Dell Lifecycle Controller Integration Version 3.3 for Microsoft System Center Configuration Manager Installation Guide

Notes, cautions, and warnings

NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

Contents

Introduction

Dell Lifecycle Controller Integration Version 3.3 for Microsoft System Center Configuration Manager Installation Guide provides information on software pre-requisites and requirements to install, upgrade, and uninstall Dell Lifecycle Controller Integration (DLCI) for Microsoft System Center Configuration Manager.

Configuration Manager is used in this document in the following products:

- Microsoft System Center Configuration Manager Version 1610
- Microsoft System Center 2012 SP2 Configuration Manager
- Microsoft System Center 2012 R2 SP1 Configuration Manager
- Microsoft System Center 2012 R2 Configuration Manager
- Microsoft System Center 2012 SP1 Configuration Manager
- Microsoft System Center 2012 Configuration Manager

Prerequisites

About this task

Before you install Dell Lifecycle Controller Integration, complete the following:

Steps

1. Configure an account for use with discovery and handshake. For more information, see Configuring an account for use with discovery and handshake.
2. Ensure that the software prerequisites and requirements are available. For more information, see Software pre-requisites and requirements.
3. Ensure to install all the features of Windows Automation Install Kit (WAIK) or Windows Assessment and Deployment Kit (ADK).
4. Ensure that the available prerequisites are specific to the components. For more information, see Component-specific pre-requisites.

   > **NOTE:**
   > - If you are using iDRAC firmware version 2.40.40.40 or later, Transport Layer Security (TLS) versions 1.1 or later is enabled by default. Before installing DLCI for Microsoft System Center Configuration Manager, see *support.microsoft.com/en-us/kb/3140245* for more information about TLS updates. Based on the web browser you use, you may have to enable support for TLS 1.1 or later. For more information about iDRAC, see *Dell.com/idracmanuals*. Update to the latest iDRAC firmware version, if you are using 11th or 12th generation PowerEdge servers.
   > - If a yellow bang appears under device manager after deploying Windows 2016 operating system, download and install appropriate drivers from http://dell.to/294Ska9

Configuring an account for use with discovery and handshake

If you do not want to use an administrator account for the Dell Provisioning Service (DPS) to access the Configuration Manager server, create a user account with minimal permissions.

About this task

> **NOTE: If you install DLCI by providing user credentials authenticated in Active Directory, and then perform the discovery and handshake with a target system using a Non-Active Directory authenticated user credentials, the discovery and handshake with the target system fails. To resolve this issue, disable the Active Directory credentials.**

Perform the following steps to create a user account with minimal user permissions:

Steps

1. Create a user account on the domain, as the DPS impersonates this account while writing the Data Discovery Record (DDR) to the inbox of the site server.
2. In the Configuration Manager console, check for the user name under **Administration → Security → Administrative Users**. Provide the user with the following permissions:
   - **Collection** — **Read**, **Modify** and **Create**
   - **Site** — **Read** and **Import computer entry**
3. Configure user access to Windows Management Instrumentation (WMI). For more information, see Configuring user access to WMI.
4. Provide share and folder permissions to write files to the DDR inbox. For more information, see Providing share and folder permissions.

Configuring user access to WMI

About this task

To configure user access to WMI remotely:

> **NOTE: Make sure that firewall of the system does not block the WMI connection.**

Steps

1. To access the Distributed Component Object Model (DCOM) remotely using **dcomcnfg.exe**, provide user permissions to the Dell Provisioning Server. For more information, see Providing user permissions for DCOM.
2. To access the DCOM Config Windows Management and Instrumentation (WMI) components using **dcomcnfg.exe**, provide user permissions to the Dell Provisioning Server. For more information, see Providing user permissions for DCOM Config WMI.
3. Set the namespace security and grant permissions. For more information, see Setting namespace security and granting permissions.
4. From the Dell Provisioning Server, validate user permissions for the account. For more information, see Validating user permissions from the Dell Provisioning Server.

Providing user permissions for DCOM

About this task

To grant user permissions for DCOM:

Steps

1. Launch **dcomcnfg.exe**.
2. From the left pane, in the **Component Services** console, expand **Computers**, right-click the Provisioning Server Computer, and select **Properties**.
3. On **COM Security**:
   - From **Access Permissions**, click **Edit Limits** and select **Remote Access**.
   - From **Launch and Activation Permission**, click **Edit Limits** and select **Local Launch**, **Remote Launch**, and **Remote Activation**.

Providing user permissions for DCOM Config WMI

About this task

To grant user permissions for DCOM Config WMI:

Steps

1. Launch **dcomcnfg.exe**.
2. Expand **My Computer** → **DCOM Config**.
3. Right-click **Windows Management and Instrumentation**, and select **Properties**.
4. On **Security**, from **Launch and Activation Permission**, click **Edit** and select **Remote Launch and Remote Activation permissions**.

Setting namespace security and granting permissions

About this task

To set namespace security and grant permissions:

Steps

1. Launch **wmimgmt.msc**.
2. In the **WMI Control** pane, right-click **WMI Control**, select **Properties**, and then select **Security**.
3. Navigate to ROOT\SMS Namespace.
4. Select the **Execute Methods**, **Provide Write**, **Enable Account**, and **Remote Enable permissions**.
5. Navigate to **Root\cimv2\dlci**.
6. Select the **Execute Methods**, **Provide Write**, **Enable Account**, and **Remote Enable** permissions.

Alternatively, the Configuration Manager user becomes a member of the **SMS_Admin** group, and you can grant **Remote Enable** to the existing permissions of the group.

Validating user permissions from the Dell Provisioning Server

About this task

To validate user permissions:

Steps

1. Use **WBEMTest** to verify that you can connect to the site server using WMI.

   Ensure that you select **Packet privacy** in the **Authentication level** group box when connecting to **Site_<sitecode> Namespace**.

2. After establishing the connection, run the `Select*from SMS_Site` query. If permissions are properly assigned, this command returns a record with the site code.

Providing share and folder permissions

About this task

To grant share and folder permissions to write files to the DDR inbox:

Steps

1. From the Configuration Manager console, under **Administration**, grant the user permission to write to the **SMS_<sitecode>** share.

2. Using **File Explorer**, go to the share location **SMS_<sitecode>** share, and then to the **ddm.box** folder. Grant full control to the domain user for the following folders:

   · **SMS_<sitecode>**

   · inboxes

   · **ddm.box**

3. Add a configuration point to provide full control permission at the registry location HKEY_LOCAL_MACHINE\SOFTWARE \Wow6432Node\DELL\Provisioning Service\Repository.

4. Validate these permissions by temporarily mapping a drive from the Dell Provisioning Server with user credentials, and then creating, writing, modifying, and deleting a new file.

Software pre-requisites and requirements

About this task

Before you install DLCI for Configuration Manager, complete the following pre-requisites:

Steps

1. Install Microsoft System Center Configuration Manager Version 1610, Microsoft System Center 2012 SP2 Configuration Manager, Microsoft System Center 2012 R2 SP1 Configuration Manager, Microsoft System Center 2012 R2 Configuration Manager, Microsoft System Center 2012 SP1 Configuration Manager, or Microsoft System Center 2012 Configuration Manager. For details on how to download and install Configuration Manager, see **technet.microsoft.com**

2. Ensure that at least 40 MB of free disk space is available on the system to install DLCI.

3. Install .NET version 4.0 on systems running Microsoft System Center Configuration Manager Version 1610, Microsoft System Center 2012 SP2 Configuration Manager, Microsoft System Center 2012 R2 SP1 Configuration Manager, Microsoft System Center 2012 R2 Configuration Manager, Microsoft System Center 2012 SP1 Configuration Manager, or Microsoft System Center 2012 Configuration Manager.

4. Install Windows Remote Management (WinRM) and .NET 4.0, if you are installing DPS on systems running Microsoft Windows Server 2008 and 2008 R2.

5. Ensure that you have installed the Configuration Manager Console (admin console) before you install DPS.

   Before installing DPS, the DLCI installer checks if the admin console is installed. If the admin console is not installed, the installer displays an error message. The installation does not continue until the admin console is installed.

> **NOTE: The DLCI installer only checks for the installation of Configuration Manager admin console. It does not check whether the same version of Configuration Manager is installed on the site server where DPS drops the discovery records. Ensure that you have installed the correct version of the admin console.**

6. Ensure that the required KB articles are available:

   If you are installing DLCI on a system running Windows Server 2008 R2 64–bit, then do this update: **KB981506** — "SSL Certificate add failed, Error: 1312" error message when you try to add a CTL in Windows Server 2008 R2 or in Windows 7. See **support.microsoft.com/kb/981506**.

7. For DLCI for Configuration Manager, agent-free configuration, updates, and bare-metal OS deployment, continue as node-based licensed features. A configuration manager requires a node-based license to manage Dell PowerEdge servers. A configuration manager lists the number of nodes consumed. To view the nodes consumed: In **Configuration Manager**, select **Assets and Compliance** > **Overview** > **Device Collections** > **All Dell Lifecycle Controller Servers**, and check the **node Count**. You require sufficient licenses to manage Dell PowerEdge servers (nodes). If the number of nodes increase in a data center and you require license with additional node capacity, contact a Dell sales representative.

8. If you do not have the administrator privileges and you want to automatically configure Dell Provisioning Server and in addition you are planning on installing DPS on one server and Dell Lifecycle Controller Integration on another server, consider the following:

   - To configure firewall settings before installing DPS, see Enabling or disabling WMI traffic using firewall.
   - On the system where Dell Lifecycle Controller Integration is installed, provide **Write** permission for the **<Configuration Manager Admin Console Install Dir >\XmlStorage\Extensions\DLCPlugin** folder.
   - Provide write permissions using PowerShell. see Providing read and execute permissions to users.

9. For working with deploying non-Windows operating systems on target systems task, complete the following pre-requisites:

   - For deploying non-Windows operating systems, you require Network File System (NFS). The NFS can be either Client for NFS or Services for Network File System.
   - Install Client for NFS on the system where site server/admin console or Dell Lifecycle Controller Integration is installed. NFS share name is case-sensitive.
   - NFS is configured to have Anonymous/Unmapped read access for all systems. The NFS has read and write access for site server and admin console. Confirm that the site server, admin console, and the system on which the NFS share is present are in the same domain. NFS must contain at least 60 percent of free space. It is recommended that NFS share is hosted on a private network with no access to internet. However, make NFS accessible from site server, admin console, and all the iDRACs.
   - Status messages are received at port 4434. Confirm that a firewall exception is set for this port, else the Task Viewer does not receive any operating system deployment status messages from the server on which the operating system is being installed.

     To change the port on which Task Viewer can get the status messages: In the **DLCTaskManager.exe**.config configuration file, modify key= "NON_WIN_OSD_STATUS_PORT" and value="4434".

     Ensure that the new port is not in use.
   - Confirm that virtual disk is available on the target system.
   - Servers, where ESXi are deployed, are moved to another collection Managed Dell Lifecycle Controller (ESXi).
   - If DHCP lookup fails while deployment, then the server times out and it is not moved into **Managed Dell Lifecycle Controller (ESXi)**.

It is recommended that the network adapter is connected to the network port in the server on which the operating system is being deployed. For information on component-specific software pre-requisites and requirements, see Component-specific pre-requisites.

Component-specific pre-requisites

The DLCI for Configuration Manager installer verifies the following pre-requisites before installation:

During initial startup

- `Regsrv32.exe`
- WinRM
- Client for NFS
- Configuration Manager 2012

- Microsoft .NET version 4.0

For DLCU

- Installation on primary site server or Configuration Manager Admin console.
- DLCI version 3.3 for Microsoft System Center Configuration Manager Version 1610, Microsoft System Center 2012 SP2 Configuration Manager, Microsoft System Center 2012 R2 SP1 Configuration Manager, Microsoft System Center 2012 R2 Configuration Manager, Microsoft System Center 2012 SP1 Configuration Manager, and Microsoft System Center 2012 Configuration Manager consoles.
- Windows Automation Install Kit (WAIK) or Windows Assessment and Deployment Kit (ADK).
- To deploy a non-Windows operation system, such as Red Hat Linux operating system, you require a Network File System Version 3.0 (NFSv3). To work with NFSv3, in the system where DLCU is installed, enable the **File and Storage Services** role.

For DPS

- The admin console is installed
- Internet Information Services (IIS) 6, IIS 7, IIS 7.5, IIS 8, IIS 8.5 or IIS 10
- IIS WMI compatibility is enabled on IIS 7, IIS 8, IIS 8.5, or IIS 10
- IIS6 WMI Metabase compatibility is enabled on IIS 7, IIS 8, or IIS 8.5
- `icacls.exe`
- PowerShell 2.0

DPS and DLCU are present in the same domain.

Supported operating systems

The following table provides information on the operating systems supported to install DLCI for Configuration Manager.

For information on the supported configurations for Configuration Manager Version 1610, Configuration Manager 2012 SP2, Configuration Manager 2012 R2 SP1, Configuration Manager 2012 R2, Configuration Manager 2012 SP1, or Configuration Manager 2012, see: **technet.microsoft.com/en-us/library/gg682077.aspx.**

Table 1. Compatible operating systems for DLCI

Operating systems	Dell Provisioning Service
Configuration Manager Version 1610	
Windows Server 2016	✅
Configuration Manager 2012 SP2	
Windows Server 2012 R2 — Standard and Datacenter x64 Editions	✅
Windows Server 2012	✅
Windows Server 2008 R2	❌
Windows Server 2008	❌
Windows 8.1 x64 Edition	❌
Windows 8 x64 Edition	❌
Windows 7 x64 Edition	❌
Configuration Manager 2012 R2 SP1	

Operating systems	Dell Provisioning Service
Windows Server 2012 R2 — Standard and Datacenter x64 Editions	✅
Windows Server 2012	❌
Windows Server 2008 R2	❌
Windows Server 2008	❌
Windows 8.1 x64 Edition	❌
Windows 8 x64 Edition	❌
Windows 7 x64 Edition	❌
Windows Vista SP1 x64 Business Edition	❌
Windows Vista x64 Business Edition	❌
Windows Vista SP1 x64 Business Edition	❌
Windows Vista x64 Business Edition	❌
Configuration Manager 2012 R2	
Windows Server 2012 R2 — Standard and Datacenter x64 Editions	✅
Windows Server 2012	❌
Windows Server 2008 R2	❌
Windows Server 2008	❌
Windows 8.1 x64 Edition	❌
Windows 8 x64 Edition	❌
Windows 7 x64 Edition	❌
Windows Vista SP1 x64 Business Edition	❌
Windows Vista x64 Business Edition	❌
Configuration Manager 2012 SP1	
Windows Server 2012 R2	❌
Windows Server 2012 — Standard and Datacenter x64 Editions	✅
Windows Server 2008 R2	❌
Windows Server 2008	❌

Operating systems	Dell Provisioning Service
Windows 8 x64 Edition	❌
Windows 7 x64 Edition	❌
Windows Vista SP1 x64 Business Edition	❌
Windows Vista x64 Business Edition	❌
Configuration Manager 2012	
Windows Server 2012 R2	❌
Windows Server 2012	❌
Windows Server 2008 SP2 — Standard, Enterprise, and Datacenter x64 Editions	✅
Windows Server 2008 — Standard, Enterprise, and Datacenter x64 Editions	✅
Windows Server 2008 R2 — Standard, Enterprise, and Datacenter Editions	✅
Windows Vista SP1 x64 Business Edition	❌
Windows Vista x64 Business Edition	❌

Enabling or disabling WMI traffic using firewall

If firewall is enabled on Dell Lifecycle Controller Utility for Configuration Manager, ensure to enable the WMI traffic to run remote PowerShell commands for the WMI class.

About this task

To enable WMI traffic using firewall user interface:

Steps

1. In **Control Panel**, click **Security** and then click **Windows Firewall**.
2. Click **Change Settings**, and then click **Exceptions**.
3. In **Exceptions**, select **Windows Management Instrumentation (WMI)** to enable WMI traffic.

   NOTE: To disable WMI traffic, clear Windows Management Instrumentation (WMI).

Providing read and execute permissions to users

Non-administrator users are required to complete the following prerequisites on the site server, SMS provider Server, and DPS Server before installing DLCU and DPS components:

1. In PowerShell, run this command: `Enable-PSRemoting`.
2. In the confirmation message, type `Y`.
3. In PowerShell, run this command: `Set-ExecutionPolicy RemoteSigned`.
4. In the confirmation message, type `Y`.

Installing DLCI for Configuration Manager

The Dell Lifecycle Controller Integration (DLCI) for Configuration Manager installer contains two components — Dell Lifecycle Controller Utility (DLCU) and Dell Provisioning Service (DPS).

DLCU is a plug-in for Configuration Manager. Select this option when you have Configuration Manager installed on a site server.

DPS is a component for provisioning Dell servers into Configuration Manager. For DPS, Configuration Manager installation is not required.

The server on which DPS is installed is known as Dell Provisioning Server.

You can install both the components together or install them individually on separate systems.

Table 2. Installer support for client and server operating systems

Operating system version	Initial prerequisites check	DLCU component	DPS component
Client OS only	Installation is not supported. An error message is displayed.	Not applicable	Not applicable
Client OS + Admin Console	Pass	Pass	Not applicable
Server OS only	Installation is not supported. An error message is displayed.	Not applicable	Not applicable
Server OS + Admin Console	Pass	Pass	Pass
Server OS + Site Server only	Installation is not supported. An error message is displayed.	Not applicable	Not applicable
Server OS + Admin Console + Site Server	Pass	Pass	Pass

It is recommended that you close Configuration Manager before installing, upgrading, or uninstalling the DLCI for Configuration Manager.

To install Dell Lifecycle Controller Integration for Configuration Manager

1. Go to **dell.com/support/home**.
2. Under **General Support**, click the relevant product link.
   The **Product Support** page is displayed.
3. On the left side, click **Drivers and downloads**.
4. From the **Operating System** drop-down list, select the operating system.
5. From the **Category** drop-down list, select the relevant category.
   By default **All,** is selected.
6. Expand the **Systems Management** option.
7. Under **Dell Lifecycle Controller Integration 3.3 for Microsoft System Center Configuration Manager**, click **Download**.
8. Download **Dell_Lifecycle_Controller_Integration_3.3.0_Axx_for_Configuration_Manager.zip** and extract the contents to a folder on the system.

9. To install the package, if UAC is enabled, see Working with Dell Lifecycle Controller Integration on a User Account Control enabled system, else double-click **Dell_Lifecycle_Controller_Integration_3.3.0_for_Configuration_Manager.exe**.

   The **Welcome** screen is displayed.

10. Click **Next**.

    The license agreement is displayed.

11. Accept the license agreement and click **Next**.

    The **Custom Setup** screen is displayed.

12. Select the option to install either the **Dell Lifecycle Controller Utility** or the **Dell Provisioning Service**, or both.

    If you are installing DPS on a system where Configuration Manager is not available, the DLCI for Configuration Manager 2012 option is available. When you clear this option, the space required on the hard drive is incorrect in **Feature Description**.

    You can select from the following custom options based on your requirement:

    - Installing DLCU and DPS
    - Installing DLCU only
    - Installing DPS only

Installing DLCU and DPS

About this task

To install the DLCU and DPS on a site server or Admin Console:

Steps

1. From **Custom Setup**, select both **Dell Lifecycle Controller Utility** and **Dell Provisioning Service** and click **Next**.

   The **Custom Setup Confirmation** screen is displayed.

2. Click **Next**.

   The **Dell Provisioning Service User Credentials for Configuration Manager Access** screen is displayed.

3. Perform one of the following:

   a. On a site server, enter an account (with required privileges) for use by Dell Provisioning Service to access Configuration Manager on all newly discovered systems with iDRAC, and click **Next**.

   b. On a Configuration Manager Admin Console with IIS, type the primary site server name, user name, and password that is provisioned on all newly discovered systems with iDRAC, and click **Next**.

   To automatically configure the Dell Provisioning Server, select **Automatically configure Dell Provisioning Server user permissions**.

   > NOTE: If the user name is not part of SMS_Admins group, then provide additional permissions to the WMI namespace. For more information, see Setting namespace security and granting permissions.

   The **Dell Lifecycle Controller Utility User Credentials for iDRAC Access** screen is displayed.

4. Type the iDRAC credentials, retain the default settings for skipping CN and CA checks, and then click **Next**.

   The **Change Firewall Setting** screen is displayed.

5. Select the **Add Provision Web Site Port in the firewall exception list** option. This option enables the DPS to discover the target systems even when firewall is enabled.

   > NOTE: This screen is displayed only when you select the Dell Provisioning Service in the installer.

6. Click **Next**.

   The **Ready to Install the Program** window is displayed.

7. Click **Install**.

   The Progress bar is displayed. After installation, the completion message is displayed.

8. Click **Next**.

9. In **Installation Completed Successfully**, click **Finish**.

   > NOTE: As part of the installation, a provisioning website is created and configured under Internet Information Services (IIS).

Installing DLCU only

About this task

For information on component-specific requirements, see Component-specific pre-requisites.

> ✐ **NOTE: Ensure that you install the DLCU on the site server before using it on the Admin Console.**

To only install DLCU:

Steps
1. In **Custom Setup**, select **Dell Lifecycle Controller Utility**, clear **Dell Provisioning Service**, and click **Next**.

   In the **Custom Setup Confirmation** screen, the selected component is displayed.
2. Click **Next**.
3. In **Dell Lifecycle Controller Utility User Credentials for iDRAC Access**, enter the user name and password for out-of-band controller management. This account is provisioned on the iDRAC.

   Retain the default settings for skipping CN and CA checks.

   > ✐ **NOTE: This screen is displayed only if you are installing DLCI for Configuration Manager on a site server.**
4. Click **Next**.

   The **Ready to Install the Program** screen is displayed.
5. Click **Install**.

   The progress bar is displayed. After installation, the completion message is displayed.
6. Click **Next**.
7. In **Installation Completed Successfully**, click **Finish**.

Installing DPS only

About this task

For information on component-specific requirements, see Component-specific pre-requisites.
To install only the DPS:

Steps
1. In **Custom Setup**, select **Dell Provisioning Service**, clear **Dell Lifecycle Controller Utility** and click **Next**.

   In the **Custom Setup Confirmation** screen, the selected component is displayed.
2. Click **Next**.
3. In the **Dell Provisioning Service User Credentials for Configuration Manager Access** screen, enter the primary site server name or IP of the server, user name, and password.

   To automatically configure the **Dell Provisioning Server** for non-administrator user, select **Automatically configure Dell Provisioning Server user permissions**.

   > ✐ **NOTE: If the user name is not part of SMS_Admins group, provide additional permissions to the WMI namespace. For more information, see Setting namespace security and granting permissions.**
4. Click **Next**.

   The **Change Firewall Setting** screen is displayed.
5. Select **Add Provision Web Site Port in the firewall exception list**. This option enables the DPS to discover the target systems even when firewall is enabled.

   > ✐ **NOTE: This screen is displayed only when you select the Dell Provisioning Service in the installer.**
6. Click **Next**.

   The **Ready to Install the Program** dialog box is displayed.
7. Click **Install**.

   The progress bar is displayed. After installation, the completion message is displayed.

8. Click **Next,** and then click **Finish**.

Working with Dell Lifecycle Controller Integration on a User Account Control enabled system

The permissions required to install or uninstall the DLCU feature on a site server are as follows:

- You have a local administrator or a domain administrator access to the server.
- On an operating system, such as Microsoft Windows Server 2008, with User Account Control (UAC) enabled, launch the EXE file from a command prompt using **Run As Administrator**.
- The permissions on Configuration Manager are:

  - Site = Read
  - Package = Read, Delete, and Create

Installing Dell Lifecycle Controller Integration for Configuration Manager on a UAC-enabled system

1. Right-click **Command Prompt** and select **Run As Administrator**.
2. Run **Dell_Lifecycle_Controller_Integration_3.3.0_for_Configuration_Manager.exe** from the folder where you have extracted it.
3. Follow the instructions in the installation wizard to install Dell Lifecycle Controller Integration on the system.

Using the repair option in the installer

1. To repair the installation of DLCI for Configuration Manager, if UAC is enabled, see Working with Dell Lifecycle Controller Integration on a User Account Control enabled system, else double-click **Dell_Lifecycle_Controller_Integration_3.3.0_for_Configuration_Manager.exe**.

   The **Welcome** screen is displayed.
2. Click **Next**.
3. In **Program Maintenance**, select **Repair**, and then click **Next**.

   The **Ready to Repair the Program** screen is displayed.
4. Click **Install**.

   A progress screen displays the progress of the installation. After the installation is complete, the **InstallShield Wizard Completed** window is displayed.
5. Click **Finish**.

Upgrading Dell Lifecycle Controller Integration for Configuration Manager from a previous version

> **NOTE:**
> - Before upgrading to the latest version of Configuration Manager from an earlier version of Configuration Manager, ensure to uninstall DLCI, and boot images initially. After upgrading the Configuration Manager to the latest version, install DLCI. For information about upgrading Configuration Manager from earlier versions, see **technet.microsoft.com/en-us/library/jj822981.aspx**.
> - DLCI for Configuration Manager supports upgrading only from version 3.2 to version 3.3.
>   If you have an earlier version installed, uninstall the earlier version, then you can either install version 3.3, or follow the upgrade process to reach to version 3.2, and then upgrade to version 3.3. When you uninstall the earlier version, the previous settings are not retained and you must rediscover the target systems after you install version 3.3. For example, as DLCI for Configuration Manager does not support upgrade from DLCI 2.2 to DLCI 3.3, uninstall DLCI 2.2 and then install DLCI 3.3.
> - While upgrading to DLCI 3.3 from DLCI 3.2, if you want to make a configuration change such as, adding or deleting SMS providers, uninstall DLCI 3.2, make the configuration change, and then install DLCI 3.3.

Pre-requisites for upgrading

Before you upgrade to Dell Lifecycle Controller Integration version 3.3 for Configuration Manager, ensure to upgrade the firmware on the target systems. If the blade servers are part of the chassis, then upgrade the Chassis Management Controller (CMC) firmware before upgrading other firmware.

If you are using Dell Update Packages (DUPs) to perform the updates on the *yx1x* (Dell's 11th generation of PowerEdge servers), then update firmware as follows:

> **NOTE: In the Server name format *yxxx*; y denotes alphabets, for example M, R, or T; and x denotes numbers.**

1. Upgrade the BIOS of the target systems to the latest version.
2. Upgrade Lifecycle Controller on the target systems to version 1.5.5 or later. For more information, see the *Dell Lifecycle Controller USC/USC-LCE Version 1.6.5 User's Guide* available at **dell.com/support/manuals**. To upgrade Lifecycle Controller, use the Firmware Upgrade Tool in Dell Lifecycle Controller Integration version 3.3 for Configuration Manager. Lifecycle Controller version 1.5.5 is delivered as part of iDRAC version 1.9 for rack and tower servers and iDRAC version 3.4 for blade servers.
3. Upgrade iDRAC on the target systems to version 1.9 or later for monolithic systems and iDRAC version 3.4 or later for modular systems. For more information, see the following documents available at **dell.com/support/home**.

   - *Integrated Dell Remote Access Controller 6 (iDRAC6) Version 2.85 User's Guide*
   - *Integrated Dell Remote Access Controller 6 (iDRAC6) Enterprise for Blade Servers Version 3.80 User's Guide*
   - *Integrated Dell Remote Access Controller 7/8 with Lifecycle Controller Version 2.40.40.40 User's Guide.*

   > **NOTE: You cannot abort the upgrade process by closing the installation wizard. If you close the installation wizard, the following message is displayed: `Are you sure you want to cancel Dell Lifecycle Controller Integration installation?` The upgrade process continues irrespective of the selection you make on the message box.**

If you are updating iDRAC firmware to version 3.0 or greater from an iDRAC version less than 2.3, then first update the iDRAC firmware to version 2.3 before updating to version 3.0 or later on Dell's 11th generation of PowerEdge servers.

> **NOTE:**
> - For Dell's 12th generation of PowerEdge servers, you do not require to update firmware before installing DLCI.

Upgrading Dell Lifecycle Controller Integration for Configuration Manager from version 3.2 to version 3.3

About this task
To upgrade DLCI for Configuration Manager from version 3.2 to version 3.3:

Steps

1. Run the **Dell_Lifecycle_Controller_Integration_3.3.0_for_Configuration_Manager.exe** file from the folder where you have extracted it.

2. A message is displayed stating that another version of DLCI for Configuration Manager is found; and prompts you to upgrade. Click **Yes** to continue.

   The **Welcome** screen is displayed.

3. Click **Next**.

   The license agreement is displayed.

4. Accept the license agreement and click **Next**.

   The **Custom Setup** screen is displayed.

5. Select one or both the components. Follow the steps provided:

   - Installing DLCU and DPS
   - Installing DLCU only
   - Installing DPS only

   📝 **NOTE:**

   - You cannot abort the upgrade process by closing the installation wizard. If you close the installation wizard, the following message is displayed: `Are you sure you want to cancel Dell Lifecycle Controller Integration installation?` The upgrade process continues irrespective of the selection you make on the message box.

Using the Modify option in the installer

The **Modify** option in the DLCI for Configuration Manager installer, modifies the program features that are installed. This option enables you to perform the following actions:

- Installing a feature that you did not install earlier
- Removing a feature that you had installed earlier

If you uninstall DLCU in the DLCI server using the **Modify** option, uninstall DPS and install again.

Installing a feature that you did not install earlier

About this task

To install a feature that you did not install earlier:

Steps

1. Run **Dell_Lifecycle_Controller_Integration_3.3.0_for_Configuration_Manager.exe** from the folder where you have extracted it.

2. Click **Next**.

   The installer displays three options.

3. Select the **Modify** option.

   The **Custom Setup** screen is displayed.

4. In **Custom Setup**, select the feature that you did not install earlier.

5. Click **Next**.

6. In **Ready to Modify the Program**, click **Install** to begin installing the feature.

   When the installation process completes, click **Finish** to exit the installer.

Removing a feature that you had installed earlier

About this task

To remove a feature that you had installed earlier:

Steps
1. Run **Dell_Lifecycle_Controller_Integration_3.3.0_for_Configuration_Manager.exe** from the folder where you have extracted it.
2. Click **Next**.

   The installer displays three options.
3. Select the **Modify** option.

   The **Custom Setup** screen is displayed.
4. In **Custom Setup**, select the feature that you want to remove.
5. Click the feature and select the **This feature will not be available** option and click **Next**.
6. Click **Install**.

   The installer removes the feature.

Uninstalling Dell Lifecycle Controller Integration for Configuration Manager

To uninstall DLCI for Configuration Manager:

1. Click **Start → Control Panel → Add or Remove Programs.**
2. Select **Dell Lifecycle Controller Integration for Configuration Manager** and click **Remove**.
3. Follow the instructions to complete the uninstallation.

   If you are uninstalling by using the package that you downloaded and if UAC is enabled, see Working with Dell Lifecycle Controller Integration on a User Account Control enabled system, else double-click **Dell_Lifecycle_Controller_Integration_3.3.0_for_Configuration_Manager.exe**, select **Remove**, and follow the instructions on the screen.

Troubleshooting

Errors during Dell Provisioning Service (DPS) installation on system

If you specify incorrect system name or user credentials for accessing the site server while installing DPS on a system other than the site server, the information is not authenticated by the installer, and the installation is completed.

However, when DPS is trying to access the site server, failure to access the site server occurs. When such failure occurs; from the DPS installation directory location, in the file import.log, check the log information for the following error message:

```
ERROR2011-10-14 03:01:02 - SCCMProxy::Connect()-Failed to connect - Error The RPC server is
unavailable. (Exception from HRESULT: 0x800706BA)at
Microsoft.ConfigurationManagement.ManagementProvider.WqlQueryEngine.WqlConnectionManager.Con
nect(String configMgrServerPath)
```

If the error message is present, then install DPS again and provide the correct system name.