

In today's topic, we will learn about installing Standalone primary site in SCCM 2012 R2.

Before proceeding further, we will go through brief about the Primary site.

Primary Site:

Primary Sites supports clients up to 1,00,000 and each primary site can support up to 10 MP's and up to 250 Secondary sites. A primary site stores Configuration Manager 2012 data for itself and all the secondary sites beneath it in a SQL Server database. This is called the Configuration Manager 2012 site database. Primary sites have an administrative tool called the Configuration Manager 2012 console that enables the Configuration Manager 2012 administrator to directly manage the site. Primary sites are child sites of the Central Administration Site.

The Primary Sites within the SCCM 2012 R2 Hierarchy are the sites responsible for managing clients and servers.

Primary sites in System Center 2012 Configuration Manager R2 have the following differences from primary sites in Configuration Manager 2007:

The Primary Sites within the SCCM 2012 R2 Hierarchy are the sites responsible for managing clients and servers.

Primary sites in System Center 2012 Configuration Manager R2 have the following differences from primary sites in Configuration Manager 2007:

- A primary site supports only a central administration site as a parent site.
- Additional primary sites allow the hierarchy to support more clients.
- Cannot be added below other primary sites.
- No longer used as a boundary for client agent settings or security.
- Participates in database replication.

Within the Accenture SCCM 2012 R2 Hierarchy the Primary Sites will be the primary point of administration for the business units.

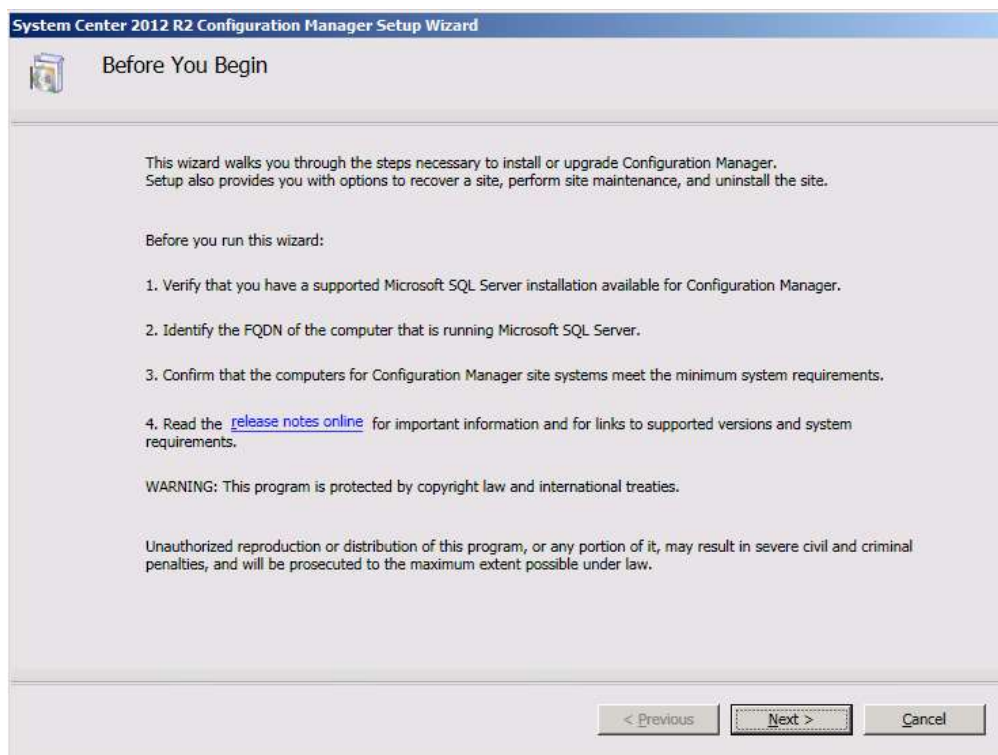
Below Pre-requisites should be in place to proceed further with the installation of Primary site.

- Web Server (IIS) with below sub features
 - Common HTTP Features – Default Document, Static Content.
 - Application Development – ASP.NET 3.5, .NET Extensibility 3.5, ASP.NET 4.5, .NET Extensibility 4.5, ISAPI extensions.
 - Security – Windows Authentication.
 - IIS 6 Management Compatibility – IIS Management Console, IIS 6 Metabase Compatibility, IIS 6 WMI Compatibility, IIS Management Scripts and Tools.
- .Net Framework 3.5 Features [Install all sub features]
- .Net Framework 4.5 Features [Install all sub features]
- WSUS
- Remote differential compression
- BITS

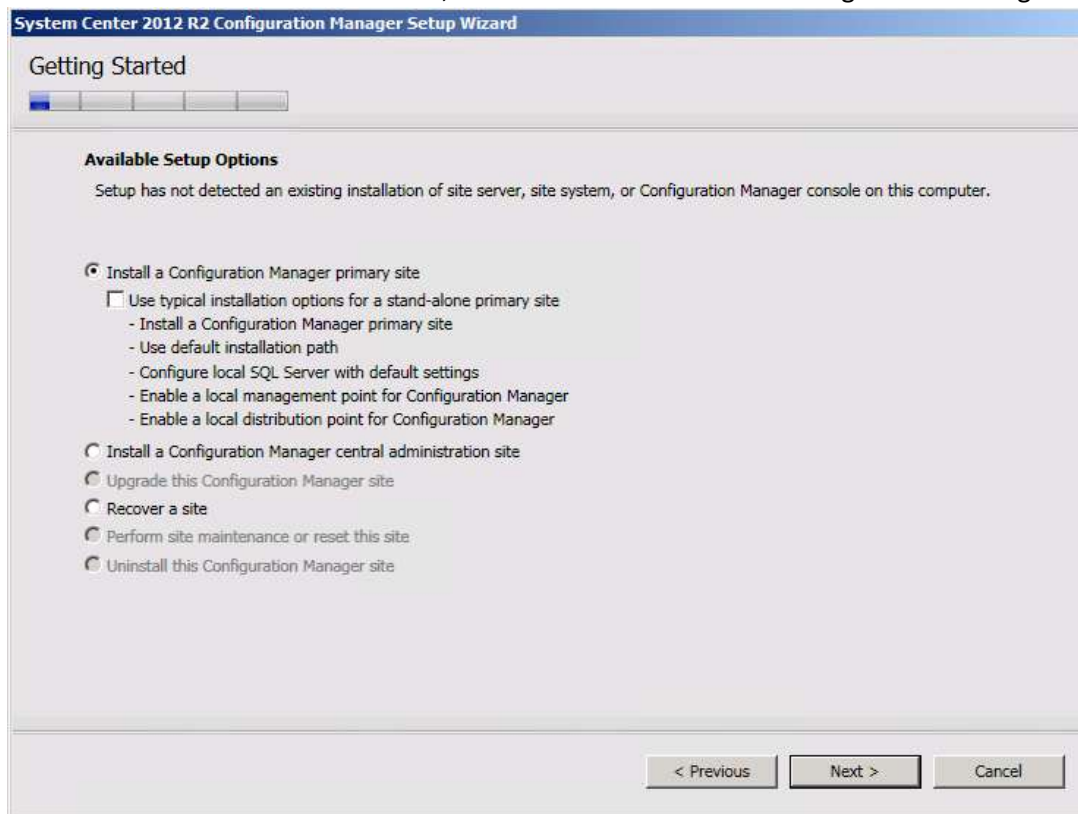
Click on install to begin the installation of CAS



Click Next to continue.



To install Central Administration Site, select the circle to Install a Configuration Manager Primary Site.



The screenshot shows the 'Getting Started' screen of the 'System Center 2012 R2 Configuration Manager Setup Wizard'. The title bar is blue with the text 'System Center 2012 R2 Configuration Manager Setup Wizard'. Below the title bar, the text 'Getting Started' is displayed. A progress bar with five segments is shown, with the first segment highlighted in blue. The main content area is titled 'Available Setup Options' and contains the text: 'Setup has not detected an existing installation of site server, site system, or Configuration Manager console on this computer.' Below this text, there are several radio button options: 'Install a Configuration Manager primary site' (selected), 'Install a Configuration Manager central administration site', 'Upgrade this Configuration Manager site', 'Recover a site', 'Perform site maintenance or reset this site', and 'Uninstall this Configuration Manager site'. Under the 'Install a Configuration Manager primary site' option, there is a checkbox 'Use typical installation options for a stand-alone primary site' which is unchecked. Below the checkbox, there are five bullet points: '- Install a Configuration Manager primary site', '- Use default installation path', '- Configure local SQL Server with default settings', '- Enable a local management point for Configuration Manager', and '- Enable a local distribution point for Configuration Manager'. At the bottom right, there are three buttons: '< Previous', 'Next >', and 'Cancel'.

System Center 2012 R2 Configuration Manager Setup Wizard

Getting Started

Available Setup Options

Setup has not detected an existing installation of site server, site system, or Configuration Manager console on this computer.

☒ Install a Configuration Manager primary site

☐ Use typical installation options for a stand-alone primary site

- Install a Configuration Manager primary site
- Use default installation path
- Configure local SQL Server with default settings
- Enable a local management point for Configuration Manager
- Enable a local distribution point for Configuration Manager

☐ Install a Configuration Manager central administration site

☐ Upgrade this Configuration Manager site

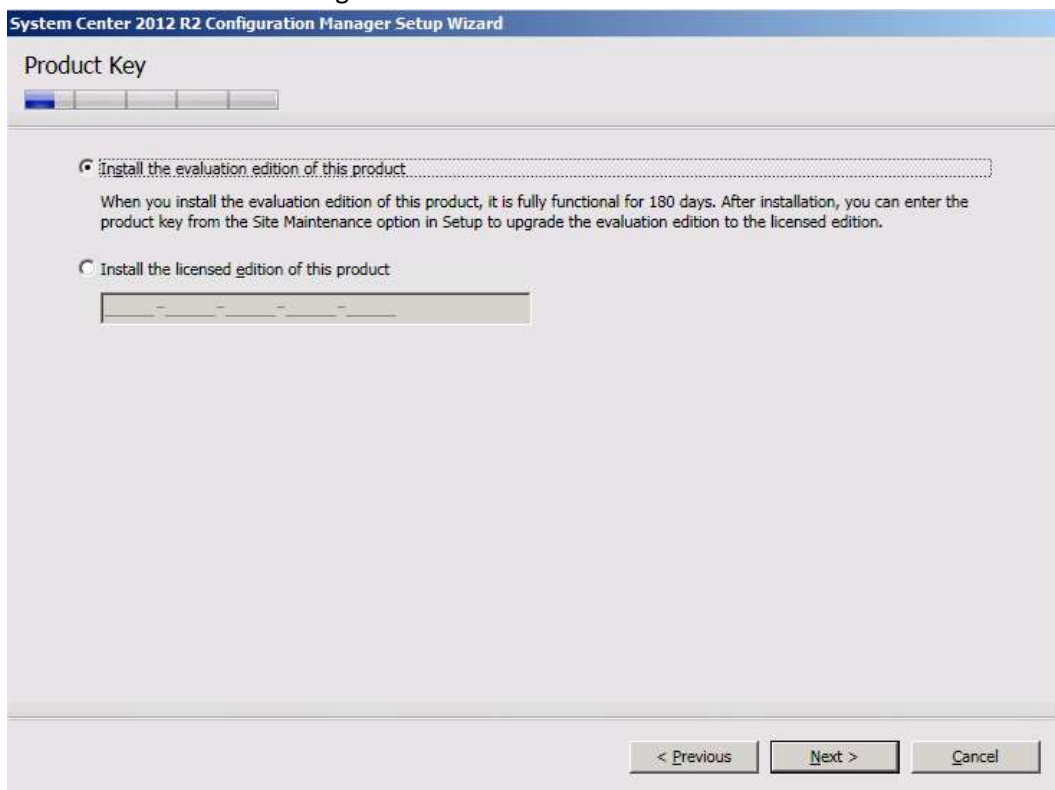
☐ Recover a site

☐ Perform site maintenance or reset this site

☐ Uninstall this Configuration Manager site

< Previous Next > Cancel

As this is a Lab I am selecting



The screenshot shows the 'Product Key' screen of the 'System Center 2012 R2 Configuration Manager Setup Wizard'. The title bar is blue with the text 'System Center 2012 R2 Configuration Manager Setup Wizard'. Below the title bar, the text 'Product Key' is displayed. A progress bar with five segments is shown, with the first segment highlighted in blue. The main content area contains two radio button options: 'Install the evaluation edition of this product' (selected) and 'Install the licensed edition of this product'. Below the 'Install the evaluation edition of this product' option, there is a text box containing the text: 'When you install the evaluation edition of this product, it is fully functional for 180 days. After installation, you can enter the product key from the Site Maintenance option in Setup to upgrade the evaluation edition to the licensed edition.' Below the 'Install the licensed edition of this product' option, there is a text box for entering the product key. At the bottom right, there are three buttons: '< Previous', 'Next >', and 'Cancel'.

System Center 2012 R2 Configuration Manager Setup Wizard

Product Key

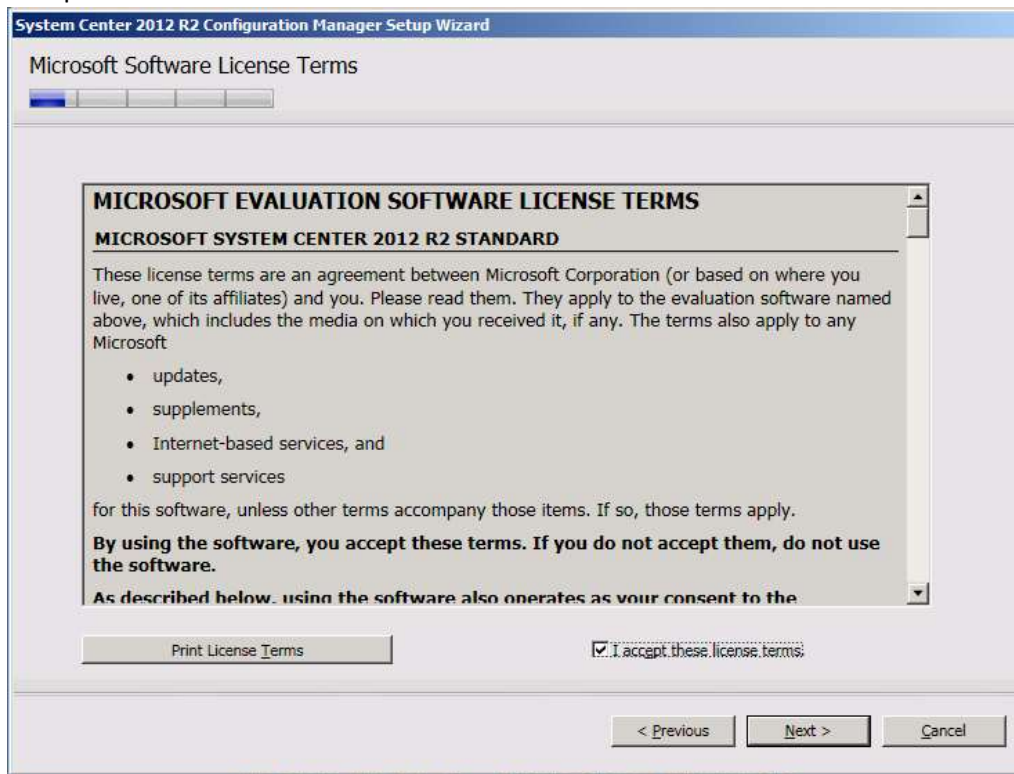
☒ Install the evaluation edition of this product

When you install the evaluation edition of this product, it is fully functional for 180 days. After installation, you can enter the product key from the Site Maintenance option in Setup to upgrade the evaluation edition to the licensed edition.

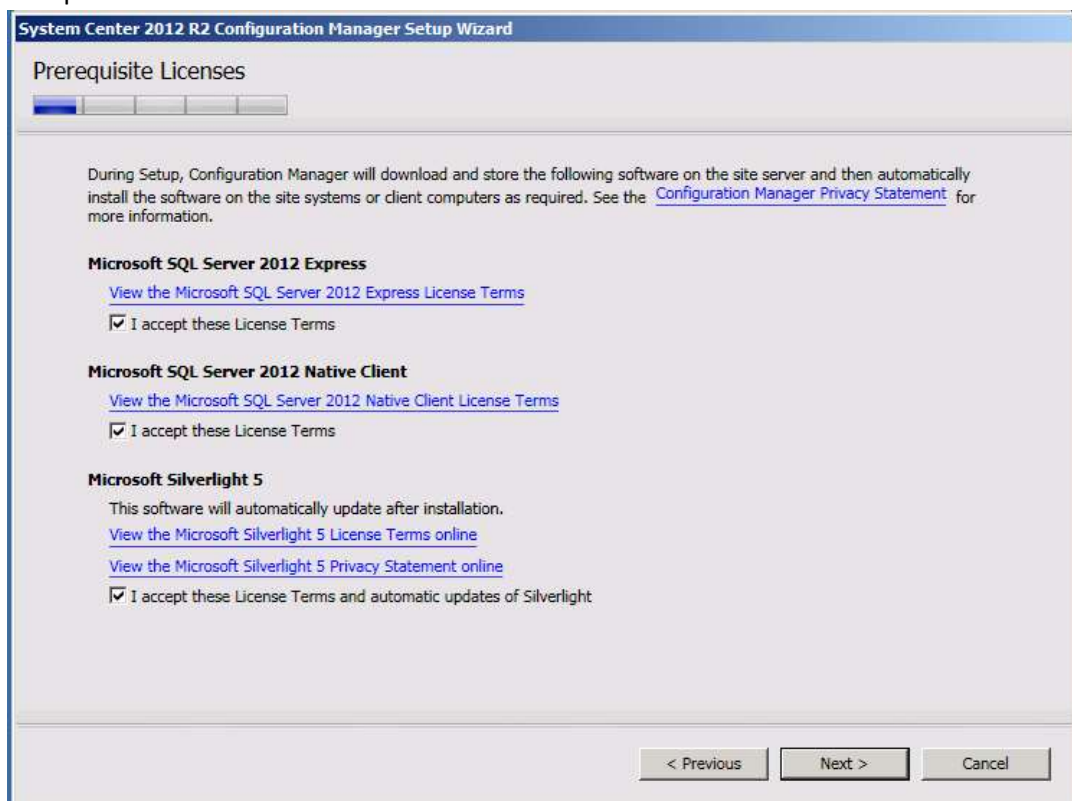
☐ Install the licensed edition of this product

< Previous Next > Cancel

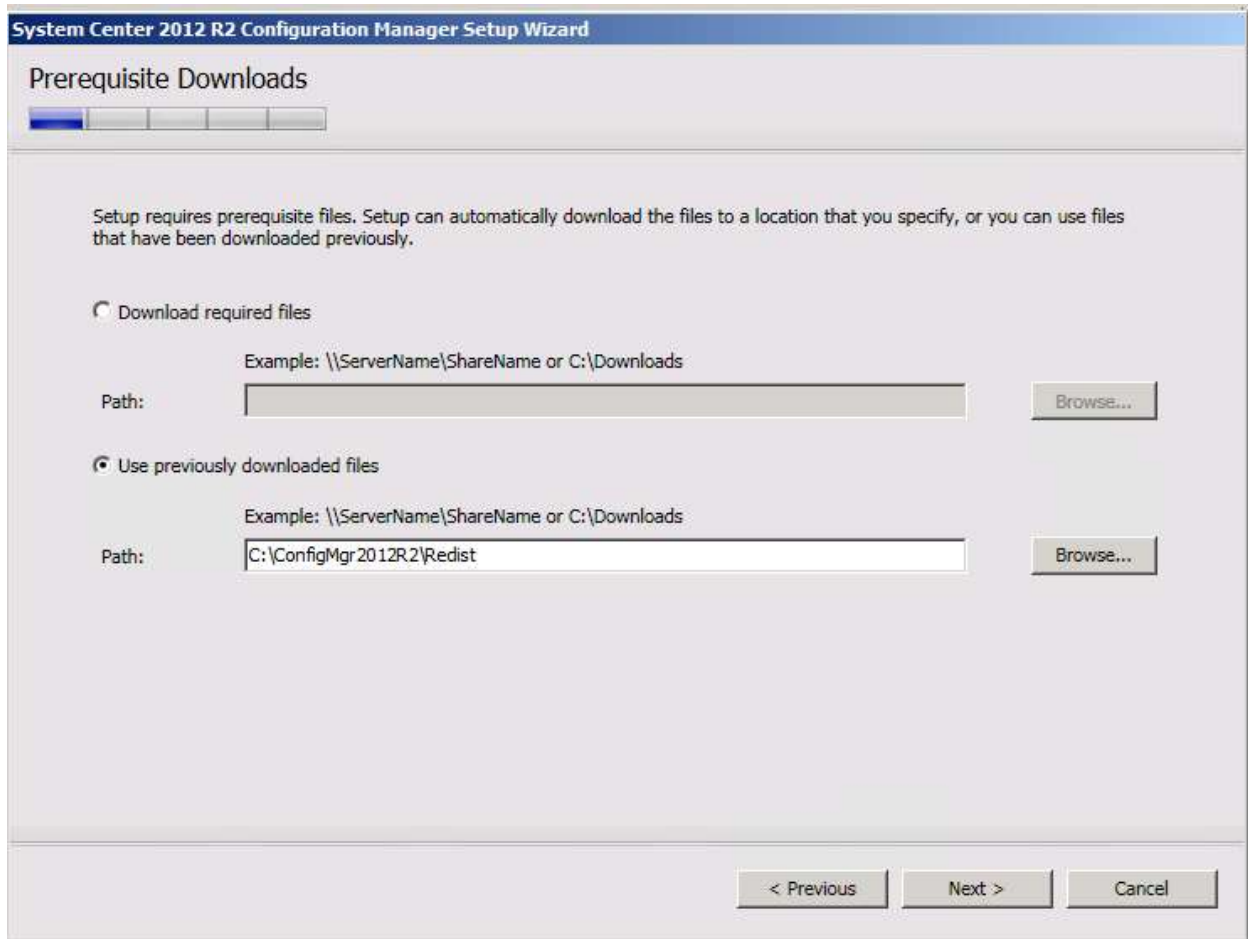
Accept the license terms and click next to continue.



Accept the license terms and click next to continue.



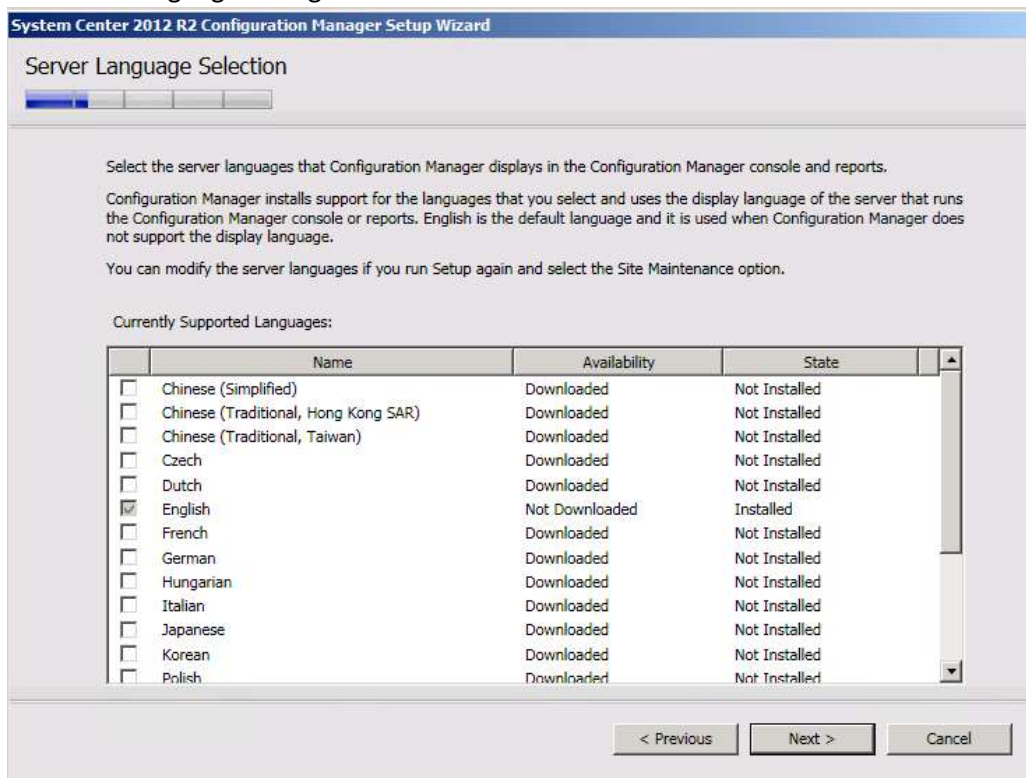
Select use previously downloaded files and click next to continue.
Path for downloaded files is : c:\configMgr2012R2\Redist



It will verify the downloaded components to proceed further.



Select the language as English and click next to continue.



System Center 2012 R2 Configuration Manager Setup Wizard

Server Language Selection

Select the server languages that Configuration Manager displays in the Configuration Manager console and reports.

Configuration Manager installs support for the languages that you select and uses the display language of the server that runs the Configuration Manager console or reports. English is the default language and it is used when Configuration Manager does not support the display language.

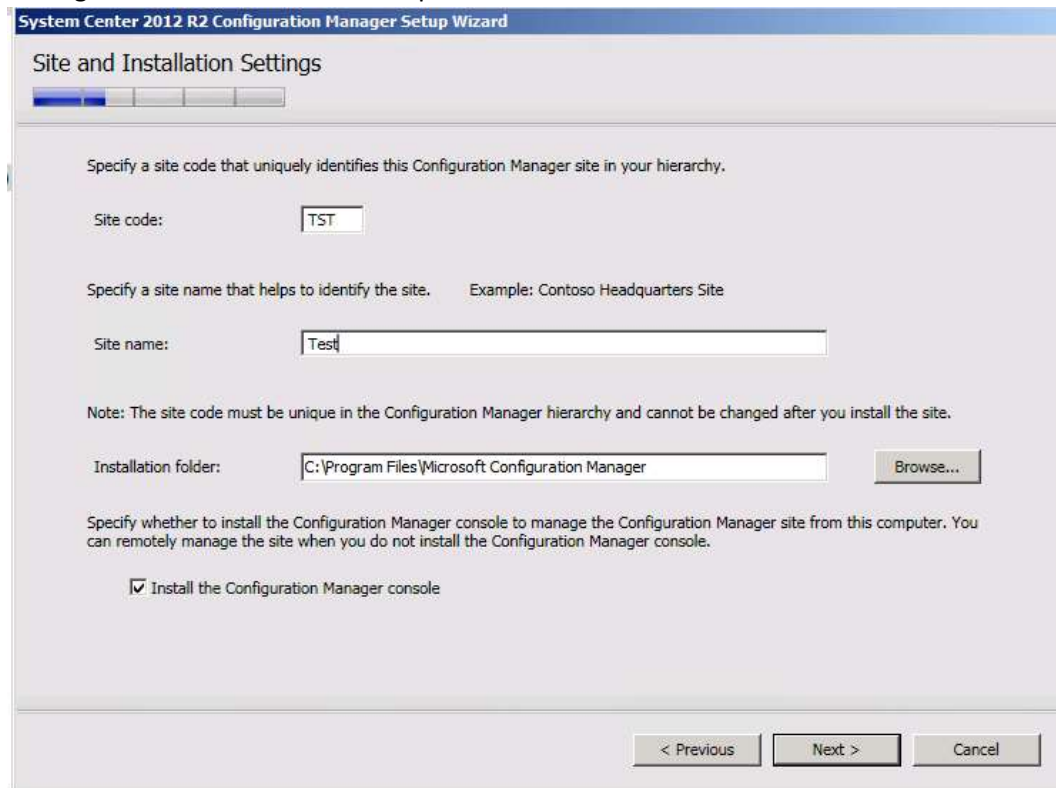
You can modify the server languages if you run Setup again and select the Site Maintenance option.

Currently Supported Languages:

	Name	Availability	State
<input type="checkbox"/>	Chinese (Simplified)	Downloaded	Not Installed
<input type="checkbox"/>	Chinese (Traditional, Hong Kong SAR)	Downloaded	Not Installed
<input type="checkbox"/>	Chinese (Traditional, Taiwan)	Downloaded	Not Installed
<input type="checkbox"/>	Czech	Downloaded	Not Installed
<input type="checkbox"/>	Dutch	Downloaded	Not Installed
<input checked="" type="checkbox"/>	English	Not Downloaded	Installed
<input type="checkbox"/>	French	Downloaded	Not Installed
<input type="checkbox"/>	German	Downloaded	Not Installed
<input type="checkbox"/>	Hungarian	Downloaded	Not Installed
<input type="checkbox"/>	Italian	Downloaded	Not Installed
<input type="checkbox"/>	Japanese	Downloaded	Not Installed
<input type="checkbox"/>	Korean	Downloaded	Not Installed
<input type="checkbox"/>	Polish	Downloaded	Not Installed

< Previous Next > Cancel

Provide Site code, Site name and installation folder and check the box to install the configuration manager console and click next to proceed further.



System Center 2012 R2 Configuration Manager Setup Wizard

Site and Installation Settings

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.

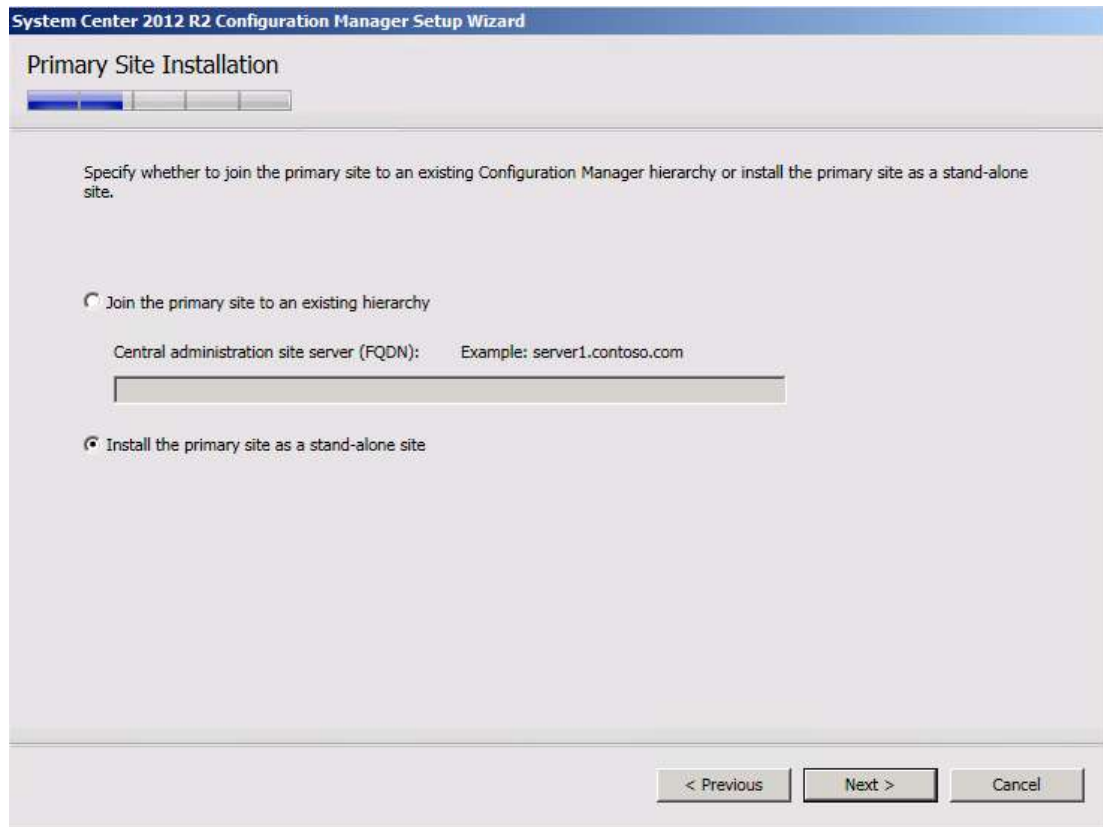
Installation folder:

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

< Previous Next > Cancel

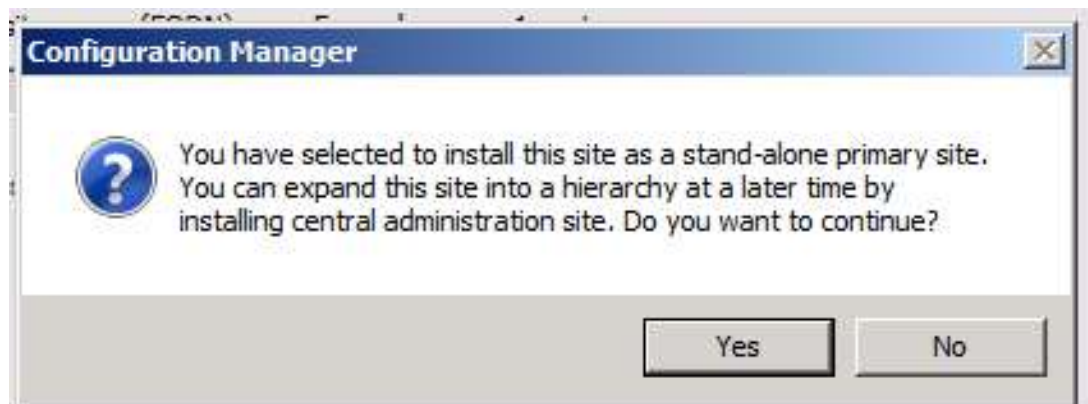
Select Install the primary site as a stand-alone site as we don't have existing hierarchy or CAS installed in our environment.



The screenshot shows the 'Primary Site Installation' window of the 'System Center 2012 R2 Configuration Manager Setup Wizard'. The window has a title bar with the text 'System Center 2012 R2 Configuration Manager Setup Wizard'. Below the title bar is a progress bar with four steps, the first of which is highlighted. The main content area contains the text: 'Specify whether to join the primary site to an existing Configuration Manager hierarchy or install the primary site as a stand-alone site.' There are two radio button options: 'Join the primary site to an existing hierarchy' (which is unselected) and 'Install the primary site as a stand-alone site' (which is selected). Below the first option is a text field labeled 'Central administration site server (FQDN):' with the example 'server1.contoso.com' and an empty input box. At the bottom right, there are three buttons: '< Previous', 'Next >', and 'Cancel'.

Click on yes to continue.

Note: you can install the CAS into a hierarchy and expand your site later or any time.



The screenshot shows a 'Configuration Manager' dialog box with a blue title bar and a close button. It contains a question mark icon and the text: '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. Do you want to continue?'. At the bottom, there are two buttons: 'Yes' and 'No'.

Provide the required information related to Database and click next to proceed further.

System Center 2012 R2 Configuration Manager Setup Wizard

Database Information

Configuration Manager primary sites require a Microsoft SQL Server database to store site settings and data.

Specify the site database server details. The instance name that you use for the site database must be configured with a static TCP port. Dynamic ports are not supported.

SQL Server name (FQDN): Example: Server1.contoso.com

Instance name (leave blank for default): Example: MyInstance

Database name: Example: CM_XYZ

Specify the TCP port number for SQL Server Service Broker. Configuration Manager uses Service Broker to replicate data between parent and child site database servers in the hierarchy. This port is different from the port used by the SQL Server service, which is automatically detected by Configuration Manager.

Service Broker Port:

< Previous Next > Cancel

Provide path to SQL server data file and log file to proceed further and click next to continue.

System Center 2012 R2 Configuration Manager Setup Wizard

Database Information

Specify the locations for the SQL Server data file and transaction log file.

Path to the SQL Server data file

Path to the SQL Server log file

< Previous Next > Cancel

Click next to continue.

The screenshot shows the 'SMS Provider Settings' page of the 'System Center 2012 R2 Configuration Manager Setup Wizard'. The page has a blue header bar with the title. Below the header is a progress bar with five steps, the second of which is highlighted. The main content area contains the following text: 'SMS Providers are used by the Configuration Manager console to communicate with the site database.' followed by 'Specify the server where the SMS Provider will be installed.' Below this is a label 'SMS Provider (FQDN):' with an example 'server1.contoso.com' and a text input field containing 'Primary1.ConfigMgrDom.local'. A note at the bottom states: 'Note: The SMS Provider cannot be installed on a server that is configured for SQL Server clustering.' At the bottom right are three buttons: '< Previous', 'Next >', and 'Cancel'.

System Center 2012 R2 Configuration Manager Setup Wizard

SMS Provider Settings

SMS Providers are used by the Configuration Manager console to communicate with the site database.

Specify the server where the SMS Provider will be installed.

SMS Provider (FQDN): Example: server1.contoso.com

Primary1.ConfigMgrDom.local

Note: The SMS Provider cannot be installed on a server that is configured for SQL Server clustering.

< Previous Next > Cancel

Select configure the communication method on each site system role because I don't want to use HTTPS communication from clients as I want to configure the communication separately on each site system role.

The screenshot shows the 'Client Computer Communication Settings' page of the 'System Center 2012 R2 Configuration Manager Setup Wizard'. The page has a blue header bar with the title. Below the header is a progress bar with five steps, the third of which is highlighted. The main content area contains the following text: 'Configuration Manager site system roles can accept HTTP or HTTPS communication from clients. Specify whether to require all site system roles to accept only HTTPS communication or allow the communication method to be configured on each site system role.' Below this are two radio button options: 'All site system roles accept only HTTPS communication from clients' (which is selected) and 'Configure the communication method on each site system role'. Under the second option is a checkbox labeled 'Clients will use HTTPS when they have a valid PKI certificate and HTTPS-enabled site roles are available'. A note at the bottom states: 'Note: HTTPS communication requires client computers to have a valid PKI certificate for client authentication.' At the bottom right are three buttons: '< Previous', 'Next >', and 'Cancel'.

System Center 2012 R2 Configuration Manager Setup Wizard

Client Computer Communication Settings

Configuration Manager site system roles can accept HTTP or HTTPS communication from clients. Specify whether to require all site system roles to accept only HTTPS communication or allow the communication method to be configured on each site system role.

☐ All site system roles accept only HTTPS communication from clients

☒ Configure the communication method on each site system role

☐ Clients will use HTTPS when they have a valid PKI certificate and HTTPS-enabled site roles are available

Note: HTTPS communication requires client computers to have a valid PKI certificate for client authentication.

< Previous Next > Cancel

Select the check box to install the Management Point and Distribution point to proceed further and click next to continue. If you want you can install these roles later also.

System Center 2012 R2 Configuration Manager Setup Wizard

Site System Roles

Specify whether to have Setup install a management point or distribution point.

A management point provides clients with policy and content location information. It also receives configuration data from clients.

☒ Install a management point.

FQDN: Client connection:

A distribution point contains source files for clients to download and lets you control content distribution by using bandwidth, throttling, and scheduling controls.

☒ Install a distribution point.

FQDN: Client connection:

The site server's computer account is used to install the selected site system roles. Ensure that this account is a member of the local administrators group for the specified servers.

You can install additional site system roles from the Configuration Manager console after Setup finishes.

Site system roles configured to use HTTPS must have a valid PKI server certificate.

< Previous Next > Cancel

select the appropriate option and click next to continue.

System Center 2012 R2 Configuration Manager Setup Wizard

Customer Experience Improvement Program

Do you want to join the Customer Experience Improvement Program (CEIP)?

The program collects information about computer hardware and how you use Configuration Manager, without interrupting you. This helps Microsoft to improve Configuration Manager features. No information collected is used to identify or contact you.

[Read the CEIP privacy statement online](#)

[Read the privacy statement online](#)

☐ Join the Customer Experience Improvement Program

☒ I don't want to join the program at this time

< Previous Next > Cancel

Verify the settings summary once again and click next to continue.

System Center 2012 R2 Configuration Manager Setup Wizard

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	Primary site installation
Site Code	TST
Site Name	Test
Role Communication Protocol	Client configured to communicate over both HTTP and HTTPS
Clients Use PKI Certificate	No
Product Key	EVAL
Installation Directory	C:\Program Files\Microsoft Configuration Manager\
External File Folder	C:\ConfigMgr2012R2\Redist
SQL Server	Primary1.ConfigMgrDom.local
SSB Port	4022
Database Name	CM_TST
SQL Server data installation directory	C:\Program Files\Microsoft Configuration Manager\SQL Server\data

To change these settings, click Previous. To apply the settings and start the installation prerequisite check, click Next.

< Previous Next > Cancel

Click next to continue post prerequisites checkup completes and click begin install to proceed further.

System Center 2012 R2 Configuration Manager Setup Wizard

Prerequisite Check

Setup is checking for potential installation problems. If problems are found, Setup will display details about how to resolve them.

Details:

Prerequisite	Status	System
Schema extensions	Warning	Primary1.ConfigMgrDom.local
Verify site server permissions to publish to Active Directory	Warning	Primary1.ConfigMgrDom.local
Configuration for SQL Server memory usage	Warning	Primary1.ConfigMgrDom.local
SQL Server process memory allocation	Warning	Primary1.ConfigMgrDom.local

Prerequisite checking has completed.

Select an item to display details and information about how to resolve the problem. For a listing of all prerequisite check results, see ConfigMgrPrereq.log.

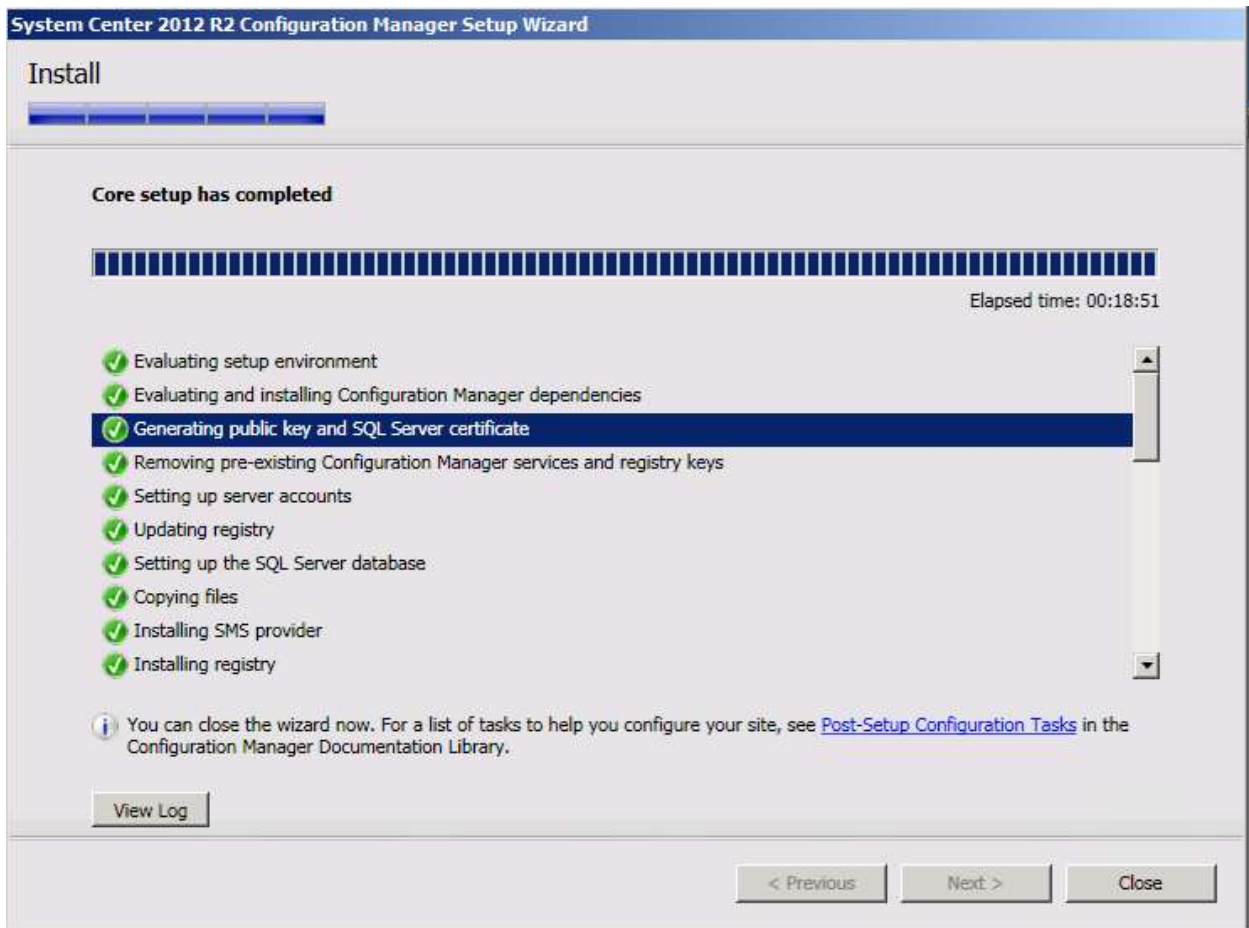
Run Check

< Previous Begin Install Cancel

To monitor the Installation status, check the C:\ConfigMgrSetup logs.

```
ConfigMgrSetup - Notepad
File Edit Format View Help
<01-07-2014 09:04:20> *****
<01-07-2014 09:04:20> ***** ConfigMgr 2012 Setup Bootstrapper *****
<01-07-2014 09:04:20> *****
<01-07-2014 09:04:20> Commandline:
<01-07-2014 09:04:20> "C:\ConfigMgr2012R2\SMSETUP\BIN\X64\Setupwpf.exe"
<01-07-2014 09:04:20> INFO: Checking dotnet framework versions...
<01-07-2014 09:04:20> INFO: Dotnet 3.5 installed
<01-07-2014 09:04:20> Starting Setupwpf.exe...
```

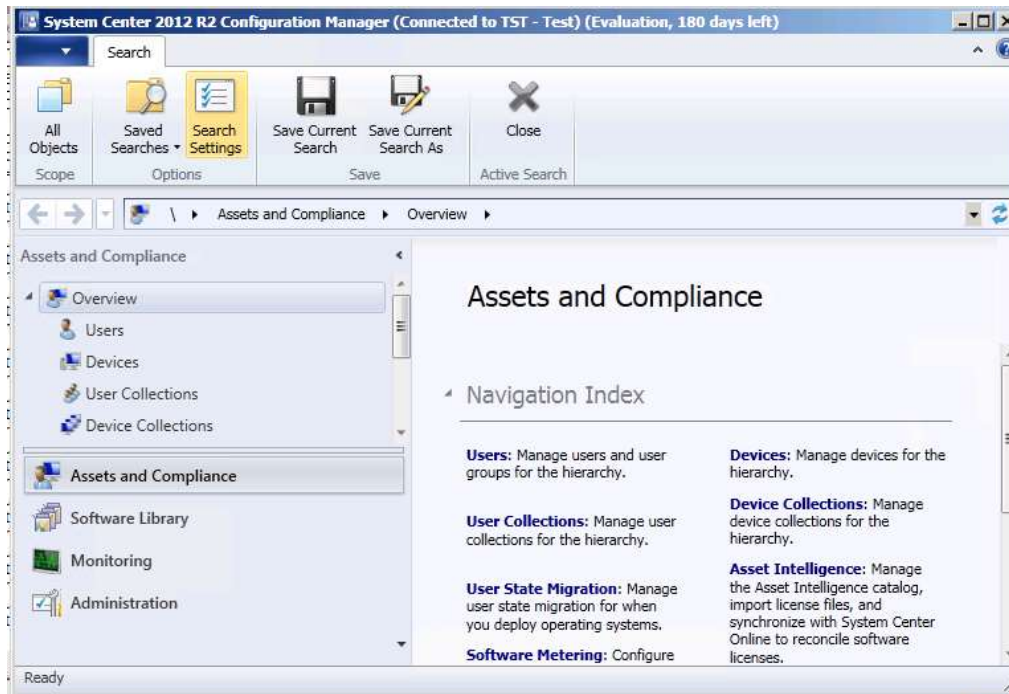
Installation successfully completed, now we can go ahead and close the window to finish the setup.



In logs, we can see the below entry and it will show as completed configuration manager 2012 Server setup.

```
ConfigMgrSetup - Notepad
File Edit Format View Help
INFO: CreatedDirectory for C:\ProgramData\Microsoft\windows\Start Menu\Programs\Microsoft Sys
INFO: Program group directory C:\ProgramData\Microsoft\windows\Start Menu\Programs\Microsoft
INFO: Failed to locate the exe path for icon Configuration Manager Console, skip it.~ $$<Co
INFO: AddItem(C:\Program Files\Microsoft Configuration Manager\bin\x64\SETUP.EXE, Configur
INFO: Shortcut string is C:\ProgramData\Microsoft\windows\Start Menu\Programs\Microsoft Sys
INFO: Failed to locate the exe path for icon Configuration Manager Documentation, skip it.~
INFO: Automatic updates detection task was called - IAutomaticUpdates->DetectNow returned 8
===== Completed Configuration Manager 2012 Server Setup =====
```


Post installation you will get an administration console called Configuration Manager Console to manage the clients.



To find out the version of the configuration manager go to about system center configuration Manager.



This concludes the installation of SCCM 2012 R2 – Standalone primary site.