1. Client Installation

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| Computers used in  this Lab | ROUTER01  SRV0001  SRV0002  SRV0003  WKS0001  WKS0002  WKS0004 |
| More information | About client installation properties in System Center Configuration Manager  <https://docs.microsoft.com/en-us/sccm/core/clients/deploy/about-client-installation-properties>  How to deploy clients to Windows computers in System Center Configuration Manager  <https://docs.microsoft.com/en-us/sccm/core/clients/deploy/deploy-clients-to-windows-computers> |
| Description | In this chapter, we will be configuring SCCM for the client installation (Windows only), will be installing Windows client as well as looking at the initial information that is returned from the client once it has been installed |

* 1. Windows Client Installation
     1. Push Configuration

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| Perform this task on the SRV0002 virtual machine logged on as sccmadmin |
| 01. Start Configuration Manager Console and Click Administration. |
| 02. Expand Site Configuration and click Sites |
| 03. Select 001 – Training Lab, Client Installation Settings and click Client Push Installation |
| 04. On Client Push Installation Properties, general tab, unselect “Allow connection fallback to NTLM” and then change to the Accounts Tab |
| 05. On the Accounts tab, click New (yellow button) |
| 06. Under Windows User Account, type CLASSROOM\svc\_sccmpush as UserName and Pa$$word for password and confirm password. Click Verify >> |
| 07. Under verify, select data source network share and network share type \\WKS0001\c$ and click Test Connection |
| 08. Click Ok twice when the connection is successfully verified |
| 09. Once back to the Client Push Installation Properties, change to the Installation Properties tab |
| 10. On the Installation Properties tab, type FSP=SRV0002 at the end of the Installation Properties and click Ok |

This can also be achieved via PowerShell using the commands below:

$SiteCode = "001"

$Secure = 'Pa$$w0rd'| ConvertTo-SecureString -AsPlainText -Force

$account = "CLASSROOM\svc\_sccmpush"

New-CMAccount -Name "$account" -Password $Secure -SiteCode "$SiteCode"

Set-CMClientPushInstallation -AddAccount "$account" -EnableAutomaticClientPushInstallation $False -EnableSystemTypeConfigurationManager $False -EnableSystemTypeServer $False -EnableSystemTypeWorkstation $False -InstallationProperty "SMSSITECODE=$($SiteCode) FSP=$($servername)" -InstallClientToDomainController $False -SiteCode "$($SiteCode)"

#Enable Kerberos only

$component = gwmi -Namespace ("root\sms\site\_$SiteCode") -query "select \* From SMS\_SCI\_Component where FileType=2 and ItemName = 'SMS\_DISCOVERY\_DATA\_MANAGER|SMS Site Server' and SiteCode='$SiteCode'"

$component.get()

$props = $component.Props

$prop = $props | where {$\_.PropertyName -eq 'ENABLEKERBEROSCHECK'}

$prop.Value = 2 #change to 3 if NTLM needs to be enabled

$component.Props = $props

$component.Put() | Out-Null

* + 1. Manual Push

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| Perform this task on the SRV0002 virtual machine logged on as sccmadmin |
| 01. Start Configuration Manager Console and Click Assets and Compliance. |
| 02. Click Device Collections |
| 03. Right click All Systems and click Update Membership |
| 04. On “This action will re-evaluate the membership rules for the selected collection and might take some time to finish”, click Yes  Note: It will take about 10 seconds for the process to complete  Note: Updating All Systems collection is only required if the device has been discovered and not yet added to the All Systems collection. In a default installation, it will take about 5 minutes after the discovery |
| 05. Right Click All Systems and click Show Members |
| 04. Select WKS0001 and click Install Client |
| 05. On Before You Begin, click Next |
| 06. Under Installation Options, select Install the client software from a specific site, confirm the site 001 is selected and click Next |
| 07. Under Summary, click Next |
| 08. Under Completion, click Close |
| 09. You can also review the following logs:   * C:\ConfigMgr\Logs\ccm.log: Records client push installation activities.   Note: Repeat the process for the WKS0002 and WKS0004 machines |

This can also be achieved via PowerShell using the commands below:

$SiteCode = "001"

Invoke-CMCollectionUpdate -Name "All Systems"

Start-sleep 10

@("WKS0001", "WKS0002", "WKS0004") | foreach { Get-CMDevice -Name $\_ | Install-CMClient -SiteCode "$SiteCode" }

* + 1. Validating the Installation and Installation Process on the Client

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| Perform this task on the WKS0001 virtual machine logged on as user01 |
| 01. On the client WKS0001, open Task manager and confirm that ccmsetup.exe is running |
| 02. Examine the content of C:\windows\ccmsetup folder |
| 03. Once the Installation is completed, the ccmexec.exe process will appear instead of ccmsetup.exe |
| 04. Open Control Panel and confirm that Configuration Manager exist. Open it. |
| 05. On the Configuration Manager Properties, General Tab, confirm the Site Code is SMS:001 and Assigned management point is SRV0002.CLASSROOM.INTRANET. Change to the Components tab |
| 06. Under Components tab, confirm the Components that are installed and enabled. Change to the Actions tab |
| 07. Under Actions tab, confirm that there are 2 actions. Change to the Site tab  Note: After the installation, it is normal to have only 2 actions until the post-installation process finishes. After this, there will be 10 actions to be used, depending on the options enabled in the client settings |
| 08. Under site, confirm the Configuration manager service location is set to 001. Click Ok |
| 09. Open Software Center under Start -> Microsoft System Center -> Configuration Manager |
| 10. Confirm that the Software Center opens without any problem. |
| 11. You can also review the following client logs:   * C:\Windows\CCMSetup\Logs\ccmsetup.log: Records ccmsetup tasks for client setup, client upgrade, and client removal. Can be used to troubleshoot client installation problems. * C:\Windows\CCMSetup\Logs\client.msi.log: Records setup tasks performed by client.msi. Can be used to troubleshoot client installation or removal problems. |

This can also be achieved via PowerShell using the commands below:

while ($true) {

$Process = Get-Process -Name ccmsetup -ErrorAction SilentlyContinue

if ($Process -ne $null) { Start-Sleep 10 }

else { Write-host "Process ccmsetup.exe does not exist or already finished"; break }

}

while ($true) {

$Process = Get-Process -Name ccmexec -ErrorAction SilentlyContinue

if ($Process -eq $null) { Start-Sleep 10 }

else { Write-host "Process ccmexec exist"; break }

}

start-sleep 60

"Client is assigned to $((Invoke-WMIMethod -Namespace root\ccm -Class SMS\_Client -Name GetAssignedSite).sSiteCode)"

* + 1. Validating the Installation and Installation Process on the SCCM Console

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| Perform this task on the SRV0002 virtual machine logged on as sccmadmin |
| 01. Start Configuration Manager Console and Click Assets and Compliance. |
| 02. Click Devices and confirm that WKS0001 says:   * Installed: Yes * Site Code: 001 * Client Activity: Active   Note: The Client Activity will only show Active after the client post-installations have been completed and the device has been online for at least 15 minutes |

This can also be achieved via PowerShell using the commands below:

$SiteCode = "001"

Invoke-CMCollectionUpdate -Name "All Systems"

Start-sleep 10

Get-CMDevice -Name "WKS000?" | select Name, IsClient, SiteCode, ClientActiveStatus

* 1. Client Properties

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| Perform this task on the SRV0002 virtual machine logged on as sccmadmin |
| 01. Start Configuration Manager Console and Click Assets and Compliance. |
| 02. Click Devices |
| 03. Select WKS0001 and click Properties |
| 04. Once the Properties Open note the Agent Edition: Windows desktop or server |
| 05. Operating System Name and version shows Microsoft Windows NT Workstation 10.0. Click Ok  Note: Repeat the process for the WKS0002 and WKS0004 machines  Note: The Operating System may be shown as Microsoft Windows NT Workstation 10.0 (Tablet Edition) |

This can also be achieved via PowerShell using the commands below:

Get-CMDevice -Name "WKS000?" | select Name, ClientEdition, DeviceOS

* 1. Resource Explorer

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| Perform this task on the SRV0002 virtual machine logged on as sccmadmin |
| 01. Start Configuration Manager Console and Click Assets and Compliance. |
| 02. Click Devices |
| 03. Right click a Windows computer and click Start -> Resource Explorer |
| 04. Once the Resource Explorer open, expand hardware  Note: If the inventory information is empty, you will need to wait a bit longer, so the device has time to collect and send the information to the server and the server has time to process. The wait time may be close to 30 minutes |
| 05. Select Disk Drives |
| 06. Select Logical Disk |
| 07. Select Memory |

This can also be achieved via PowerShell using the commands below:

$SiteCode = "001"

$servername = "SRV0002.classroom.intranet"

$ModulePath = $env:SMS\_ADMIN\_UI\_PATH

if ($ModulePath -eq $null) {

$ModulePath = (Get-ItemProperty -Path "Registry::HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager\Environment").SMS\_ADMIN\_UI\_PATH

}

$ModulePath = $ModulePath.Replace("bin\i386","bin\resourceexplorer.exe")

#windows machine

$Device = get-CMDevice -name "WKS0001"

Start-Process -Filepath ("$ModulePath") -ArgumentList ("-s -sms:ResourceID=$($Device.ResourceID) -sms:connection=\\$($servername)\root\sms\site\_$($siteCode)")