CHAPTER **3**

Driver Management and Task Sequence

This chapter includes the following section:

Importing Driver Packages

The **Cisco UCS Driver Package** wizard allows you to import driver zip packages from Cisco.com or local file system for both Cisco IMC and UCS Manager. The driver catalog is located in the **Software Library** workspace and comprises the following two nodes:

- Drivers — The **Drivers** catalog lists all the imported drivers. You can view details of each driver, what driver package or boot image a driver belongs to. You can also enable or disable a driver, and so on.

- Driver Packages — The **Driver Packages** catalog lists all the driver packages you created. You can create these packages when you import drivers into the **Drivers** catalog, or you can create them directly in the **Driver Packages** catalog.

Following table provides details of the zip support matrix based on the server model and Operating System version:

	Windows Server 2008 R2	Windows Server 2012	Windows Server 2012 R2
Cisco UCS C-Series Servers	1.5(3) and above	1.5(3) and above	1.5(4) and above
Cisco UCS E-Series Servers	2.0(1a)	1.5(3) and above	1.5(4) and above

> **Note** For Cisco UCS C-Series M4 servers, minimum version of driver zip supported is 2.0(3) and higher for all the supported operating systems.

Step 1 Select **Start > All Programs > Microsoft System Center> Configuration Manager > Microsoft Configuration Manager Console**.

The **Microsoft Configuration Manager Console** screen displays.

Step 2   From the left pane of the console, select **Software Library > Overview > Operating Systems > Driver Packages** catalog.

Step 3   Right-click the **Driver Packages** catalog, and select **Cisco UCS Configuration > Create Cisco UCS Driver Package**.

The **Create Cisco UCS Server Driver Package** wizard is displayed.

> **Note**   Alternatively, you can select the **Create Cisco UCS Driver Package** option from the top ribbon bar.

Step 4   On the **Get Drivers tab**, you can import the drivers by one of the following ways:

To import driver packages using **Download driver zip from Cisco.com,** follow these steps:

- Click **Browse** and navigate to the location where driver must be downloaded, and click **OK**.
- From the **Select OS** drop-down list, select the operating system depending on the driver package.
- Click **Download Details**, enter the credentials for Cisco.com, and provide proxy server details in the corresponding fields.
- Click **OK**.

> **Note**   If the credentials provided are valid, then the UI displays all the available driver versions for download. If not, the following error message is displayed 'Failed to get the download details from Cisco.com'.

- Select a driver version from the drop-down list.

For importing driver packages using **Select driver zip file from local share**, click **Browse,** navigate to the zipped file with updated driver and click **Open**.

> **Note**   Download the driver packages from Cisco.com for importing the driver package using **Select driver zip file from local share option**.

To download the driver from Cisco.com, click **Support > Downloads > Products > Server-Unified Computing**. From the list, select the driver you want to download, and click the **Download** button.

Step 5   Click **Next**.

Step 6   In the **Save Drivers**, provide the locations where the driver zip file and the driver package must be downloaded.

    a.   To save the file, click **Browse** against the **Destination for Driver Zip** box and navigate to the location where you want to save the driver zip file.

        Provide a unique name for each package.

    b.   To save the driver package folder, click **Browse** against the **Destination for Driver Package**, and navigate to the location where you want to save the driver package folder on the network shared drive.

> **Note**   The location of the driver zip file and driver package folder must not be the same.

> **Caution**   Keep the driver source file on a network share.

Step 7   Click **Next**.

Step 8   In the **Select Boot Images**, select the boot image on which the drivers must be applied.

To select all the boot images, check the **Select All** check box.

> **Note** On importing drivers for Windows 2008 R2 on Configuration Manager 2012 SP1and Windows 2008 R2 and Windows 2012 on Configuration Manager 2012 R2, no boot image is listed in the Select Boot images screen. It is an expected behavior.

Step 9   Select the **Update distribution point** to update the boot image on the distribution points in the **Configuration Manager Console**.

Step 10   Click **Import Drivers**.

Step 11   Click **Download Credentials**.

> **Note** If the progress bar is not updated, tasks involving importing of drivers might take time.

Step 12   The import status displays in the **Summary of Driver Import Wizard**.

Step 13   Click **Close,** and **Exit** to return to the **Microsoft Configuration Manager Console**.

Step 14   To verify if the import drivers operation is successful, select **Software Library > Overview > Operating Systems > Drivers** catalog.

The drivers list is refreshed and is shown in the **Name** column of the content pane.

Step 15   To verify if the import driver package operation is successful, select **Software Library > Overview > Operating Systems > Driver Packages** catalog.

The driver packages list is refreshed and is shown in the **Name** column of the content pane.

> **Note** After the driver is imported and driver package operation is successful, the corresponding boot image is also updated with the new drivers.
>
> To view the updated drivers of a boot image, follow these steps:
>
> a.   Select **Software Library > Overview > Operating Systems > Boot Images** catalog.
>
> b.   Select the boot image for which you want to view the updated drivers.
>
> c.   Right-click the boot image and click **Properties**.
>
>   The **Boot Image Properties** dialog box displays.
>
> a.   Click the **Drivers** tab to view the list of updated drivers.
>
>   The driver package can be used in a **Task Sequence**.

Creating and Editing Task Sequences

You create task sequences to support the deployment of operating systems. Add or edit the following task sequence steps to a task sequence. You can add ot edit while creating a custom task sequence or editing an existing task sequence. This helps the deployment of operating systems:

- Format and Partition Disk

- Apply Operating System Image
- Apply Network Settings
- Apply Windows Settings
- Apply Driver package
- Setup Windows and ConfigMgr

Creating a Custom Task Sequence

Step 1 From the left pane of the **Configuration Manager** console, select **Software Library > Overview > Operating Systems > Task Sequence** catalog.

Step 2 Right-click on the **Task Sequence** catalog and select **Create Task Sequence**.

The **Create Task Sequence Wizard** displays.

Step 3 In the **Create Task Sequence Wizard**, select **Create a new custom task sequence**, and click **Next**.

Step 4 In the **Specify task Sequence information**, complete the following fields:

- **Task sequence name**—Enter a name for the task sequence
- **Description**—Enter a brief description about the task sequence
- **Boot image**—Click **Browse**, to select the boot image from the **Select a Boot Image** screen and click **OK**.

Step 5 Click **Next**.

Step 6 In **Summary**, review the settings and click **Next.**

If you want to modify the settings, click **Previous**.

Step 7 Once the task sequence is created, click **Close** to exit the **Create Task Sequence** wizard.

You can view the task sequence in the **Name** column of the content pane.

Editing a Task Sequence

Step 1 From the left pane of **Microsoft Configuration Manager Console**, select **Software Library > Overview > Operating Systems > Task Sequences** catalog.

The task sequences are listed in the content pane.

Step 2 Right-click the task sequence, and select **Edit**.

The **Task Sequence Editor** page displays.

Step 3 From the drop-down list, select **Add > Disks > Format and Partition Disk**.

The **Format and Partition Disk** item is flagged with a red X check mark.

Step 4 On the **Properties** tab, complete the following fields:

- **Name**—Enter a name for the task to be performed
- **Description**—Enter brief description for the task to be performed
- **Volume**—Create a new partition.

To create a new partition, follow these steps:

    a. In the **Volume** area, click the ![icon] icon.

        The **Partition Properties** page displays.

    b. Enter a name for the partition and check the **Make this the boot partition** check box.

    c. Check the **Quick format** check box.

- **Variable**—Enter a name for the environment variable for the logical drive. For example, OSDRIVE.

Step 5   Click **OK**.

The **Format and Partition Disk** task sequence is now flagged with a green check mark.

Step 6   From the drop-down list of the **Task Sequence Editor**, select **Add> Images > Apply Operating System Image**.

The **Apply Operating System Image** item is flagged with a red X check mark.

Step 7   In the left pane of the **Task Sequence Editor**, click **Apply Operating System Image** which is flagged with a red X check mark.

Step 8   On the **Properties** tab, complete the following fields:

- **Name**—Enter a name for the task to be performed

- **Description**—Enter a description for the task to be performed

- **Apply operating system from a captured image**—Click **Browse** to open the **Select an Operating System Image** dialog box. Select the existing image package you want to install.

  If multiple images are associated with the specified **Image package**, use the drop-down list to specify the associated image to be used for this deployment.

- From the **Destination** drop-down list, select **Logical drive letter stores in a variable** and enter the variable name created in the **Format and Partition Disk** step. For example, OSDRIVE.

Note   See, Technet documentation for importing **Operating System Images into Configuration Manager**.

Step 9   Click **OK**.

The **Apply Operating System Image** task sequence is now flagged with a green check mark.

Step 10   From the drop-down list of the **Task Sequence Editor**, select **Add> Settings > Apply Network Settings**.

The **Apply Network Settings** item is flagged with a red X check mark.

Step 11   Click **Apply Network Settings** which is flagged with a red X check mark.

Step 12   On the **Properties** tab, complete the following fields:

- **Name**—Enter a name for the task to be performed

- **Description**—Enter a description for the task to be performed

- **Join a workgroup**—Select this option to join the destination computer with the specified workgroup. Enter the name in the **Workgroup** field. Override the value with the value entered in the Capture Network Settings task sequence step.

- **Join a domain** — Select this option to have the destination computer join the specified domain.

- **Account** — Click **Set** to specify an account with the necessary permissions to join the computer to the domain.

      • **Adapter settings** — Specify network configurations for each network adapter in the computer. Click **New** to open the **Network Settings** dialog box, and then specify the network settings.

Step 13   Click **OK**.

      The **Apply Network Settings** task sequence is now flagged with a green check mark.

Step 14   In the left pane of **Task Sequence Editor**, select **Add> Settings > Apply Windows Settings**.

      The **Apply Windows Settings** item is flagged with a red X check mark.

Step 15   In the left pane of the **Task Sequence Editor**, click **Apply Windows Settings** which is flagged with a red X check mark.

Step 16   In the right pane of the **Task Sequence Editor**, under **Properties,** enter information for the following:

      • **Name** — Enter short user-defined name that describes the action taken in this step.

      • **Description** — Enter a more detailed information about the action taken in this step.

      • **User name** — Specify the registered username that is associated with the destination computer.

      • **Organization name** — Specify the registered organization name that is associated with the destination computer.

      • **Product key** — Specify the product key that is used for the Windows installation on the destination computer.

      • Select the radio button for **Enable the account and specify the local administrator password**. An alternate account can be used for logging in with the local administrator password.

      • **Time Zone** — Specify the time zone to configure on the destination computer.

Step 17   Click **OK**.

      The **Apply Windows Settings** task sequence is now flagged with a green check mark.

Step 18   In the left pane of **Task Sequence Editor**, select **Add> Drivers > Apply Driver Package**.

      The **Apply Driver Package** item is flagged with a red X check mark.

Step 19   In the left pane of the **Task Sequence Editor**, click **Apply Driver Package** which is flagged with a red X check mark.

Step 20   In the right pane of the **Task Sequence Editor**, in **Properties**, click **Browse** next to the **Driver Package** box. Select the driver package created using the **Create UCS C-Series Driver Package wizard**.

Step 21   Click **OK**.

      The **Apply Driver Package** task sequence is now flagged with a green check mark.

> **Note**   The package contains all the drivers to be made available during operating system deployment.

Step 22   In the left pane of **Task Sequence Editor**, select **Add> Images > Setup Windows and ConfigMgr**.

      The **Setup Windows and ConfigMgr** item is flagged with a red X check mark.

Step 23   In the left pane of the **Task Sequence Editor**, click **Setup Windows and ConfigMgr** which is flagged with a red X check mark.

Step 24   In the right pane of the **Task Sequence Editor**, under **Properties**, click **Browse** next to the **Package** box.

      The **Select the Deployment Package** page displays.

Step 25   In the **Select the Deployment Package** page, under **Deployment packages**, select the required deployment package.

Note   Refer to **Microsoft Technet** documentation on details for **Creating a Deployment Package**.

Step 26   Click **OK**.

The **Setup Windows and ConfigMgr** task sequence is now flagged with a green check mark.

Step 27   Click **Apply**.