

## Project Story: SCCM Implementation for Mstile

**Background:** Mstile has experienced rapid growth and now needs an efficient system to manage their computers and IT resources. Microsoft recommends System Center Configuration Manager (SCCM) as a comprehensive solution for both client and server management.

**Objective:** Mstile would like us to set up a demo environment to showcase how SCCM works and how it can streamline their IT management.

### Preparations:

1. **Active Directory Server:**
  - Install and configure an Active Directory server to handle domain control and authentication.
2. **SCCM Server:**
  - Install Windows Server 2019 on a server that will be used for the SCCM installation.
3. **Applications:**
  - Download all necessary applications and installation files from Google Drive to prepare for the SCCM setup and configuration.
4. **Client Machine:**
  - Create a virtual machine with Windows 10 to serve as the client machine in the demo environment.

By completing these preparations, we will create a functional demo environment that demonstrates SCCM's capabilities and how it can enhance Mstile's IT management.

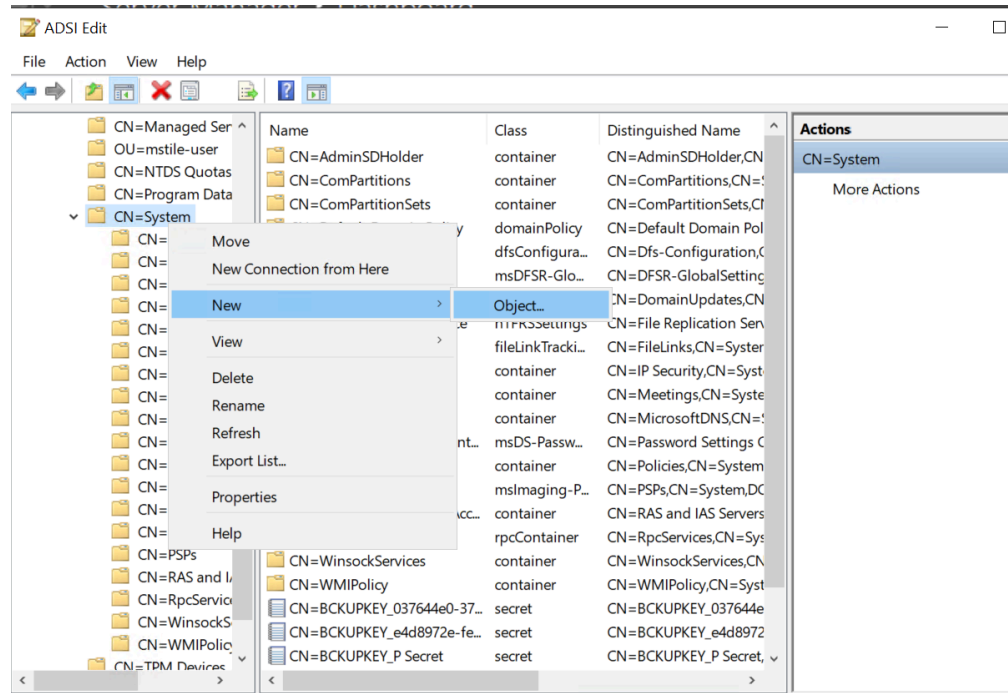
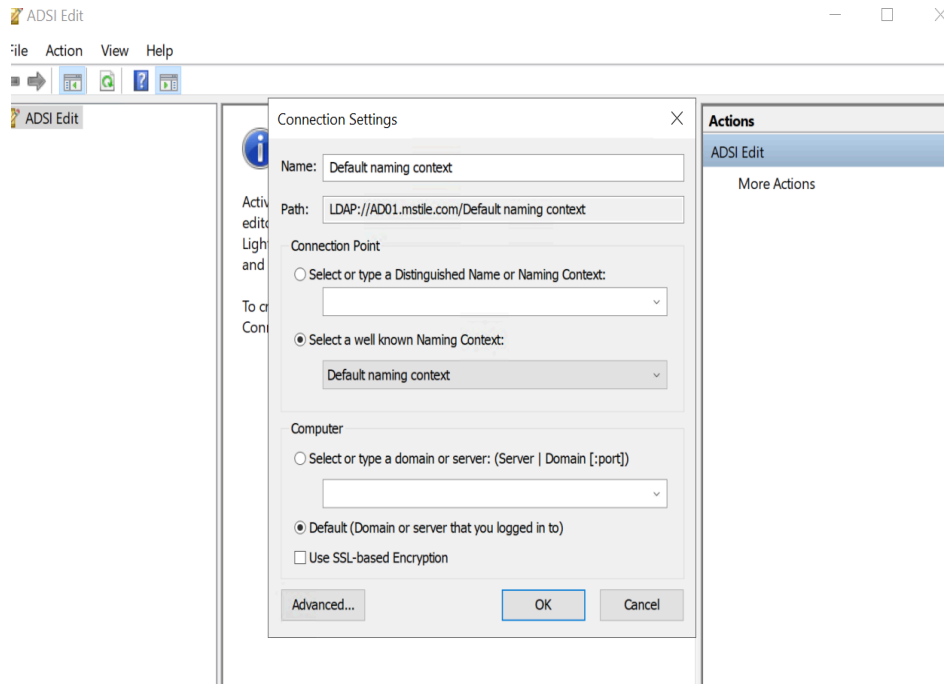
### DEL 1:

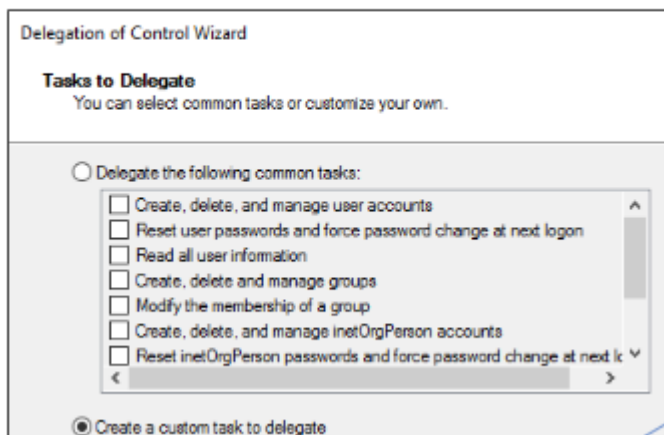
Via PowerShell, I installed the Active Directory (AD) server with the IP address **192.168.100.10**, then set up the AD server and used the domain name **Mstile.com**.

### SCCM Installation:

For this deployment, we need an AD server where we install the AD role and connect it to the router. After completing the AD role installation, follow these steps in **ADSI Edit** to create a system container:

1. Open **ADSI Edit**.
2. Connect to the **Default Naming Context**.
3. Select a well-known naming context and choose **Default Domain**, then click **OK**.
4. Expand **Default Naming Context**.
5. Right-click on **Object**, select **Create Object**, and choose **Container**.
6. For the **Value** field, enter **SYSTEM MANAGEMENT**, then click **OK**.





## Delegating Control of the System Management Container

1. **Open Active Directory Users and Computers:**
  - In **Active Directory Users and Computers**, go to the **View** menu and select **Advanced Features**.
2. **Locate the System Management Container:**
  - Expand the **System** node in the console tree.
  - You should see the **System Management** container.
3. **Delegate Control:**
  - Right-click on the **System Management** container and select **Delegate Control**.
  - Click **Next** to start the Delegation of Control Wizard.
4. **Add the SCCM Server:**
  - Click **Add** to specify which object will be granted delegated control.
  - Change the **Location** if needed, and click **Object Types**.
  - Check **Computer** (note: by default, computer objects are not included in AD, so you need to enable this option).
  - In the **Object** field, type the name of the SCCM server computer (e.g., **SCCM**), and click **OK**.
5. **Create a Custom Task:**
  - You should now see the SCCM server (e.g., **SCCM (mstile/SCCM)**).
  - Select **Create a custom task to delegate**, and click **Next**.
  - Choose **Delegate control**, then click **Next**.
6. **Set Permissions:**
  - In the permissions section, select **Full Control** or **Everything** to grant the SCCM server all necessary permissions.
  - Click **Next** to complete the delegation process.
7. **Finish:**
  - Review the summary and click **Finish** to apply the delegation.

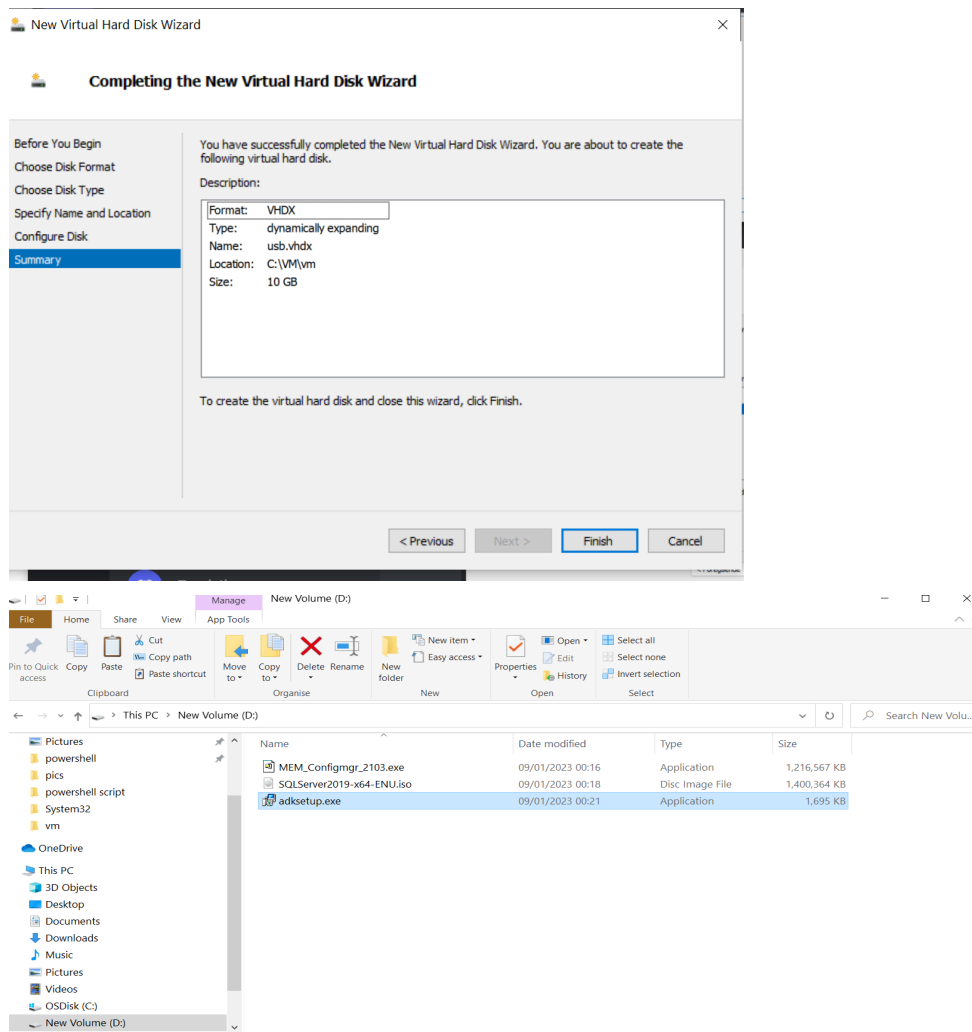
The System Management container is now successfully delegated, and the SCCM server has the necessary rights to manage it.

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## AD Schema Setup

1. **Create a Virtual Hard Disk in Hyper-V:**
  - Open **Hyper-V Manager**.
  - Select the appropriate virtual machine (VM) where you want to add the new hard disk.
  - Right-click the VM and select **Settings**.
  - Under **Hardware**, click **Add Hard Disk**.
  - Choose **Virtual Hard Disk** and click **Next**.
  - Select **Dynamic** as the disk type and set the size to **10 GB**.
  - Click **Next**, review your settings, and click **Finish**.
2. **Initialize and Format the New Disk:**
  - Go to **Computer Management** on your host machine (you can access it via **Control Panel > Administrative Tools > Computer Management**).
  - Select **Disk Management** under **Storage**.
  - You should see the new 10 GB disk listed as unallocated. Right-click on it and choose **Initialize Disk**.
  - Create a new volume by right-clicking the unallocated space and selecting **New Simple Volume**.
  - Follow the wizard to format the disk (choose NTFS as the file system) and assign a drive letter.
3. **Prepare the Disk for Application and ISO Files:**
  - Once formatted, open the newly created drive.
  - Download all necessary applications and ISO files for Windows Server 2019.
  - Copy these files to the new drive.
4. **Eject the Disk from the Host:**
  - Ensure that all files have been copied and no applications are using the disk.
  - Right-click the drive in **Disk Management** and select **Remove** to safely eject it, or simply shut down the VM to detach the virtual disk.
5. **Attach the Disk to the AD Server VM:**
  - In **Hyper-V Manager**, right-click on the AD server VM and select **Settings**.
  - Under **Hardware**, click **Add Hard Disk**.
  - Choose **Existing** and browse to the location where the virtual disk file was saved.
  - Attach the disk to the VM.
6. **Start the AD Server VM:**
  - Start the AD server VM from **Hyper-V Manager**.
  - Log in to the VM and verify that the new drive is visible and accessible in **File Explorer**.



## Initializing the New Disk and Installing SCCM Schema

### 1. Initialize the New Disk on the AD Server:

- Open **Computer Management** on the AD server.
- Go to **Disk Management** under **Storage**.
- You should see the new disk listed as uninitialized. Right-click on the disk and select **Initialize Disk**.
- Follow the prompts to initialize the disk.

### 2. Unzip and Install SCCM Schema:

- Unzip the file **Mem-configmgr** to the C: drive of the AD server.
- Navigate to the location: **C:\bin\x64**.
- Find the file named **extadsch** and open **File Explorer** to this location.
- Click the **Home** tab in **File Explorer** and select **Copy path** to copy the full path of the **extadsch** file.

### 3. Run the Schema Extension Tool:

- Open **Command Prompt** as an Administrator.

- Paste the copied path of **extadsch** into the Command Prompt and press **Enter**.
  - This command will run the schema extension tool and install the SCCM schema updates.
4. **Turn Off the AD Server:**
- Once the schema installation is complete, shut down the AD server.

## Creating the SCCM Server

1. **Create and Configure the SCCM Server:**
  - Open **PowerPoint** to create a new presentation. This seems unusual, but if it's required for documentation or a planning purpose, use PowerPoint to prepare any relevant slides or diagrams.
  - Set up the SCCM server with the following network configuration:
    - **IP Address:** 192.168.100.11
    - **Default Gateway:** 192.168.100.10
  - Connect the SCCM server to the domain **mstile.com**.
2. **Complete SCCM Server Setup:**
  - Make sure the SCCM server is properly connected to the domain and verify network settings.
  - Follow any additional steps required for SCCM installation and configuration as per your organization's guidelines.

Here are the detailed and corrected steps for configuring IIS on the SCCM server, including using the USB drive to provide the necessary installation files:

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### ### Configuration of IIS on SCCM Server

1. **\*\*Prepare the USB Drive\*\*:**
  - **\*\*Delete the old USB drive/hard disk\*\*** from the SCCM server if it was previously used.
  - **\*\*Attach the USB drive\*\*** to the SCCM server.
2. **\*\*Start the SCCM Server\*\*:**
  - Boot up the SCCM server if it is not already running.
3. **\*\*Add Roles in SCCM Server\*\*:**
  - Open **\*\*Server Manager\*\*** on the SCCM server.
  - Click on **\*\*Manage\*\*** and select **\*\*Add Roles and Features\*\***.
4. **\*\*Install IIS\*\*:**
  - Proceed through the wizard until you reach the **\*\*Select features\*\*** section.
  - Check **\*\*Web Server (IIS)\*\*** and click **\*\*Next\*\***.

## 5. **\*\*Provide Source Files for IIS\*\***:

- When prompted to specify the source files for IIS, you need to point to the Windows Server installation files on the USB drive.
- Navigate to the USB drive and locate the ISO file for Windows Server 2019.
- Mount the ISO file or open the drive to access the installation files.
- Go to the `sources\sxs` directory on the USB drive.
- Copy the `sxs` folder to the desktop for easier access.
- After copying, open the `sxs` folder and **\*\*copy the path\*\*** of this directory.

## 6. **\*\*Specify the Path During IIS Installation\*\***:

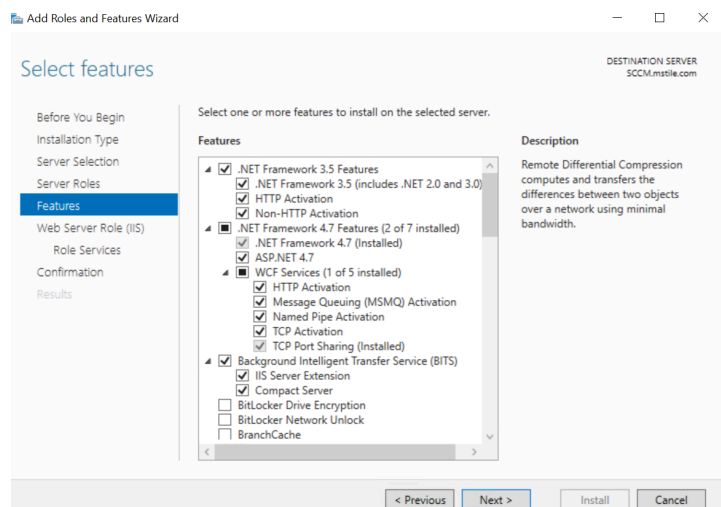
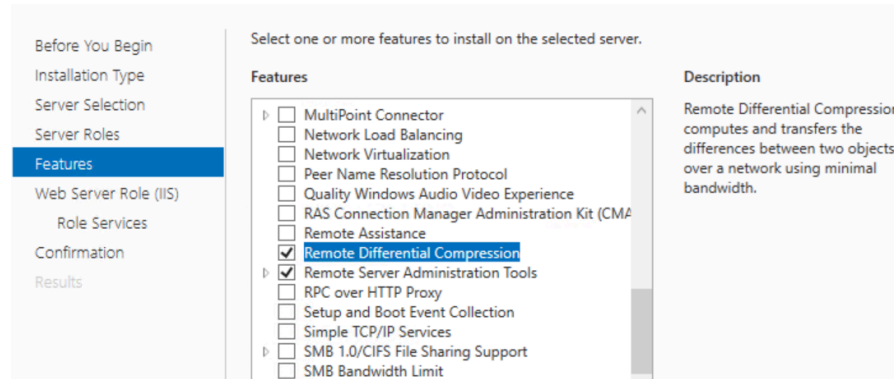
- In the **\*\*Add Roles and Features Wizard\*\***, when you are asked to specify the source path for IIS files, paste the copied path to the `sxs` directory.
- The path should look something like `C:\Users\[YourUsername]\Desktop\sxs`.

## 7. **\*\*Complete the Installation\*\***:

- Click **\*\*OK\*\*** to confirm the path and continue with the installation of IIS.
- Follow the remaining prompts to complete the installation process.

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By following these steps, you should successfully configure IIS on your SCCM server.



## SELECT ROLE SERVICES

Before You Begin  
Installation Type  
Server Selection  
Server Roles  
Features  
Web Server Role (IIS)  
**Role Services**  
Confirmation  
Results

Select the role services to install for Web Server (IIS)

### Role services

- ☐ ODBC Logging
- ☒ Request Monitor
- ☒ Tracing
- ☒ Performance
  - ☒ Static Content Compression
  - ☐ Dynamic Content Compression
- ☒ Security
  - ☒ Request Filtering
  - ☐ Basic Authentication
  - ☐ Centralized SSL Certificate Support
  - ☐ Client Certificate Mapping Authentication
  - ☐ Digest Authentication
  - ☐ IIS Client Certificate Mapping Authentication
  - ☐ IP and Domain Restrictions
  - ☐ URL Authorization
  - ☒ Windows Authentication
- ☒ Application Development
  - ☒ .NET Extensibility 3.5
  - ☒ .NET Extensibility 4.7

Description (IIS)  
Windows authentication is used to authenticate internal Web server requests. It is the most secure authentication method. It requires that the client and the server have a valid certificate. It is used to authenticate requests from behind the firewall.

### Role services

- ☒ Common HTTP Features
  - ☒ Default Document
  - ☒ Directory Browsing
  - ☒ HTTP Errors
  - ☒ Static Content
  - ☒ HTTP Redirection
  - ☐ WebDAV Publishing
- ☒ Health and Diagnostics
  - ☒ HTTP Logging
  - ☐ Custom Logging
  - ☒ Logging Tools
  - ☐ ODBC Logging
  - ☒ Request Monitor
  - ☒ Tracing
- ☒ Performance
  - ☒ Static Content Compression
  - ☐ Dynamic Content Compression
- ☒ Security
  - ☒ Request Filtering

Description  
IIS Management Console provides a graphical user interface for managing IIS. It is used to configure the Web server and its components. It is used to manage the Web server's configuration, including the virtual directories, the application pools, and the security settings.

Installation Type  
Server Selection  
Server Roles  
Features  
Web Server Role (IIS)  
**Role Services**  
Confirmation  
Results

### Role services

- ☐ Digest Authentication
- ☐ IIS Client Certificate Mapping Authentication
- ☐ IP and Domain Restrictions
- ☐ URL Authorization
- ☐ Windows Authentication
- ☒ Application Development
  - ☒ .NET Extensibility 3.5
  - ☒ .NET Extensibility 4.7
  - ☐ Application Initialization
  - ☐ ASP
  - ☒ ASP.NET 3.5
  - ☒ ASP.NET 4.7
  - ☐ CGI
  - ☒ ISAPI Extensions
  - ☒ ISAPI Filters
  - ☐ Server Side Includes
  - ☐ WebSocket Protocol
- ☐ FTP Server
  - ☐ FTP Service

### Description

IIS Management Console provides a graphical user interface for managing IIS. It is used to configure the Web server and its components. It is used to manage the Web server's configuration, including the virtual directories, the application pools, and the security settings.

- ☒ Security
  - ☒ Request Filtering
  - ☐ Basic Authentication
  - ☐ Centralized SSL Certificate Support
  - ☐ Client Certificate Mapping Authentication
  - ☐ Digest Authentication
  - ☐ IIS Client Certificate Mapping Authentication
  - ☐ IP and Domain Restrictions
  - ☐ URL Authorization
  - ☒ Windows Authentication
- ☒ Application Development
  - ☒ .NET Extensibility 3.5
  - ☒ .NET Extensibility 4.6
  - ☐ Application Initialization
  - ☐ ASP
  - ☒ ASP.NET 3.5
  - ☒ ASP.NET 4.6
  - ☐ CGI
  - ☒ ISAPI Extensions
  - ☒ ISAPI Filters
  - ☐ Server Side Includes
  - ☐ WebSocket Protocol
- ☒ Management Tools
  - ☒ IIS Management Console
  - ☒ IIS 6 Management Compatibility
    - ☒ IIS 6 Metabase Compatibility
    - ☒ IIS 6 Management Console
    - ☒ IIS 6 Scripting Tools
    - ☒ IIS 6 WMI Compatibility
  - ☒ IIS Management Scripts and Tools

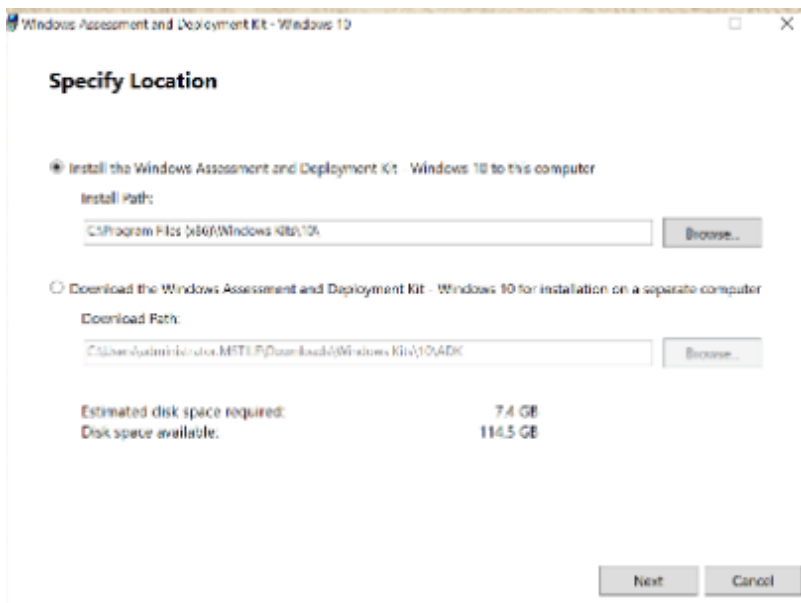
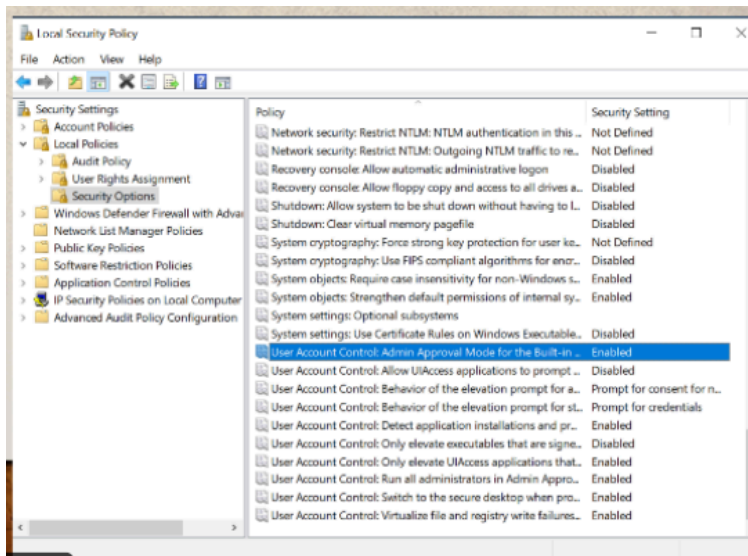


## Installing Windows ADK on SCCM Server

1. **Prepare the USB Drive:**
  - Ensure that the USB drive with the Windows ADK setup files is connected to the SCCM server.
2. **Open File Explorer:**
  - On the SCCM server, open **File Explorer**.
3. **Navigate to the USB Drive:**
  - Locate and open the USB drive in **File Explorer**.
4. **Run the ADK Setup:**
  - Find the **adksetup.exe** file on the USB drive and double-click to run it.
5. **Specify Installation Location:**
  - During the setup process, you will be prompted to specify the installation location for Windows ADK. Choose a suitable location if needed, or use the default location provided.
6. **Select Features to Install:**
  - When prompted to select the features you want to install, choose the following based on your requirements:
    - **Deployment Tools:** For general deployment capabilities.
    - **Windows Preinstallation Environment (WinPE):** For creating bootable WinPE media.
    - **Imaging and Configuration Designer (ICD):** For creating and customizing Windows images.
    - Select any additional features you need for your deployment scenario.
7. **Complete the Installation:**
  - After selecting the features, click **Install** to begin the installation process.
  - Wait for the installation to complete.
8. **Verify Installation:**
  - Once installed, you can verify the installation by checking the installed programs list or using the tools provided by Windows ADK.

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This will install the necessary Windows ADK components on your SCCM server, which are crucial for deployment and image management tasks



## Select the features you want to install

Click a feature name for more information.

- |   |       |
|---|-------|
| <input type="checkbox"/> Application Compatibility Tools                              | Mic   |
| <input checked="" type="checkbox"/> Deployment Tools                                  | (Ap   |
| <input checked="" type="checkbox"/> Windows Preinstallation Environment (Windows PE)  | Size: |
| <input checked="" type="checkbox"/> Imaging And Configuration Designer (ICD)          | Micro |
| <input checked="" type="checkbox"/> Configuration Designer                            |       |
| <input checked="" type="checkbox"/> User State Migration Tool (USMT)                  | The   |
| <input type="checkbox"/> Volume Activation Management Tool (VAMT)                     | wizar |
| <input type="checkbox"/> Windows Performance Toolkit                                  | appli |
| <input type="checkbox"/> Windows Assessment Services                                  | moni  |
| <input type="checkbox"/> Microsoft SQL Server 2012 Express                            | appli |
| <input type="checkbox"/> Microsoft User Experience Virtualization (UE-V) Template Ger | the a |
| <input type="checkbox"/> Microsoft Application Virtualization (App-V) Sequencer       | use 1 |
|   | the c |

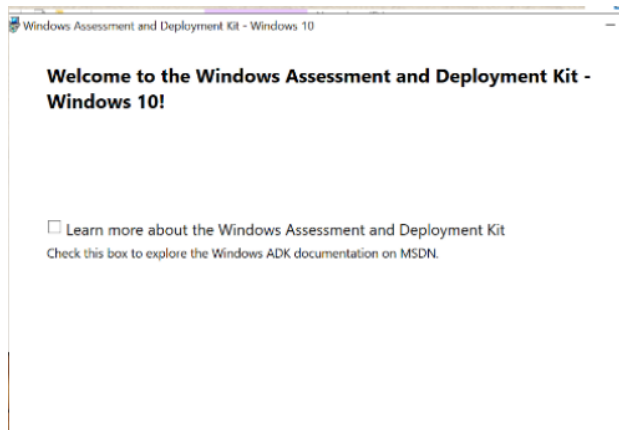
[Tell me more about the Customer Experience Improvement Program \(CEIP\).](#)

**\* Participation applies to all Windows kits installed on this computer.**

☒ Yes

☐ No

[Privacy Statement](#)



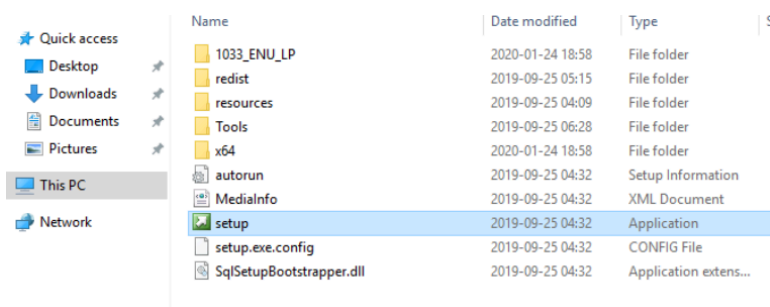
## Installing SQL Server 2019

1. **Prepare for Installation:**
  - Go to **Drive D** on the server.
  - Navigate to the folder: **SQL Server 2019 > x64 > setup.exe**.
2. **Start SQL Server Installation:**
  - Run **setup.exe** to launch the SQL Server Installation Center.
3. **Begin New SQL Server Installation:**
  - In the SQL Server Installation Center, click on **Installation** in the left-hand menu.
  - Click **New SQL Server stand-alone installation or add feature to an existing installation**.
4. **Choose Evaluation Edition:**
  - Select **Evaluation** as the edition to install.
  - Click **Next**.
5. **Configure Microsoft Update:**
  - On the **Microsoft Update** screen, do not check the option to **Use Microsoft Update**.
  - Click **Next**.
6. **Install Setup Files:**
  - SQL Server will install setup files. Wait for this process to complete and click **Next**.
7. **Configure SQL Server Setup:**
  - On the **SQL Server License Terms** screen, review and accept the license terms. Click **Next**.
8. **SQL Server Feature Selection:**
  - On the **Feature Selection** screen, select the features you want to install. For a basic setup, ensure that **Database Engine Services** is checked.
  - Click **Next**.
9. **Instance Configuration:**
  - On the **Instance Configuration** screen, select **Default instance** or specify a named instance if needed.
  - The default instance ID is **MSSQLSERVER**. You can leave it as is or specify a different instance ID.

- Click **Next**.
- 10. **Server Configuration:**
  - On the **Server Configuration** screen, choose the appropriate service accounts for SQL Server services. For basic setup, you can use the default accounts or specify custom accounts as required.
  - Click **Next**.
- 11. **Collation Settings:**
  - On the **Collation** screen, click **Customize**.
  - Set the **SQL collation** to **SQL\_Latin1\_General\_CP1\_CI\_AS**.
  - Click **Next**.
- 12. **Database Engine Configuration:**
  - On the **Database Engine Configuration** screen, choose the authentication mode:
    - **Windows Authentication Mode:** SQL Server will use Windows user accounts for authentication.
    - **Mixed Mode (SQL Server authentication and Windows authentication):** You will need to provide a SQL Server administrator password if choosing this option.
  - Add SQL Server administrators as needed by clicking **Add Current User** or specifying other users.
  - Click **Next**.
- 13. **Ready to Install:**
  - Review the summary of your installation choices on the **Ready to Install** screen.
  - Click **Install** to begin the installation process.
- 14. **Complete Installation:**
  - Wait for the installation to complete. Once it's done, click **Next** and then **Close** to exit the setup wizard.

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This will set up SQL Server 2019 on your server, configured with the specified settings



Name	Date modified	Type	Si
1033_ENU_LP	2020-01-24 18:58	File folder	
redist	2019-09-25 05:15	File folder	
resources	2019-09-25 04:09	File folder	
Tools	2019-09-25 06:28	File folder	
x64	2020-01-24 18:58	File folder	
autorun	2019-09-25 04:32	Setup Information	
MedialInfo	2019-09-25 04:32	XML Document	
setup	2019-09-25 04:32	Application	
setup.exe.config	2019-09-25 04:32	CONFIG File	
SqlSetupBootstrapper.dll	2019-09-25 04:32	Application extens...	

## Planning

**Installation**

## Maintenance

**New SQL Server stand-alone installation or add features to an existing installation**

Launch a wizard to install SQL Server 2019 in a non-clustered environment or to add features to an existing SQL Server 2019 instance.

**Product Key**

Specify the edition of SQL Server 2019 to install.

**Product Key**

License Terms

Global Rules

Microsoft Update

Product Updates

Install Setup Files

Install Rules

Feature Selection

Feature Rules

Feature Configuration Rules

Ready to Install

Installation Progress

Complete

Validate this instance of SQL Server 2019 by entering the product key, or by using a trial edition, Evaluation, or Express. Evaluation has the largest set of features, and is activated with a 180-day expiration date. Evaluation is available only on the Microsoft Books Online, and is activated with a 180-day expiration date. Evaluation has the same set of features found in Evaluation, but is for development only. To upgrade from one installed edition to another, you must first uninstall the existing edition.

☒ Specify a free edition:

Evaluation

☐ Enter the product key:

- - - -

**Microsoft Update**

Use Microsoft Update to check for important updates

Product Key

License Terms

Global Rules

**Microsoft Update**

Product Updates

Install Setup Files

Install Rules

Feature Selection

Feature Rules

Feature Configuration Rules

Ready to Install

Installation Progress

Complete

Microsoft Update offers security updates for SQL Server software, including SQL Server. For more information, visit the Microsoft Update website.

☐ Use Microsoft Update to check for updates[Microsoft Update FAQ](#)[Microsoft Update Privacy Statement](#)

**Server Configuration**

Specify the service accounts and collation configuration.

Install Rules  
Feature Selection  
Feature Rules  
Instance Configuration  
**Server Configuration**  
Database Engine Configuration  
Feature Configuration Rules  
Ready to Install  
Installation Progress  
Complete

Service Accounts Collation

Database Engine:  
 [Customize...](#)  
Latin1-General, case-insensitive, accent-sensitive, kanatype-insensitive, width-insensitive for Unicode Data, SQL Server Sort Order 52 on Code Page 1252 for non-Unicode Data

**Install Setup Files**

If an update for SQL Server Setup is found and specified to be included, the update will be installed.

Product Key  
License Terms  
Global Rules  
Microsoft Update  
Product Updates  
**Install Setup Files**  
Install Rules  
Feature Selection  
Feature Rules  
Feature Configuration Rules  
Ready to Install  
Installation Progress  
Complete

Task	Status
Scan for product updates	Completed
Download Setup files	Skipped
Extract Setup files	Skipped
Install Setup files	Not started

**Complete**

Your SQL Server 2019 installation completed successfully.

Global Rules  
Microsoft Update  
Install Setup Files  
Install Rules  
Product Key  
License Terms  
Feature Selection  
Feature Rules  
Instance Configuration  
Server Configuration  
Database Engine Configuration  
Feature Configuration Rules  
Ready to Install  
Installation Progress  
**Complete**

Information about the Setup operation or possible next steps:

Feature	Status
✓ Database Engine Services	Succeeded
✓ SQL Browser	Succeeded
✓ SQL Writer	Succeeded
✓ SQL Client Connectivity SDK	Succeeded
✓ SQL Client Connectivity	Succeeded

Details:

Install successful.

Summary log file has been saved to the following location:

## Installing and Configuring WSUS

### 1. Prepare for WSUS Installation:

- Create a folder where WSUS will store updates. For example, create a folder **C : \WSUS** on your server.

### 2. Install WSUS:

- On the SCCM server, open **Server Manager**.
- Click on **Manage** and select **Add Roles and Features**.

### 3. Role Installation Wizard:

- Proceed through the wizard until you reach the **Select server roles** section.
- Check the box for **Windows Server Update Services**.
- Click **Next**.

### 4. Select Features:

- On the **Select features** screen, you can leave the default selections or add additional features if needed.
- Click **Next**.
- 5. **WSUS Role Services:**
  - On the **Select role services** screen, check the following:
    - **WSUS Services**
    - **Database**
  - Make sure that **WSUS Services** and **SQL Server Database** (if required) are selected.
  - Click **Next**.
- 6. **Configure WSUS:**
  - On the **WSUS Configuration** screen:
    - **Content Location:** Specify the folder you created earlier (C:\WSUS).
    - Check the **Use existing database** option if you are using an existing WSUS database or **Install a new WSUS database** if this is a fresh installation.
    - Ensure that **Localhost** is selected as the WSUS server to manage updates from.
    - Check **Connect** to ensure the server can reach WSUS.
  - Click **Next**.
- 7. **Finish Installation:**
  - Review your selections and click **Install** to begin the installation process.
  - Wait for the installation to complete.
- 8. **Post-Installation Configuration:**
  - Once the installation is complete, click **Close**.
- 9. **Open WSUS Console:**
  - Click on the flag icon in the top right corner of the Server Manager window.
  - Select **Launch Post-Installation Tasks** to complete the WSUS setup.
- 10. **Configure WSUS:**
  - After the post-installation tasks are complete, open the **WSUS Console** to further configure WSUS settings, including synchronization with Microsoft Update and approval of updates.

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This process will install and configure WSUS on your server, allowing it to manage and deploy updates.

Before You Begin

Installation Type

Server Selection

Server Roles

Features

WSUS

Role Services

**Content**

DB Instance

Confirmation

Results

If you have a drive formatted with NTFS and at least 6 GB of free disk space, you can use it to store updates for client computers to download quickly.

If you need to save disk space, clear the check box to store updates on Microsoft Update; downloads will be slower.

If you choose to store updates locally, updates are not downloaded to your WSUS server until you approve them. By default, when updates are approved, they are downloaded for all languages.

☒ Store updates in the following location (choose a valid local path on SC01.xstle.se, or a remote path):

CAWSUS

Before You Begin

Installation Type

Server Selection

Server Roles

Features

WSUS

Role Services

Content

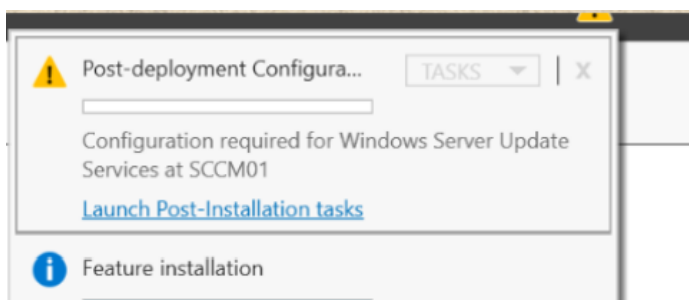
**DB Instance**

Specify an existing database server (Machine name\Instance name) to install the WSUS database:

localhost

Check connection

Successfully connected to server



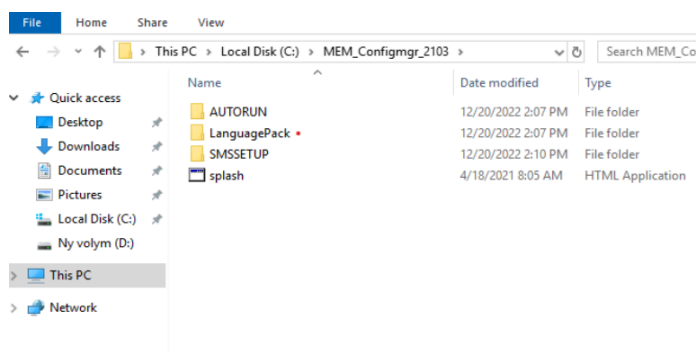
## Installing SCCM

1. **Prepare Installation Files:**
  - Navigate to **Drive D**.
  - Open the folder **MEM\_configmgr\_2103**.
2. **Start Installation:**
  - Locate and double-click the **splash.hta** file to launch the Configuration Manager setup.
3. **Begin Setup:**
  - Click **Install** to start the installation process.
  - On the **Setup Wizard** screen, click **Next**.
4. **Select Installation Type:**
  - Choose **Install Configuration Manager**.
  - Select the option for a **Typical installation**.
  - Click **Next**.
5. **Evaluation Version:**
  - When prompted to install the evaluation version, click **Yes**.
  - Click **Next** to continue.
6. **License Terms:**

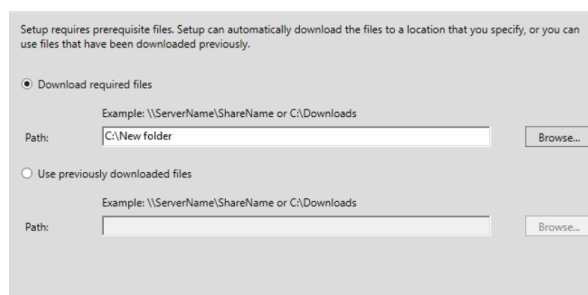


- Review and select all the license terms.
  - Click **Next**.
7. **Download and Save Files:**
- In the **Download Files** section:
    - Click **Browse** to choose the location where the installation files will be saved.
    - Create a new folder if necessary (e.g., **C:\NEW FOLDER**).
    - Select this folder and click **Next**.
8. **Wait for Download:**
- The installation files will be downloaded to the specified folder.
  - Wait for the download process to complete.
9. **Proceed with Installation:**
- Once the files are downloaded, follow any additional prompts to complete the installation of Configuration Manager.

These steps will guide you through the installation of SCCM using the **MEM\_configmgr\_2103** package.



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## Site and Installation Settings

1. **Start Configuration Manager Setup:**
  - If not already running, launch the Configuration Manager setup wizard.
2. **Proceed to Site and Installation Settings:**
  - Navigate to the **Site and Installation Settings** section.
  - Click **Next** to continue.
3. **Configure SQL Server Properties:**

- Before proceeding with the installation of SQL Server and SQL Agent, you need to set the properties for these services.
  - On the **Service Configuration** screen:
    - **SQL Server:** Specify the SQL Server instance where SCCM will install its database.
    - **SQL Agent:** Specify the SQL Server Agent account if it will be used for SCCM-related tasks.
  - 4. **Specify SQL Server Instance:**
    - Provide the name of the SQL Server instance where SCCM will store its database.
    - If SQL Server is installed on the same machine, you can use `localhost` or the name of the SQL Server instance.
  - 5. **SQL Server Agent Configuration:**
    - Configure the SQL Server Agent settings if needed. Typically, this will involve specifying the service account used by SQL Server Agent.
  - 6. **Continue Installation:**
    - Click **Next** to proceed with the installation after setting the SQL Server and SQL Agent properties.
- 

These steps ensure that SCCM is correctly configured to use the SQL Server for its database and set up SQL Server Agent for scheduled tasks.

Specify a site code that uniquely identifies this Configuration Manager site in your hierarchy.

Site code:

Specify a site name that helps to identify the site. Example: Contoso Headquarters Site

Site name:

Note: The site code must be unique in the Configuration Manager hierarchy and cannot be changed after you install the site.

Installation folder:

Specify whether to install the Configuration Manager console to manage the Configuration Manager site from this computer. You can remotely manage the site when you do not install the Configuration Manager console.

☒ Install the Configuration Manager console

The screenshot shows the Windows Services console with the 'SQL Server Agent (MSSQLSERVER)' service selected. The 'Log On' tab of the service properties dialog box is active, showing the 'Log on as:' section. The 'Local System account' is selected, and the 'Allow service to interact with desktop' checkbox is checked. The 'This account:' section is also visible, showing the account 'MSTILE\Administrator' and the password field.

Name	Description
Spot Verifier	Verifies pote...
SQL Server (MSSQLSERVER)	Provides sto...
SQL Server Agent (MSSQLSE...)	Executes job...
SQL Server Browser	Provides SQ...
SQL Server CEIP service (MSS...	CEIP service ...
SQL Server VSS Writer	Provides the...
SSDP Discovery	Discovers ne...
State Repository Service	Provides req...
Still Image Acquisition Events	Launches ap...
Storage Service	Provides ena...
Storage Tiers Management	Optimizes th...
SysMain	Maintains a...
System Event Notification S...	Monitors sy...
System Events Broker	Coordinates ...
System Guard Runtime Mon...	Monitors an...
Task Scheduler	Enables a us...
TCP/IP NetBIOS Helper	Provides sup...
Telephony	Provides Tel...
Thomson	Provides use...

>next

Select User or Service Account

Select this object type:  
 [Object Types...](#)

From this location:  
 [Locations...](#)

Enter the object name to select ([examples](#)):  
 [Check Names](#)

Settings Summary

Setup will install Configuration Manager with the following settings.

You have selected to install this site as a stand-alone primary site. You can expand this site into a hierarchy at a later time by installing central administration site.

Settings:

Setup Component	Component Details
Setup Type	Simple setup
Site Code	GBG
Site Name	Gothenburg
Role Communication Protocol	Client configured to communicate over both
Clients Use PKI Certificate	No
Product Key	EVAL
Installation Directory	C:\Program Files\Microsoft Configuration M...

Core setup has completed

Elapsed time: 00:01:12:28

- ✓ Evaluating setup environment
- ✓ Evaluating and installing Configuration Manager dependencies
- ✓ Generating public key and SQL Server certificate
- ✓ Removing pre-existing Configuration Manager services and registry keys
- ✓ Setting up server accounts
- ✓ Updating registry
- ✓ Setting up the SQL Server database
- ✓ Copying files

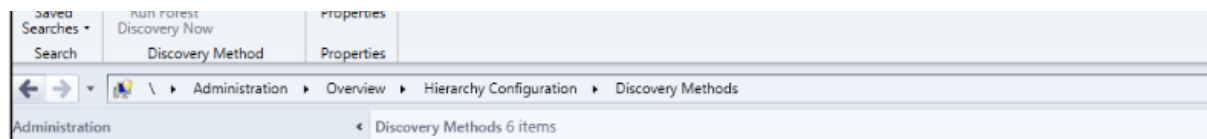
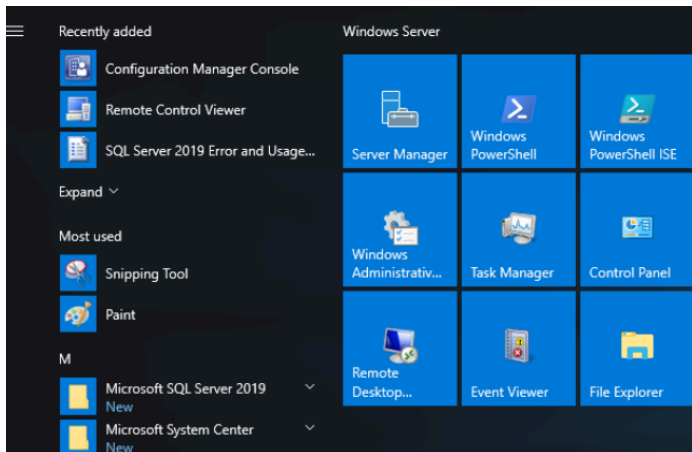
You can close the wizard now. For a list of tasks to help you configure your site, see [Post-Setup Configuration Tasks](#) in the Configuration Manager Documentation Library.

[View Log](#)

## Configuration of SCCM

1. **Open Configuration Manager Console:**
  - Launch the **Configuration Manager Console**. The console will open with various features and options.
2. **Configure Active Directory Discovery:**
  - Go to the **Administrator** workspace.
  - In the **Administration** section, navigate to **Hierarchy Configuration** and then **Discovery Methods**.
3. **Open Properties for Discovery Methods:**
  - Select **Active Directory Forest Discovery** (or the relevant discovery method).
  - Click **Properties**.
  - Go to the **General** tab and click on the yellow icon to initiate the search for devices.
4. **Search for Devices:**
  - Click **Browse** to select and search for the device you want to configure.

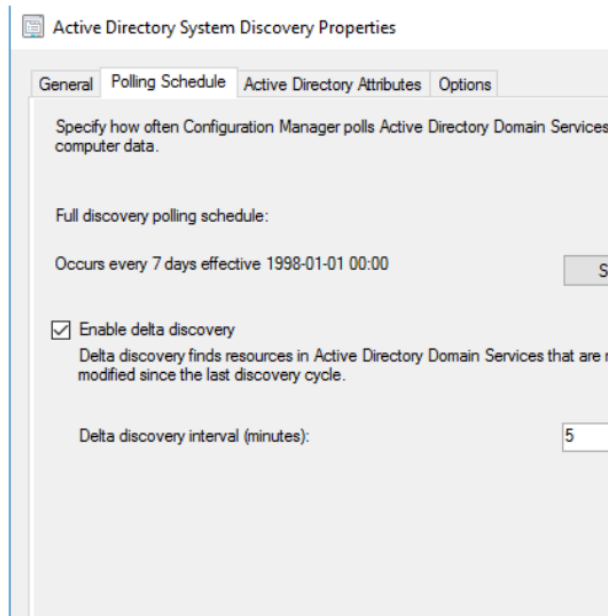
- Locate the desired device and click **OK**.
- 5. **Configure Polling Schedule:**
  - Under the **Polling Schedule** tab:
    - Click on **Discovery**.
    - Ensure that **Recurring the AD** is selected.
    - Choose **Use the computer account** for the discovery.
    - Set the polling interval according to your needs.
    - Click **OK**.
- 6. **Configure Active Directory Attributes:**
  - Go to **Active Directory Attributes**.
  - Ensure that all necessary attributes are configured correctly.
  - Click **Option** to configure attributes if needed.
  - Click **OK** to apply the changes.
- 7. **Configure Boundaries:**
  - Go to the **Administration** workspace.
  - Navigate to **Hierarchy Configuration** and then **Boundaries**.
  - Click **Create Boundary**.
- 8. **Create a New Boundary:**
  - Enter a description for the boundary (e.g., **GBG**).
  - Set **Type** to **IP Subnet**.
  - Enter the following details:
    - **Network:** **192.168.10.0**
    - **Subnet Mask:** **255.255.255.0**
    - **Gateway:** **192.168.10.0**
  - Click **OK** to create the IP subnet boundary.
- 9. **Configure Boundary Groups:**
  - In the **Boundaries** section, open the properties of the **Boundary Groups**.
  - Click **Create Boundary Group**.
  - Name the boundary group (e.g., **GBG**).
  - Click **Add** to add boundaries to the group.
  - Reference the boundaries created earlier by selecting and adding them to the group.
  - Click **OK** to apply the settings.

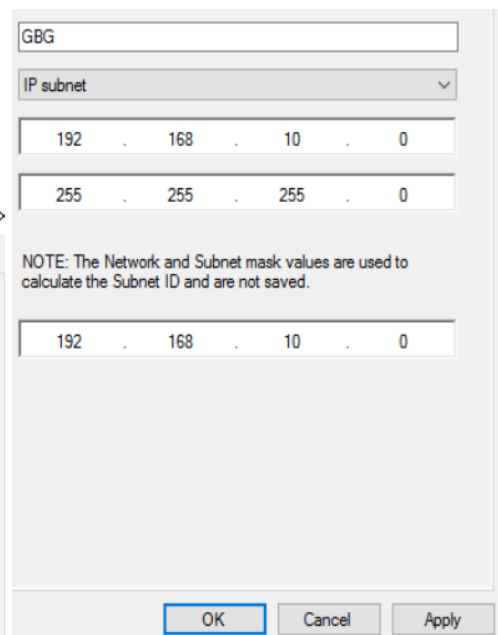
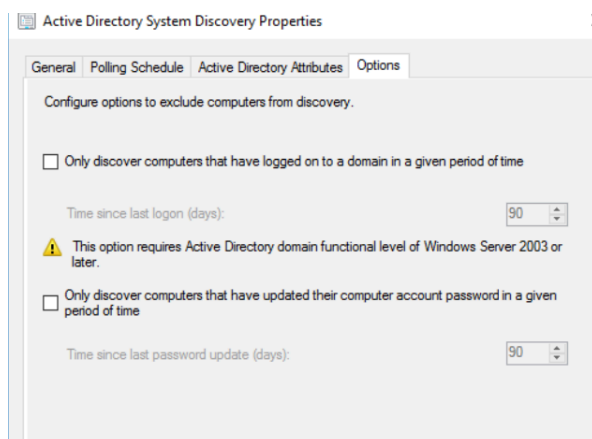
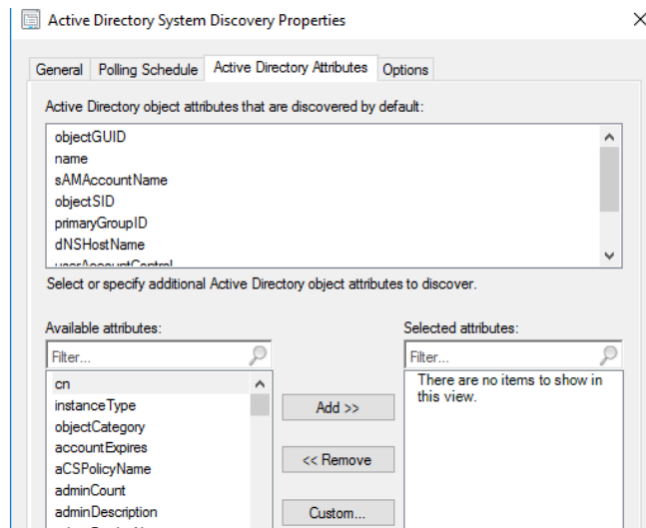


then>

Discovery Methods 6 items				
Search				
Icon	Name	Status	Site	Description
	Active Directory Forest Discovery	Disabled	GBG	Configures settings that Configuration Manager uses to find A...
	Active Directory Group Discovery	Disabled	GBG	Configures settings that Configuration Manager uses to find g...
	Active Directory System Discovery	Disabled	GBG	Configures settings that Configuration Manager uses to find c...
	Active Directory User Discovery			Configures settings that Configuration Manager uses to find u...
	Heartbeat Discovery		F5	Configures interval for Configuration Manager clients to perio...
	Network Discovery			Configures settings and polling intervals to discover resources...

>





Boundaries 1 items			
Search			
Icon	Boundary	Type	Description
	192.168.10.0	IP subnet	GBG

## Configure Firewall

### 1. Open Firewall Settings:

- Open **Control Panel**.
- Go to **System and Security** and then **Windows Defender Firewall**.
- Click on **Advanced settings**.

### 2. Modify Firewall Properties:

- In the **Windows Firewall with Advanced Security** window, go to **Properties**.
- For each profile (Domain, Private, Public), ensure that the firewall is set to **Allow** connections as necessary.
- Click **OK** to apply the changes.

---

## Install SCCM Client

1. **View Devices:**
  - Open the **Configuration Manager Console**.
  - Go to **Assets and Compliance > Overview > Devices**.
  - Here you should see a list of all devices.
2. **Install SCCM Client:**
  - Select the devices where you want to install the client.
  - Right-click on the selected device(s) and choose **Install Client**.
  - The installation process will begin. Click **Next** to proceed.
3. **Configure Installation Options:**
  - On the **Installation Options** screen:
    - Select **Allow the client software to be installed on domain computers**.
    - Choose **Install the client on the specific site** and select the site (e.g., **gbg-GOTHENBURG**).
  - Click **Next** to continue.
4. **Client Installation Setting:**
  - Go to **Administration > Site Configuration > Sites**.
  - Click on **Client Installation Settings** and then **Client Push Installation**.
  - In the **General** tab, check **Enable automatic site-wide client push**.
  - Check **Allow connections**.
  - Click **OK** to apply the settings.
5. **Create a New Account for Client Push:**
  - Click on the **yellow exclamation mark** or **Create Account** button.
  - Click **New Account** to add a domain/user account for client push installation.
  - Enter the **Domain/User** details and click **OK**.
6. **Update Boundary Group:**
  - Go to **Administration > Hierarchy Configuration > Boundary Groups**.
  - Open the properties of the **GBG BG** boundary group.
  - Ensure that the boundary group is set to be used for the assignment.
  - Click **Add** to include necessary boundaries.
  - Click **OK** to save the changes.

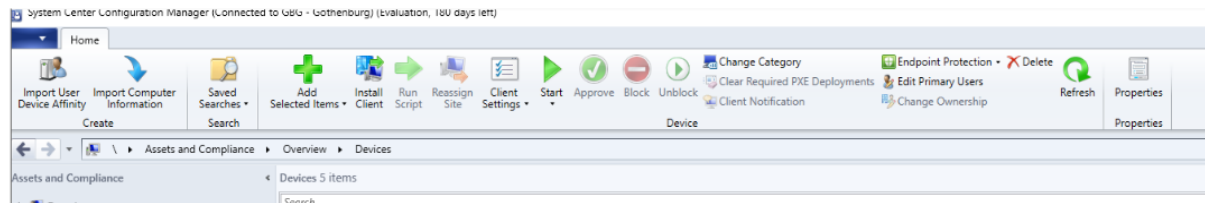
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## Final Step: Verify Client Installation

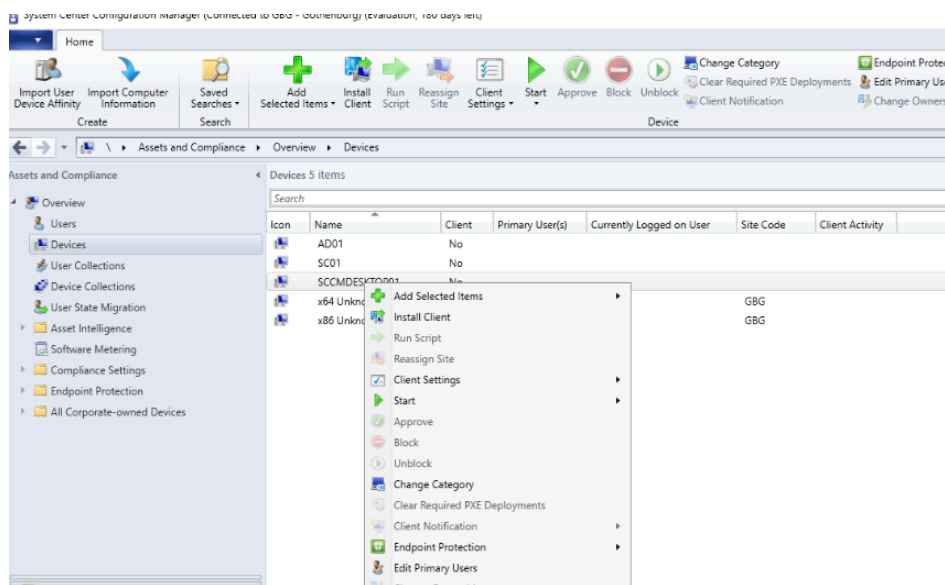
1. **Check Configuration Manager Client on the Device:**
  - Once the client installation is complete, go to the client machine.
  - Open **Control Panel**.
  - Look for **Configuration Manager** to verify that the client is installed.
2. **Verify SCCM Client Properties:**
  - On the client machine, open **Configuration Manager** from the Control Panel.
  - Check the **General** tab to see information about the SCCM client and ensure it's properly configured.



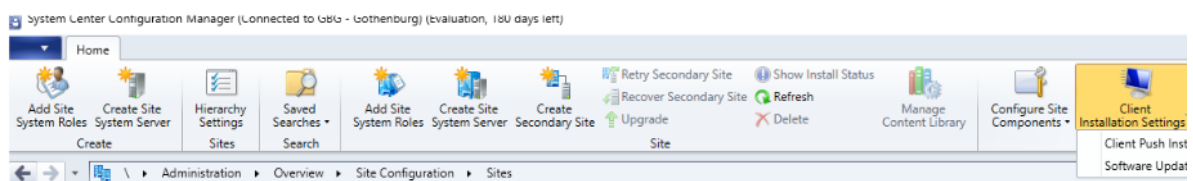
These steps will ensure that the SCCM client is installed and properly configured on your devices.



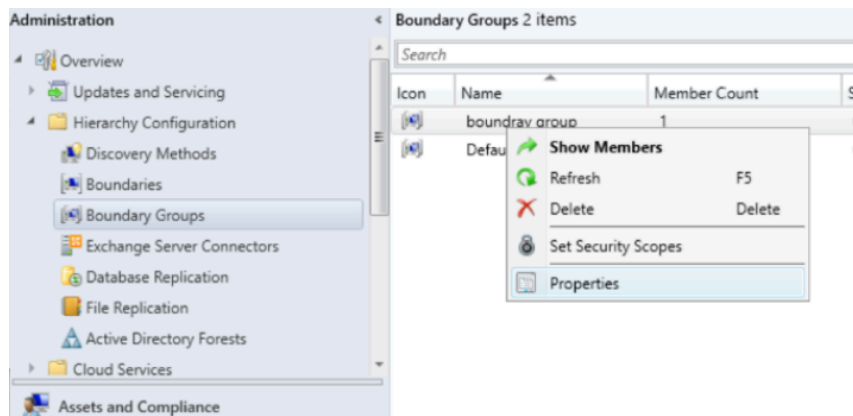
now go to Assets and compliance>overview>devices. (here you see your all devices)  
 \*in case you find /see the error correct the error by viewing its warning



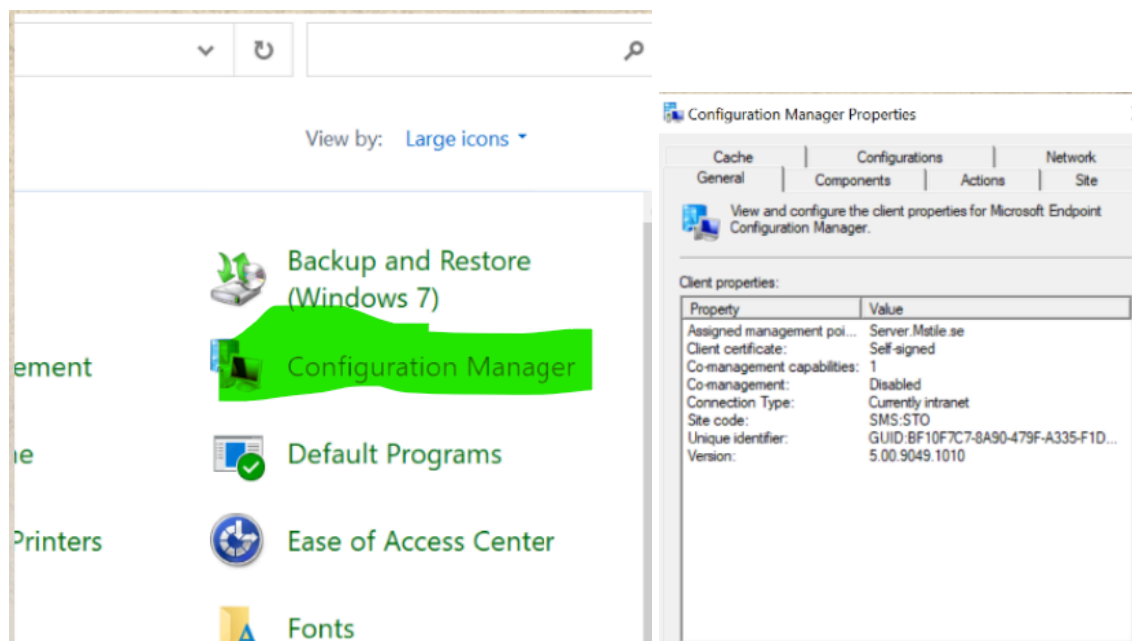
\*here we see the devices so now click left and there you will click on install client>installation process begin>click next>in installation option click "ALLOW THE CLIENT SOFTWARE TO BE INSTALLED ON DOMAIN">(\*) CLICK ON INSTALL THE CLIENT ON THE SPECIFIC SITE:gbg-GOTHENBURG>next>client is being pushed to windows 10 VM>\*



\*go to client installation setting and click on CLIENT PUSH INSTALLATION.>general click on enable>click on allow connections>ok>click on yellow button>create "new account">domain/user to be added>ok.  
 now go to Boundary group >GBG BG properties>click on use this boundary group to this assignment.>click add>now here we see the SCCM client is installed.\*



## Final step



## Creating and Installing an Application in SCCM

1. **Open SCCM Console:**
  - a. Launch the **Configuration Manager Console**.
2. **Navigate to Software Library:**
  - a. Go to **Software Library** in the left-hand navigation pane.
  - b. Expand **Application Management** and select **Applications**.
3. **Create a New Application:**
  - a. Click **Create Application** in the ribbon at the top.
4. **Specify Application Type:**
  - a. In the **Create Application Wizard**, choose **Automatically detect information about this application from installation files**.
  - b. Click **Next**.

5. **Select Application Type:**
  - a. Select **Windows Installer (\*.msi file)** as the application type.
  - b. Click **Next**.
6. **Specify Source File Location:**
  - a. Enter the path to the MSI file for the application. For example, if your file is located on a network share, enter: `\\sccm\app\googlechrome.msi`.
  - b. Click **Next**.
7. **Application Information:**
  - a. The wizard will detect the application information from the MSI file. Verify or enter the application details as needed, such as:
    - i. **Name:** Google Chrome
    - ii. **Publisher:** Google
    - iii. **Version:** [Version Number]
  - b. Click **Next**.
8. **Deployment Type:**
  - a. Specify the deployment type settings for the application. Typically, the default settings for the MSI package will be sufficient.
  - b. Click **Next**.
9. **Content Location:**
  - a. Confirm or modify the content location where the source files are stored. This is usually the network path you specified earlier.
  - b. Click **Next**.
10. **Detection Method:**
  - a. Configure the detection method to determine if the application is already installed. SCCM usually detects this automatically from the MSI file, but you can modify the detection rules if needed.
  - b. Click **Next**.
11. **User Experience:**
  - a. Configure user experience settings such as installation behavior, whether the application should be installed in the background, and if users should see any installation progress.
  - b. Click **Next**.
12. **Requirements:**
  - a. Define any system requirements that must be met for the application to be installed.
  - b. Click **Next**.
13. **Dependencies:**
  - a. Specify any dependencies required for the application to function correctly, if applicable.
  - b. Click **Next**.
14. **Summary:**
  - a. Review the summary of your application settings and configurations.
  - b. Click **Next** to create the application.
15. **Complete the Wizard:**
  - a. Click **Close** to finish the application creation process.

