



# Launching UCS Server Configuration Utility

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## Introduction

UCS Server Configuration Utility (SCU) is a bootable image based on a 64-bit Linux kernel and can be used to perform operations such as configure RAID logical volume, install operating systems on Cisco rack servers. It is designed to run on one server at a time.

## Obtaining ISO Image From cisco.com

Perform this procedure to find the ISO file for your server.

### Before you begin

You must have valid Cisco login credentials to perform this procedure.

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**Step 1** Go to [Software Download](#).

**Note** Log in using your Cisco credentials.

**Step 2** Click **Select a Product > Browse All**.

**Step 3** Click **Servers - Unified Computing** in the first column.

**Step 4** Click **Cisco UCS C-Series Rack-Mount Standalone Server Software** in the middle column.

**Step 5** Click the name of your server model from the last column.

A new page is displayed with the list of available software.

**Step 6** Under **Select a Software Type** list, select **Unified Computing System (UCS) Server Configuration Utility**.

The Download Software page appears listing the release version and the UCS-SCU image.

**Step 7** Select the desired release from the left pane.

- Step 8** Click the **Download** icon on the right pane.
- Step 9** Continue through the subsequent screens to accept the license agreement and browse to a location where you want to save the ISO file.
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## Booting UCS-SCU

You can launch the UCS-SCU application using one of the following options:

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- [Using CIMC Mapped vDVD, on page 6](#)
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## Using vKVM Mapped vDVD

### Before you begin

Download the UCS-SCU ISO image file from [cisco.com](#). For information on how to download the image, refer [Obtaining ISO Image From cisco.com, on page 1](#).

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- Step 1** Log in to Cisco IMC.
- Step 2** From top right hand menu, click **Launch KVM**.
- Note** Depending on your browser settings, you may need to accept **KVM server certificate** and click the KVM viewer.
- Virtual KVM Console displays the server console.
- Step 3** Select **Virtual Media > vKVM-Mapped vDVD**.
- The **Map Virtual Media - CD/DVD** window is displayed.
- Step 4** Navigate to and select the ISO file and click Open to mount the image.
- Step 5** Select **Map Drive** from the **Map Virtual Media - CD/DVD** window.
- The following message is displayed in the virtual KVM console:
- Successfully inserted media into device "vKVM Mapped DVD".**
- Step 6** Select **Power > Power Cycle System**.
- Step 7** Press **F6** when the server starts to select a boot device.
- The boot selection menu appears.
- Step 8** Use the arrow keys to select **vKVM Mapped DVD** and then press **Enter**.

The server boots using the UCS-SCU image and launches the application in the KVM tab.

## Using Cisco FlexMMC vDVD

### Before you begin

Download the UCS-SCU ISO image file from [cisco.com](http://cisco.com). For information on how to download the image, refer [Obtaining ISO Image From cisco.com, on page 1](#).

- Step 1** Log in to Cisco IMC.
- Step 2** In the **Navigation** pane, click the **Storage** menu.
- Step 3** In the **Storage** menu, select **Cisco FlexMMC**.
- Step 4** In the **Files Copied** area of the **Cisco FlexMMC** pane, click the **Upload Files** tab.  
The **Cisco FlexMMC Upload File** dialog box is displayed.
- Step 5** In the **Cisco FlexMMC Upload File** dialog box, enter the following details:

Field	Description
<b>Partition</b> drop-down list	Type of partition. This can be: <ul style="list-style-type: none"> <li>• <b>IMC Images</b>—Cisco .iso file.</li> <li>• <b>User Files</b>—Any .iso, image or any other file format.</li> </ul> Only one .iso file can be uploaded. <p><b>Note</b> If you choose any other file format, Cisco IMC converts the file into an image file.</p> In case of any other file format, the file size should be more than 10MB. It also takes extra space due to conversion.

Field	Description
<p><b>Mount Type</b> drop-down list</p>	<p>The type of mapping. This can be one of the following:</p> <p><b>Note</b> Ensure that the communication port of the mount type that you choose is enabled on the switch. For example, when you are using CIFS as your mount type, ensure port 445 (which is its communication port) is enabled on the switch. Similarly, enable ports 80 for HTTP, 443 for HTTPS and 2049 for NFS when you use them.</p> <ul style="list-style-type: none"> <li>• <b>NFS</b>—Network File System.</li> <li>• <b>CIFS</b>—Common Internet File System.</li> <li>• <b>WWW(HTTP/HTTPS)</b>—HTTP-based or HTTPS-based system.</li> </ul>
<p><b>Remote Share</b> field</p>	<p>The URL of the image to be mapped. The format depends on the selected Mount Type:</p> <ul style="list-style-type: none"> <li>• <b>NFS</b>—Use serverip:/share</li> <li>• <b>CIFS</b>—Use //serverip/share.</li> <li>• <b>WWW(HTTP/HTTPS)</b>—Use http[s]://serverip/share.</li> </ul>
<p><b>Remote File</b> field</p>	<p>The name and location of the .iso or .img file in the remote share.</p>

Field	Description
<p><b>Mount Options</b> field</p>	<p>Industry-standard mount options entered in a comma separated list. The options vary depending on the selected Mount Type.</p> <p>If you are using NFS, leave the field blank or enter one or more of the following:</p> <ul style="list-style-type: none"> <li>• <b>ro</b></li> <li>• <b>noexec</b></li> <li>• <b>soft</b></li> <li>• <b>port=VALUE</b></li> </ul> <p>If you are using CIFS, leave the field blank or enter one or more of the following:</p> <ul style="list-style-type: none"> <li>• <b>ro</b></li> <li>• <b>nounix</b></li> <li>• <b>noserverino</b></li> <li>• <b>port=VALUE</b></li> <li>• <b>Ntlm</b>—NT LAN Manager (NTLM) security protocol. Use this option only with Windows 2008 R2 and Windows 2012 R2.</li> <li>• <b>vers=VALUE</b></li> </ul> <p><b>Note</b> The format of the VALUE should be x.x</p> <p>If you are using WWW(HTTP/HTTPS), leave the field blank or enter the following:</p> <ul style="list-style-type: none"> <li>• <b>noauto</b></li> </ul> <p><b>Note</b> Before mounting the virtual media, Cisco IMC tries to verify reachability to the end server by pinging the server.</p> <ul style="list-style-type: none"> <li>• <b>username=VALUE</b></li> <li>• <b>password=VALUE</b></li> </ul>
<p><b>User Name</b> field</p>	<p>The username for the specified <b>Mount Type</b>, if required.</p>
<p><b>Password</b> field</p>	<p>The password for the selected username, if required.</p>

**Step 6** From top right hand menu, click **Launch KVM**.

**Note** Depending on your browser settings, you may need to accept **KVM server certificate** and click the KVM viewer.

Virtual KVM Console displays the server console.

**Step 7** Select **Power > Power Cycle System (boot)**.

**Step 8** Press **F6** when the server starts to select a boot device.

The boot selection menu appears.

**Step 9** Use the arrow keys to select **vKVM-Mapped vDVD** and then press **Enter**.

The server boots using the UCS-SCU image and launches the application in the KVM tab.

## Using CIMC Mapped vDVD

### Before you begin

Download the UCS-SCU ISO image file from [cisco.com](http://cisco.com). For information on how to download the image, refer [Obtaining ISO Image From cisco.com, on page 1](#).

**Step 1** Log in to Cisco IMC.

**Step 2** In the **Compute** menu, click **Remote Management > Virtual Media**.

**Step 3** In the **Virtual Media** tab > **Current Mappings** area, check for the required mapping.

**Step 4** From top right hand menu, click **Launch KVM**.

**Note** Depending on your browser settings, you may need to accept **KVM server certificate** and click the KVM viewer.

Virtual KVM Console displays the server console.

**Step 5** Select **Virtual Media > CIMC-Mapped vDVD**.

The **Map Virtual Media - Removable Disk** window is displayed.

**Step 6** In the **Map Virtual Media - Removable Disk** window, perform the following steps:

- a) Enter the desired name for the CIMC-mapped device.
- b) Select any of the following protocols:

- NFS
- CIFS
- HTTP/S

By default, HTTP/S is selected.

- c) Enter the file location in the format:

```
[http[s]://server-IP|DNS-name:Port/path-to-file.img
```

- d) Enter the username and password.
- e) Enter the desired name for the CIMC mapped device.
- f) (Optional) Select the **Auto-remap**.

**Step 7** Click **Save**.

**Step 8** Select **Map Drive**.

After the host ejects this media, Cisco IMC will automatically re-map this device.

**Step 9** Navigate to and select the ISO file and click Open to mount the image.

The following message is displayed in the virtual KVM console:

**Successfully inserted media into device "CIMC-Mapped vDVD".**

**Step 10** Select **Power > Power Cycle System (boot)**.

**Step 11** Press **F6** when the server starts to select a boot device.

The boot selection menu appears.

**Step 12** Use the arrow keys to select **CIMC-Mapped vDVD** and then press **Enter**.

The server boots using the UCS-SCU image and launches the application in the KVM tab.

## Using Physical Media

### Before you begin

- Download the UCS-SCU ISO image file from [cisco.com](http://cisco.com). For information on how to download the image, refer [Obtaining ISO Image From cisco.com, on page 1](#).
- Create an .iso CD using an application that burns .iso CDs.

**Step 1** Connect the USB DVD drive to the server through the USB port.

**Step 2** Insert the physical media on to your DVD drive.

**Step 3** Restart the server and press **F6** to enter the boot selection menu. Select **CDROM** drive as the boot device.

The server boots using the UCS-SCU image and starts the application.

## Using Network Boot Support

### Prerequisites

- A minimum of two systems is required for a PXE installation
- A server - a system running a DHCP server, a TFTP server, HTTP or FTP server to provide boot files. Theoretically, each of the servers can run on a different physical system; procedures in this section assume a single system runs all of them for simplicity

- A client - the system which you are booting SCU ISO. When the installation begins, the client will query the DHCP server, obtain boot files from the TFTP server

### PXE Legacy Boot



**Note** The following files can be obtained from the mounted SCU ISO:

- `initrd`
- `bzImage`
- `rootfs.img`
- `ucs-scu-container-xxx.squash.fs`

1. Copy bootloader `Pxlinux.0` under `/var/lib/tftpboot` directory.
2. Copy `Pxlinux.cfg` under `/var/lib/tftpboot` directory.
3. Copy `initrd` and `bzImage` files from mounted SCU ISO under `/var/lib/tftpboot` directory.
4. Copy `rootfs.img`, `ucs-scu-container-xxx.squashfs` and `drivers` folder under `/var/www/html` directory or `/var/ftp/pub` directory.

### PXE UEFI Boot

1. Copy `bootx64.efi` under `/var/lib/tftpboot` directory from extracted SCU ISO (which will be found in `(EFI/BOOT)` directory).
2. Copy `rootfs.img`, `ucs-scu-container-xxx.squashfs` and `drivers` folder under `/var/www/html` directory or `/var/ftp/pub` directory.

```
niosscubootmedium=pxe #type of the boot pxe/http/ipxe
```

## Exiting UCS-SCU

- Step 1** Remove the `.iso` disk from the disk drive.
- Step 2** Click **Reboot** and then click **Yes** to confirm reboot of your server.