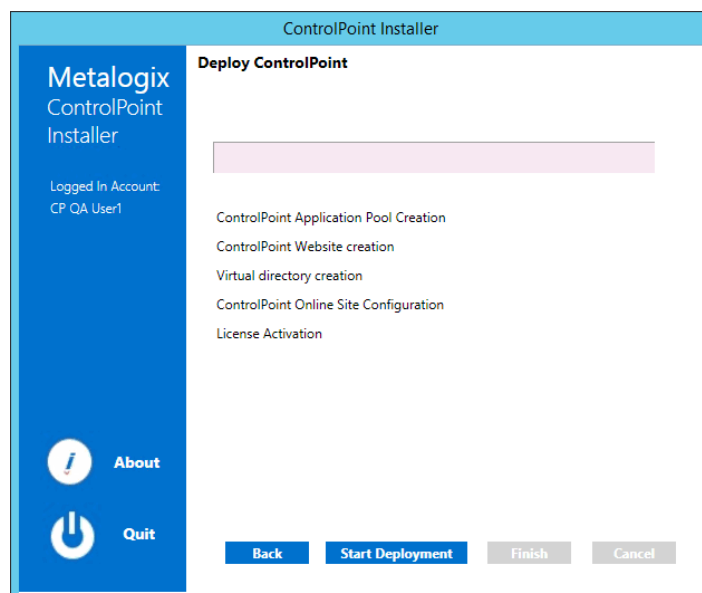
Note that if the connection is not successful, the parameter that caused it to fail will be identified.

- 15 Click **[Create]** (or if you are using an existing xcAdmin database, **[Update]**). After the Configuration Wizard has successfully created the new database (or updated an existing database), click **[Continue Installation]** then click **[Next]**.
- 16 Enter the email information for the **O365 Email Address** or **Local Email Address** (including local SMTP Server Address) that will be used as the "from" account for any correspondence sent on behalf of ControlPoint.

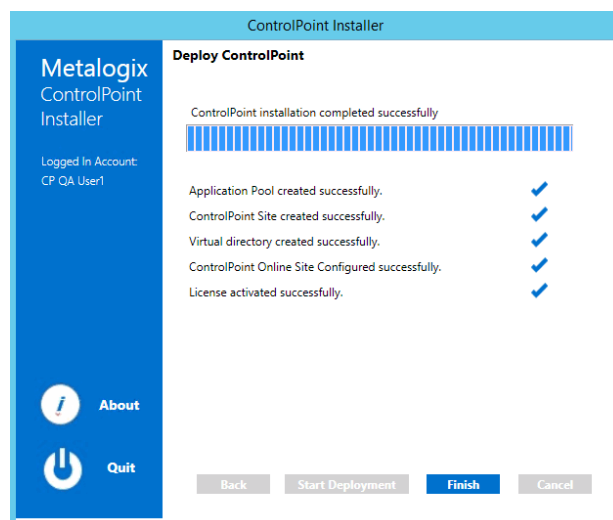




17 Click **[Next]** to display the Deploy ControlPoint dialog.



18 Click **[Start Deployment]**.



- 19 When the deployment has successfully completed, click **[Finish]**.
- 20 If you want to configure Discovery and/or SCM services, click **[Yes]** and follow the instructions for [Configuring ControlPoint Services](#).

NOTE: You can also configure services at a later time by launching the installation from the Start menu or desktop shortcut.

- 21 When you have finished configuring services, continue with [Registering the ControlPoint Online App for Modern Authentication](#).

NOTE: If the ControlPoint Online app is already registered, this step will be skipped.

## 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) FullDiscoveryJob, which runs as a Windows scheduled task. 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.

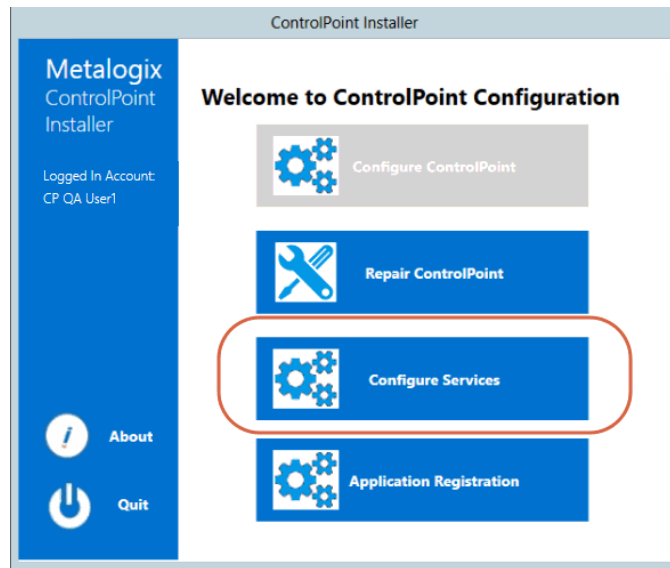
AND

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

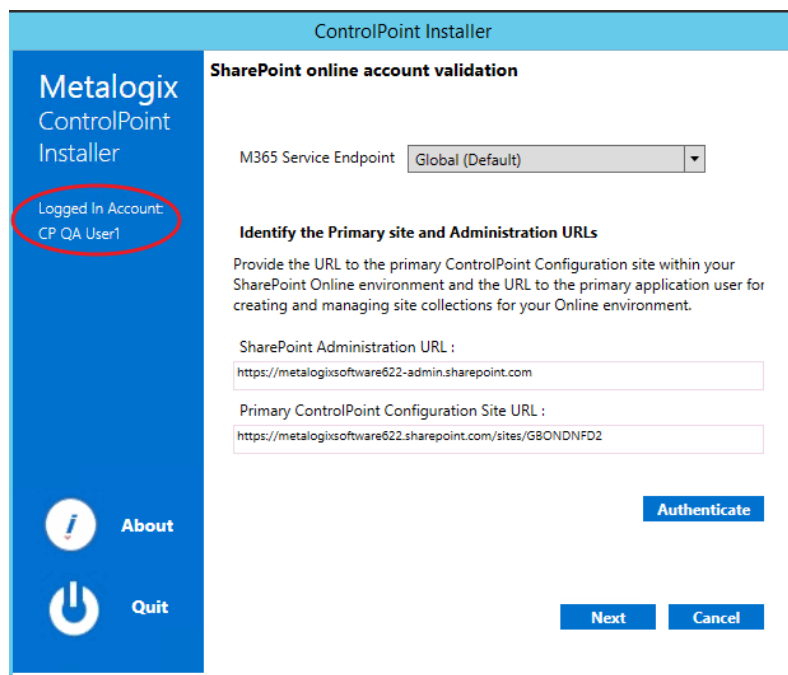
AND

- 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**.

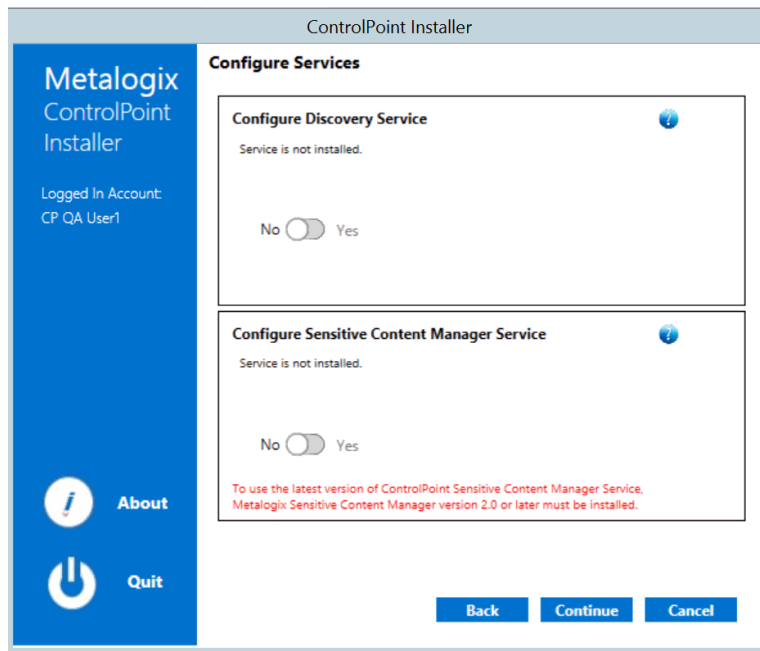


If you do choose to perform this action at later time, you will be prompted to complete the **SharePoint online account validation dialog** and authenticate using the Office 365 account used at the time ControlPoint was installed (which must be a Global Administrator for the tenant).



## To configure ControlPoint Services:

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



**IMPORTANT:**

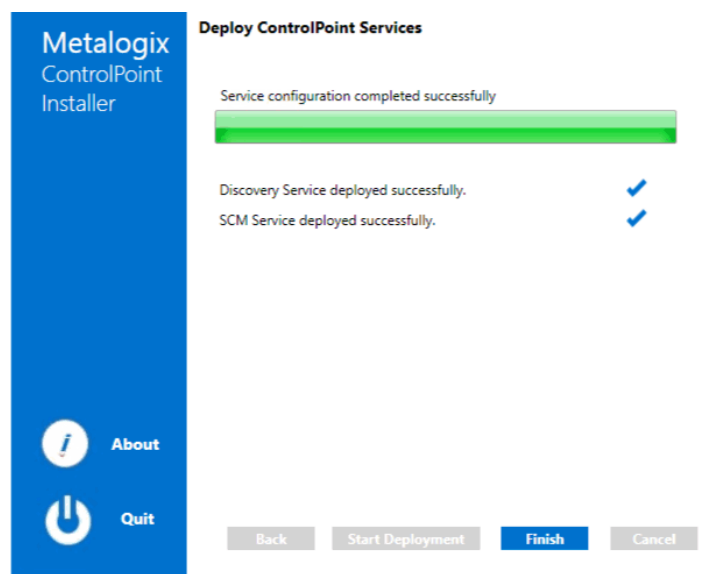
- The Service Account must meet all of the requirements of the ControlPoint Service Account, as well as permission to **Run as a Service**.
- Keep in mind that the latest version of ControlPoint Sensitive Content Manager Service will only work with version 2.0 or later of Metalogix Sensitive Content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

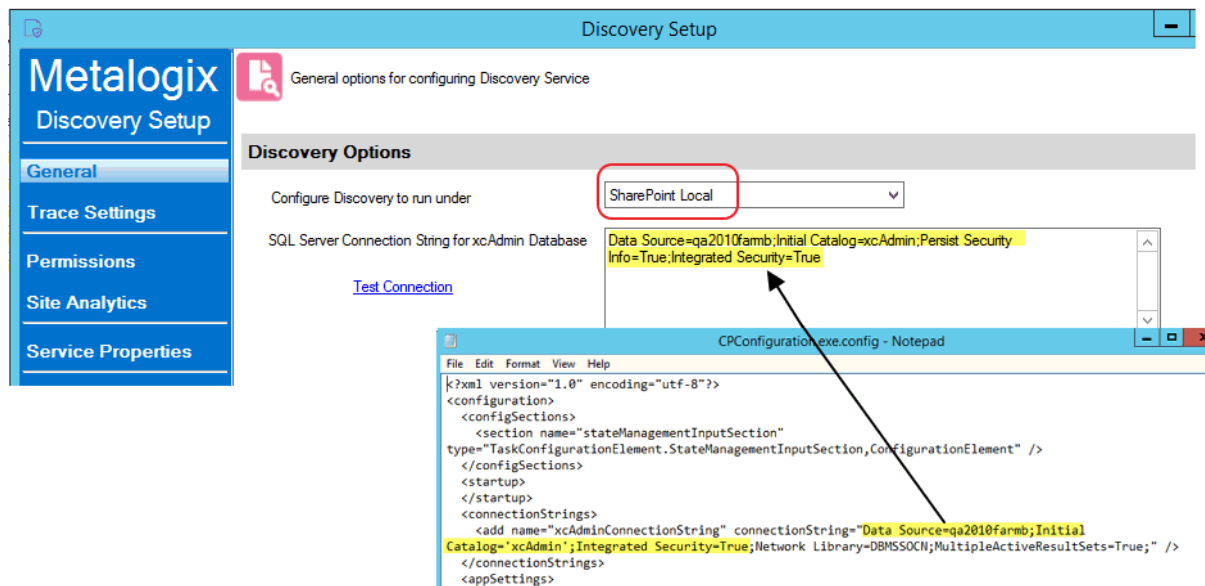
Before you can use the ControlPoint Discovery Service for the first time, you must also perform the following configuration tasks on the General tab of the Discovery Setup application (located, by default, in the folder `C:\Program`

`Files\Metalogix\ControlPointOnline\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 **CPCConfiguration.exe.config**, located, by default, in the folder `C:\Program`

`Files\Metalogix\ControlPointOnline\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 for Office 365 Administration Guide* for complete details.

### IMPORTANT: Before Services Can be Run:

Before you can run Discovery and Sensitive Content Manager services, make sure that:

- TLS version 1.2 is enabled on the server where the services are installed

AND

- the .NET Framework is [configured to support strong cryptography](#) (via the Windows Registry setting **SchUseStrongCrypto**).

Refer to the following Microsoft articles for complete details.

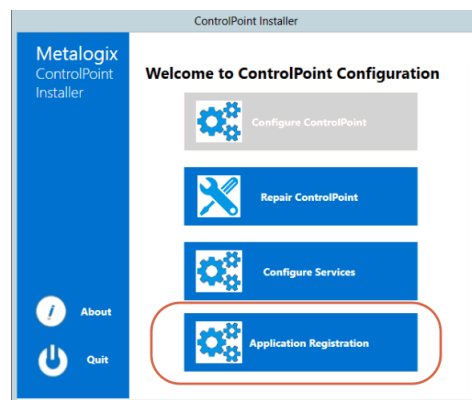
- [Transport Layer Security \(TLS\) best practices with the .NET Framework](#)

- [How to enable TLS 1.2](#)

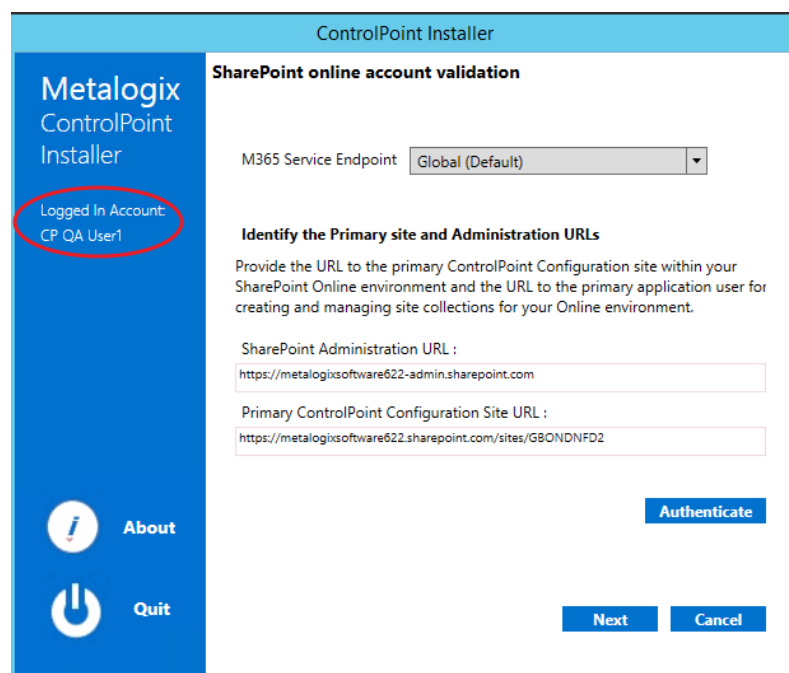
## Registering the ControlPoint Online App for Modern Authentication

As the last stage of the ControlPoint Online configuration process, the ControlPoint Online app must be registered in the Azure Active Directory to allow Modern Authentication.

The app can also be registered after the installation, as a separate action, if you launch **ControlPoint Online Configuration**. However, ControlPoint Online cannot be run until the app is registered.



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).



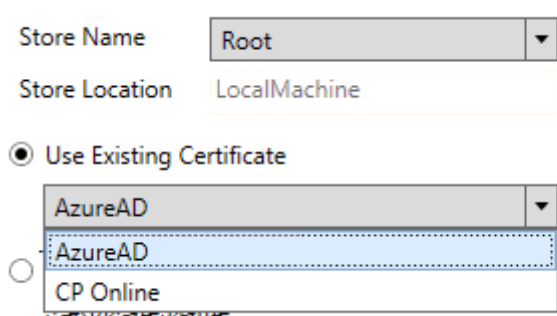
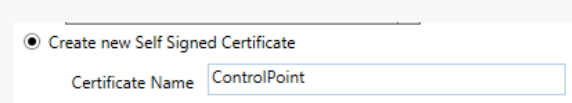
**NOTE:** Once the ControlPoint Online app is registered, it is only necessary to re-register it to change the tenant administrator and/or SSL certificate. Re-registering essentially deletes the existing registration and replaces it with a new one. Refer to the *ControlPoint for Office 365*



## To register the ControlPoint Online app in Azure Active Directory:

1. Select the SSL certificate that will allow ControlPoint users to authenticate with Microsoft, using one of the options described in the following table.

NOTE: To allow Microsoft Modern Authentication to be used by all users, the certificate must be located in the Trusted Root store. The Personal store of the ControlPoint installation account *cannot* be used. You can use the same certificate that you used for IIS Configuration, but a copy must be located in the Root store.

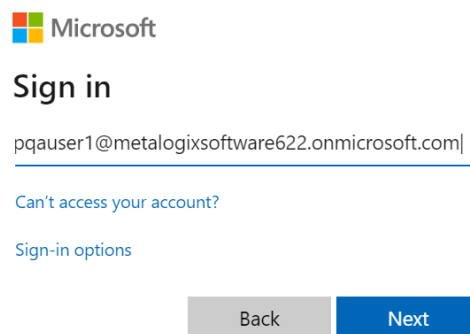
If you want to ...	Then ...
use an existing certificate	<ul style="list-style-type: none"> <li>• For the <b>Store Name</b>, make sure <b>Root</b> is selected from the drop-down.</li> </ul> <p>The <b>Use Existing Certificate</b> drop-down will be populated with available certificates in the selected store.</p> <ul style="list-style-type: none"> <li>• Make sure <b>Use Existing Certificate</b> is selected, then select a certificate from the drop-down.</li> </ul>  <p>NOTE: If the ControlPoint Installer cannot find a Certificate in the Store, this option will be disabled.</p>
create a new <i>self-signed</i> certificate (default option)	<p>Select <b>Create new Self Signed Certificate</b>, and enter a <b>Certificate Name</b>.</p>  <p>The ControlPoint installer will create a .crt certificate file in the local machine Root store.</p> <p><b>IMPORTANT:</b> Unlike a .pfx certificate file, which contains a private key, a .crt certificate file is less secure and will not be listed in the Certificate Manager in IIS.</p>

- 3 Click **[Register]**.

You will be prompted to accept Terms of Use, which grants ControlPoint Online permissions to access and operate on SharePoint Online data. When registration is complete, you can close the browser. The ControlPoint Installer will close automatically.

## Launching ControlPoint Online

To use ControlPoint Online, you must be a Site Collection Administrator for the site collection that hosts the ControlPoint Online Configuration Site. Upon launching ControlPoint, you will first be prompted to authenticate with Microsoft Online using your O365 account credentials.



**IMPORTANT:** If you are using Internet Explorer or Edge and the Sign in dialog continually prompts for your account without proceeding to the Password prompt, refer to the topic [I am Continually Prompted to Log Into ControlPoint but the Login Never Completes](#).

If that authentication is successful, a token will be returned to ControlPoint Online, which will then determine if the account is a valid ControlPoint Online user.

Use one of the following options to launch the ControlPoint Online application.

### From your workstation browser:

Enter **https://<machine\_name>:<port\_number>** or **<host\_header\_name>/\_layouts/axceler/xcmmain.aspx**.

(The server machine name is the name of the machine on which the ControlPoint client application is installed. 2828 is the default port number for the MetalogixOnline application pool.)

### From the machine on which ControlPoint Online has been installed:

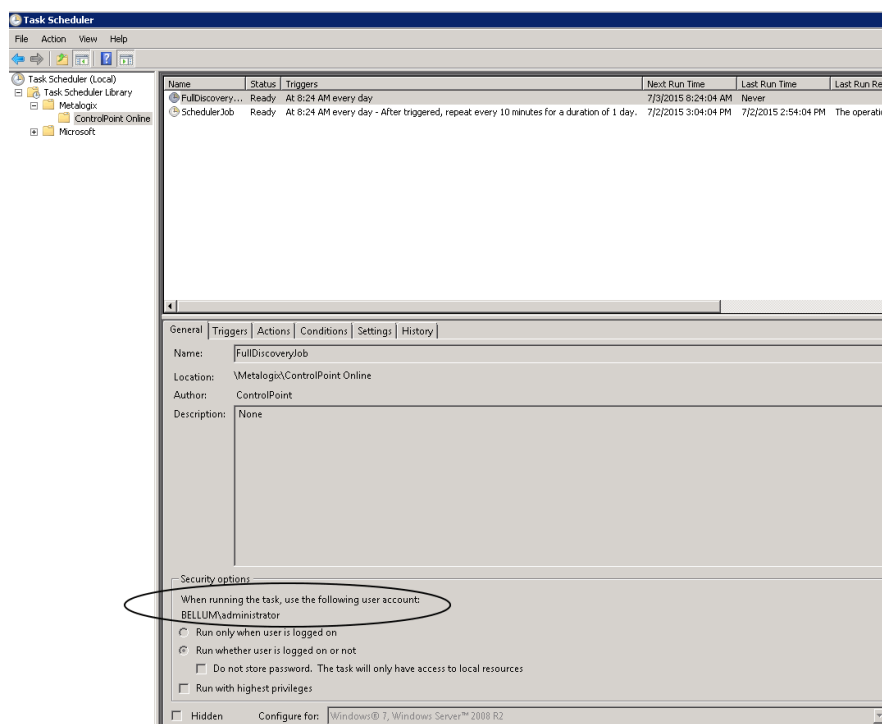
- 1 Log into the server using the account that was designated as the ControlPoint Service Account at the time the ControlPoint Online application was installed.
- 2 From the Windows Start menu, choose **Programs > Metalogix > ControlPoint\_Online> Launch ControlPoint Online Application**.

# ControlPoint Full Discovery and Scheduler Jobs

As part of the initial configuration of ControlPoint Online, the following tasks are created in the Windows Task Scheduler on the server where ControlPoint Online is installed, in the folder **Task Scheduler Library > Metalogix > ControlPoint Online**:

- the **ControlPoint FullDiscovery job**, scheduled by default to run once a day to populate the ControlPoint data cache.
- IMPORTANT:** The FullDiscovery job is disabled by default, and should be disabled if the ControlPoint Discovery Service will be used instead.
- the **ControlPoint Scheduler Job**, scheduled to run by default ever 10 minutes to check for and initiate the running of operations scheduled via the ControlPoint Scheduler.

These tasks are configured to run using the credentials of the ControlPoint Service Account.



**NOTE:** Although the Scheduler Job specifies an initial Start Date and Time, the task is actually triggered for the first time when the first scheduled job is submitted via the ControlPoint application interface.

If you want to change the scheduled run time or frequency of either of these tasks, you can do so directly in the Windows Task Scheduler or via the ControlPoint Schedule Monitor.

The screenshot displays the ControlPoint Schedule Monitor interface. On the left is a navigation pane with a tree structure under 'Manage ControlPoint' and 'Tools'. The 'Schedule Monitor' option is selected. The main area shows the 'Schedule Monitor > Select parameter(s) to act on' view. Below this, there's a 'Switch Monitor Views' section with radio buttons for 'ControlPoint Jobs' and 'Windows Jobs' (which is selected and circled). A 'Refresh Display' button is present. Below that is a table listing scheduled jobs:

Edit	Name	Trigger	Active	Author
	FullDiscoveryJob	Run At 3:00 AM every day	False	ControlPoint
	SchedulerJob	Run At 12:00 AM every day. After trig	True	ControlPoint

An arrow points from the 'FullDiscoveryJob' row to a detailed configuration window titled 'Update Windows Scheduled Task > Select parameter(s) to act on'. This window shows the configuration for 'FullDiscoveryJob':

- Start:** 7/1/2015 3:00 AM
- Active:** ☒ Active
- Recurring:** ☒ Recurring
- Run every:** 1 Day(s)
- Expire:** 10/8/2016 12:00 AM
- Repeat task every:** 5 minutes
- for a duration of:** indefinitely
- Update** button

# Upgrading from a Previous Version of ControlPoint Online

Upgrading from an earlier version of ControlPoint is same as that [First Time Installation and Configuration](#), with the following exceptions:

- The license key, ControlPoint Service (xcAdmin) database, and ControlPoint Configuration site will be retained and updated.
- You will be unable to update the 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 for Office 365 Administration Guide* for details.

**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.

Additional caveats depend on the version you are upgrading from, as described in the following table.

If you are upgrading from version ...	Then ...
8.3.0 or earlier	<p>to use <a href="#">Microsoft Modern Authentication</a> you will also be required to to:</p> <ul style="list-style-type: none"> <li>• <a href="#">specify an SSL certificate to use in IIS</a></li> </ul> <p>AND</p> <ul style="list-style-type: none"> <li>• <a href="#">register the ControlPoint Online app</a>.</li> </ul>
8.1 or earlier	<p>Discovery and Sensitive Content Manager Services will be recreated in the folder C:\Program Files\Metalogix\ControlPoint Online\ControlPointFeatures\Services, and all settings will be preserved.</p>

8.0 or earlier	installed files, which formerly resided in a folder called AxcelerFeature, will be placed in a folder called ControlPoint Features.
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# Removing (Uninstalling) ControlPoint Online

Use the following procedure if you want to remove ControlPoint Online installed components.

Note that you will have the option to either retain or remove the the ControlPoint Services (xcAdmin) database. You may want to keep this database if, for example, you plan to reinstall ControlPoint at a later time or want to archive the data. 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

## When removing installed components:

Make sure that you:

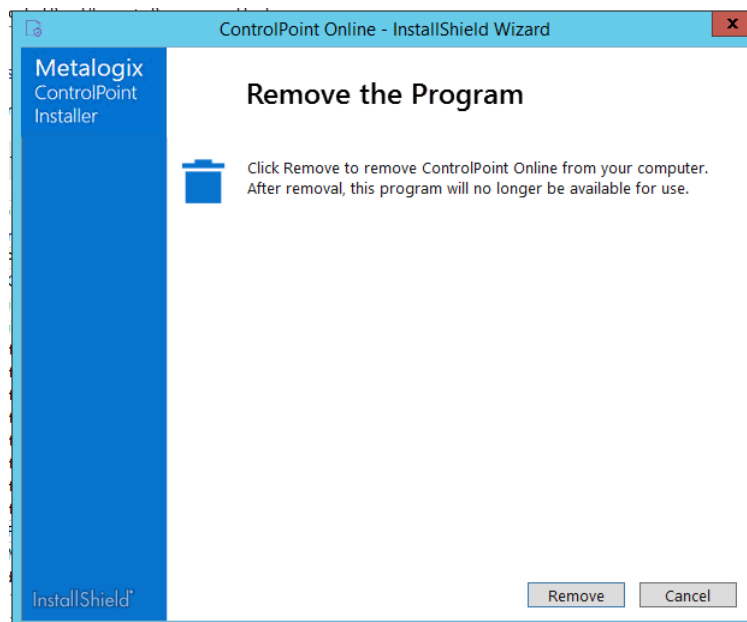
- run the installer on the server on which the original installation was performed, and
- log in using the account from which the original installation was run.

## To launch the installer:

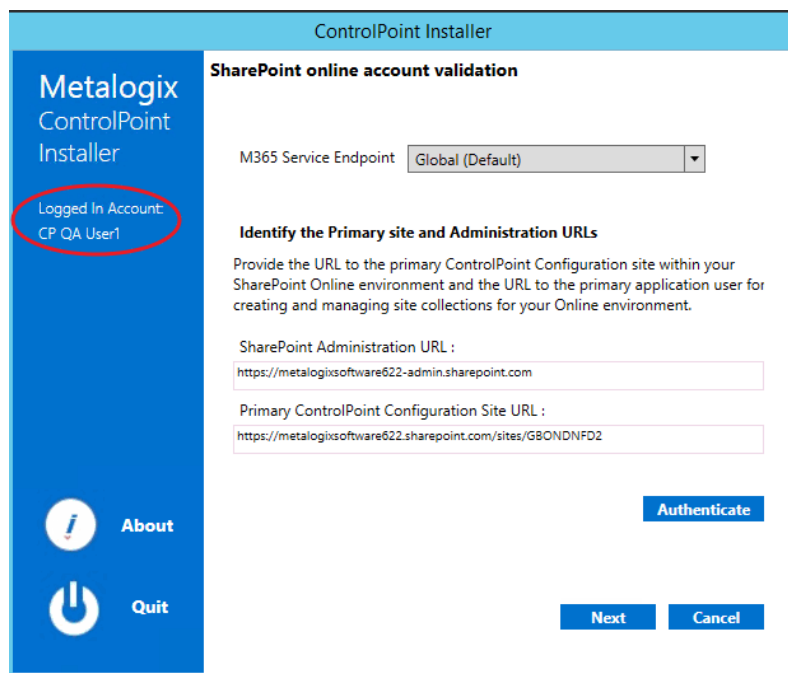
From the Control Panel Programs and Features select **Metalogix ControlPoint** and choose **Uninstall**.

## To remove (uninstall) ControlPoint Online:

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

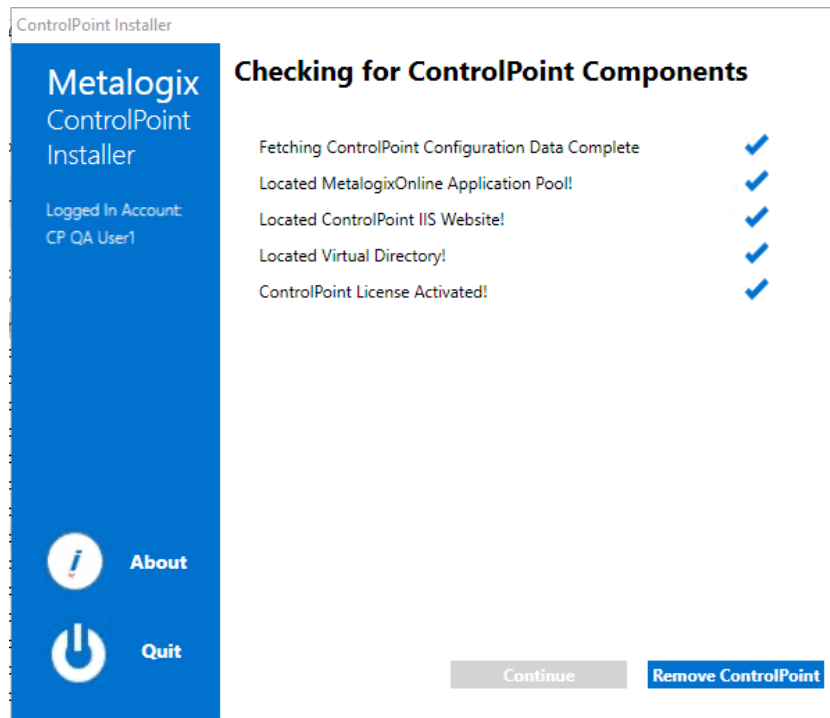


2. Complete the **SharePoint online account validation dialog** and authenticate using the Office 365 account used at the time ControlPoint was installed (which must be a Global Administrator for the tenant).

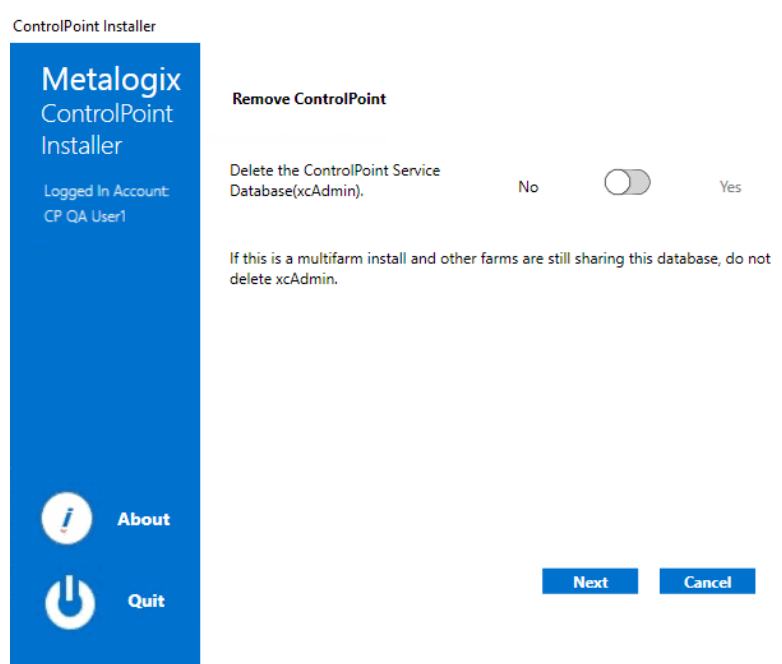


The installer checks for ControlPoint Components.





- When the Component check has been completed successfully, click **[Remove ControlPoint]** to display the Remove ControlPoint dialog.



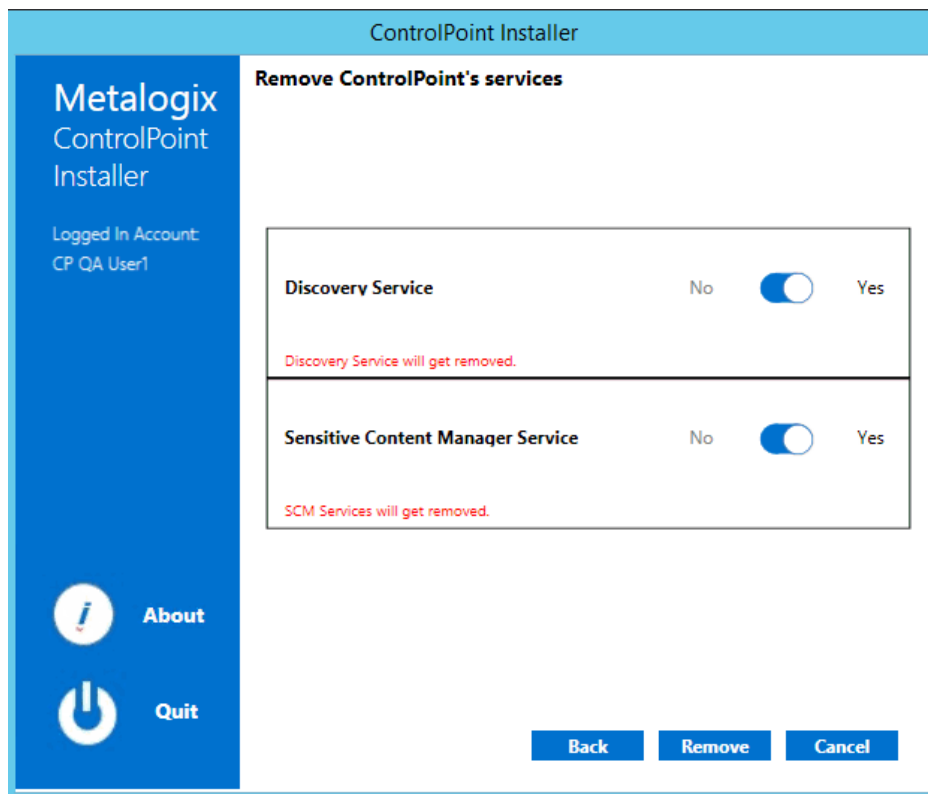
- Use the information in the following table to determine the appropriate option to select for **Delete the ControlPoint Service Database (xcAdmin)**.

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</li> </ul>	for <b>Delete the ControlPoint Service Database (xcAdmin)</b> , select <b>No</b> .

If ...	Then ...
manage other farms OR <ul style="list-style-type: none"> <li>• you plan to reinstall ControlPoint in your environment</li> </ul>	
<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> .

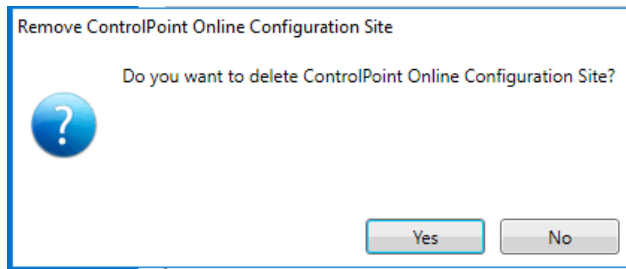
5 Click **[Next]**.

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).



6 Click **[Remove]**.

7 Use the information in the following table to determine the appropriate option to select for **Remove ControlPoint Online Configuration Site** prompt.



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

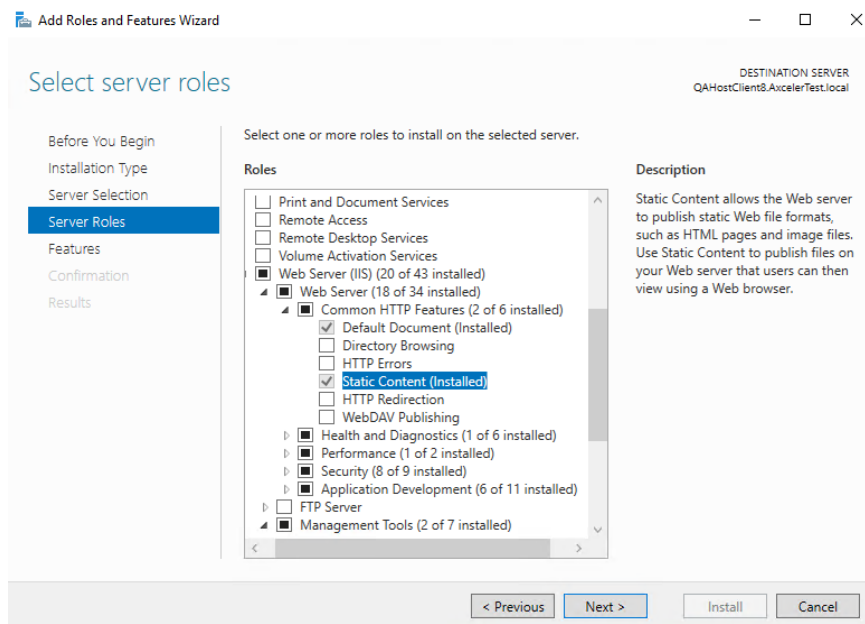
- 8 Click **[Complete]** to begin the ControlPoint Uninstallation.
- 9 When the *The program unistall is complete.* message displays, click **[Finish]**.
- 10 Once the ControlPoint Unistallation process has finished, click **[Complete]**.
- 11 When the *The program unistall is complete.* message displays, click **[Finish]**.

## Appendix: Configuring IIS if SharePoint is not Installed

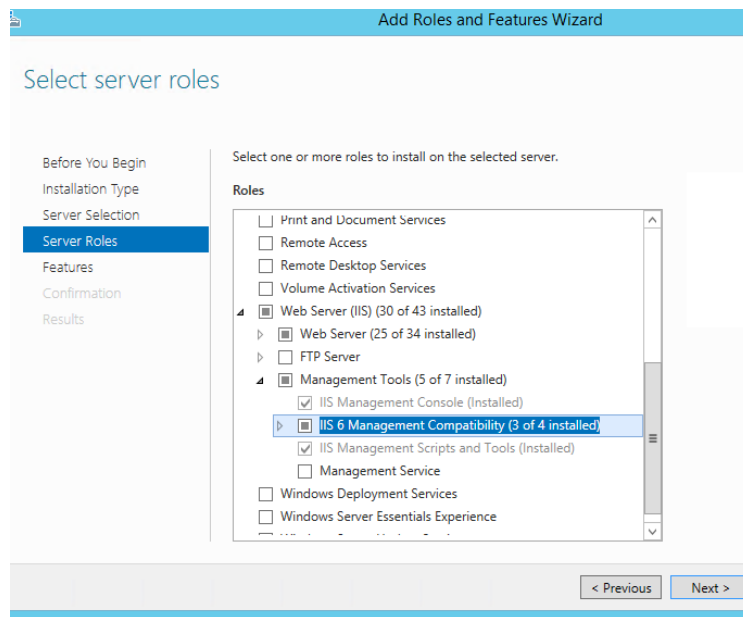
It is not required that SharePoint be installed to use ControlPoint Online. However, if SharePoint is *not* installed, IIS must be configured to allow the ControlPoint Online Configuration Site to run on the server, as described below.

### To configure IIS for ControlPoint Online if SharePoint is not Installed:

- 1 On the server where ControlPoint Online is installed, open IIS Manager and choose **Manage > Add Roles and Features**.
- 2 Select **Server Roles**.
- 3 Make sure that the following options are selected:
  - **Web Server (IIS) - Web Server - Common HTTP Features - Static Content**

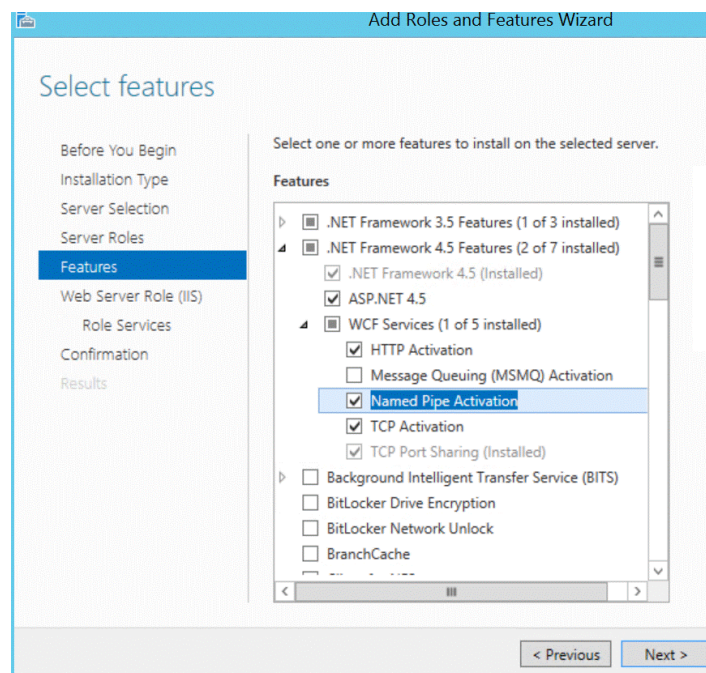


- **Web Server (IIS) - Management Tools - IIS 6 Management Compatibility**



4 Select **Features**.

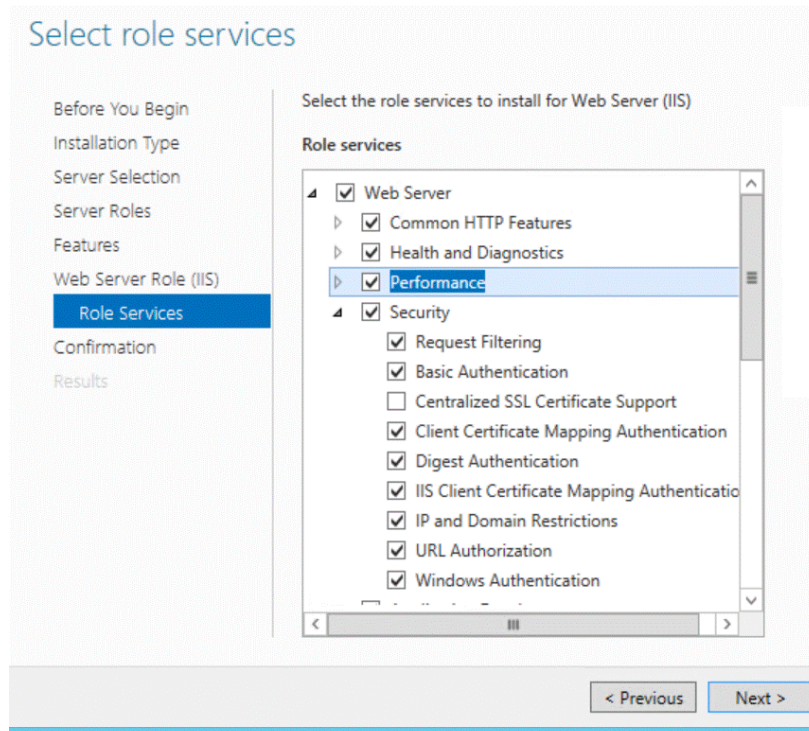
5 Make sure **.NET Framework 4.5 Features - Named Pipe Activation** is selected.



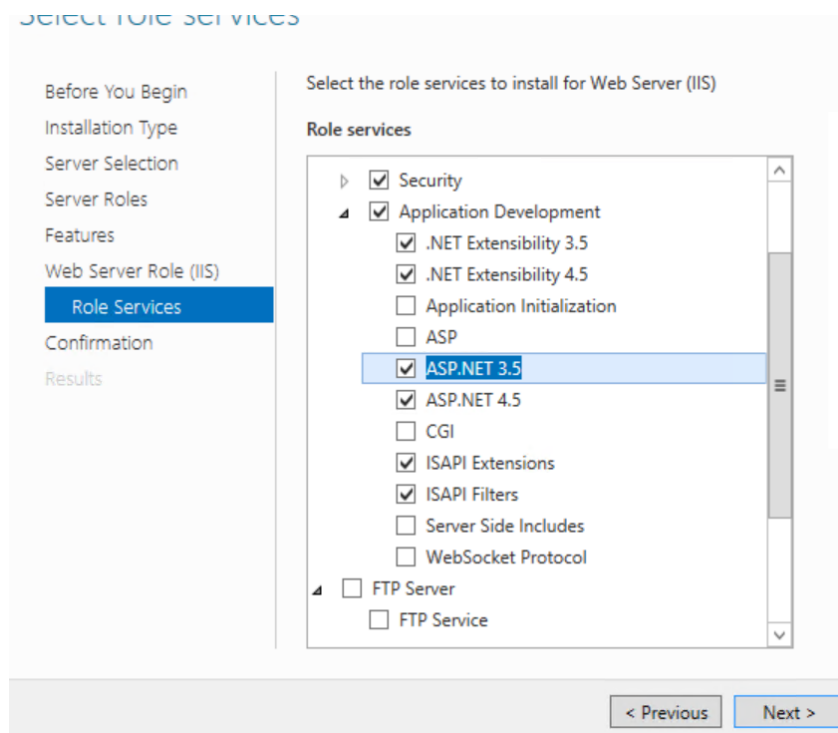
4 Select **Role Services**.

5 Make sure the following options are selected:

- **Web Server - Performance**



## ▪ Application Development - ASP.NET 3.5



# Troubleshooting

## ControlPoint Log Files

There are log files that can help in troubleshooting ControlPoint issues.

NOTE: If you cannot diagnose your issue using the information in this guide and need to contact [Quest Technical Support](#), have any applicable log file(s) readily available to help the Technical Support Specialist better assist you.

## Installation Log (xcControlPoint.log)

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.

## ControlPoint Administration Log (xcAdmin.log)

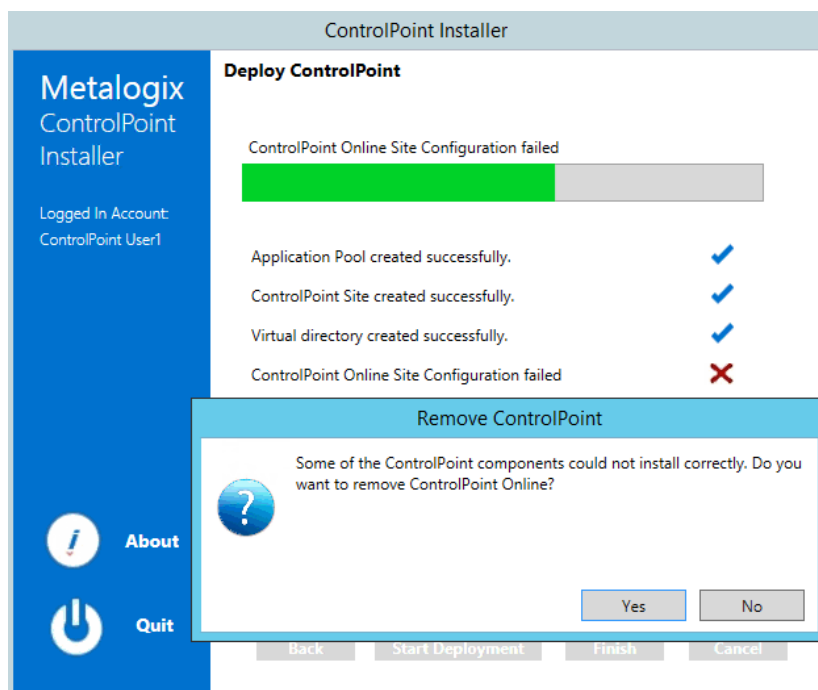
`xcAdmin.log`:

- is the log file where the following information is recorded:
  - ControlPoint application errors
  - the progress of both nightly and interactive Full Discovery tasks, and
- is accessible from the machine on which ControlPoint was installed for the farm, in the following directory: `C:\Program Files\Metalogix\ControlPoint Online\Layouts\Axceler\Log`

# Deployment of ControlPoint Online Configuration Site Fails During Installation

## Issue

During ControlPoint Online installation, the following error occurs:



## Possible Reason

The operating system is not using TLS version 1.2 by default.

## Resolution

Enable TLS version 1.2 on the server. Refer to the following Microsoft articles for complete instructions.

- [Transport Layer Security \(TLS\) best practices with the .NET Framework](#)
- [How to enable TLS 1.2](#)

# I am Continually Prompted to Log Into ControlPoint but the Login Never Completes

## Issue

With Internet Explorer or Edge, when attempting to log into ControlPoint using Modern Authentication, either for the first time or after the browser session expires, I am continually prompted to log in but the login never completes successfully.

## Resolution



This issue does not occur with Chrome. However, if you want to continue to use Internet Explorer or Edge, use the information in the following table to resolve the issue.

If you are using ...	Then ...
Internet Explorer	<p>change <b>Internet Options &gt; Security</b> options as follows:</p> <ol style="list-style-type: none"> <li>1 Add <a href="https://login.microsoftonline.com">https://login.microsoftonline.com</a> to the Trusted Sites.</li> <li>2 Add the ControlPoint URL to the Trusted Sites.</li> <li>3 Change the <b>Custom Level</b> as follows: <ol style="list-style-type: none"> <li>a) Select <b>Local Intranet</b>.</li> <li>b) Click <b>[Custom level...]</b>.</li> <li>c) Enable the <b>Websites in less privileged web content zone can navigate into this zone</b> option.</li> </ol> </li> </ol>
Edge	<p>upgrade to the latest version of Edge.</p> <p><a href="https://www.microsoft.com/en-us/edge">https://www.microsoft.com/en-us/edge</a></p> <p>NOTE: This is a Microsoft Known Issue.</p>