

# Getting Started with Cisco UCS Blade Server Diagnostics

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## **Obtaining the Cisco UCS Blade Server Diagnostics ISO Image**

Use the following steps to download the Cisco UCS Blade Server Diagnostics ISO image from the Cisco website.

#### Procedure

- Step 1 From your browser, navigate to the following URL: http://www.cisco.com/cisco/software/navigator.html.
- Step 2 From the Downloads Home table, in the middle column, click Servers Unified Computing.
- Step 3 From the right column in the table, click Cisco UCS B-Series Blade Server Software.
- **Step 4** In the Select a Software Type list, choose **Unified Computing System (UCS) Diagnostics.** The Download Software screen appears listing the release version and the ISO image for the Cisco UCS Blade Server Diagnostics tool.
- **Step 5** Click **Download** to download the ISO file.
- **Step 6** Verify the information on the next page, and then click **Proceed With Download**. If prompted, use your cisco.com credentials to log in.
- Step 7 Continue through the screens to accept the license agreement and to browse to a location where you want to save the ISO file.

## Launching Cisco UCS Blade Server Diagnostics

The Cisco UCS Blade Server Diagnostics tool is a bootable image that is based on a 64-bit Linux kernel. You can load multiple instances of the ISO image on different blades and run the tests on multiple blades at the same time. The diagnostics tool provides both GUI and CLI interfaces for you to view the server inventory, run diagnostic tests, and view log files and test results. You can boot the image by using the Cisco UCS Manager KVM remotely using virtual media.

### **About KVM Console**

You can use Cisco Integrated Management Controller (CIMC) Console to launch the diagnostics tool with virtual media. KVM Console is an interface accessible from CIMC that emulates a direct keyboard, video, and mouse (KVM) connection to the server. KVM Console enables you to connect to the server from a remote location.



KVM Console requires Java Runtime Environment (JRE) version 1.5.0 or higher. However, if you are using Cisco UCS Manager release 1.4, 2.0(1), and 2.0(2), make sure that you do not have JRE versions 1.6x or higher installed. JRE versions 1.7 and higher are only supported on Cisco UCS Manager releases 2.0(3) and higher.

KVM Console has the following tabs:

- KVM—Displays the diagnostics tool when it is booted.
- Virtual media—Maps the following media to a virtual drive:
  - ° CD/DVD on your computer or your network
  - Disk image files (ISO or IMG files) on your computer or your network
  - ° USB flash drive on your computer

## **Using KVM Console**

#### **Before You Begin**

- Download the Cisco UCS Blade Server Diagnostics ISO image file from cisco.com. For information about how to download the image, see Obtaining the Cisco UCS Blade Server Diagnostics ISO Image, on page 1.
- To access KVM Console for booting the diagnostics tool, make sure that you have a service profile associated with the Cisco UCS Blade Server against which you want to run the tests.

#### Procedure

**Step 1** If you do not have access to the Cisco UCS Manager, perform the following steps. Otherwise skip to step 2.

- a) Log into the KVM Manager and choose the service profile that is associated to your Cisco UCS Blade Server.
- b) Launch KVM and provide your credentials.
- c) Skip to step 5.
- **Step 2** Log into Cisco UCS Manager and provide your credentials.
- **Step 3** Choose the **Equipment > Chassis** tab.
- **Step 4** Choose the Cisco UCS Blade Server.
- Step 5 From the Action pane, click KVM Console.
- **Step 6** Click the **Virtual Media** tab (Tools tab for Cisco UCS 1.4 and earlier releases). The **Virtual Media** tab appears.
- Step 7 Click Add Image.
- **Step 8** Navigate to and choose the ISO file, and click **Open**.
- Step 9 In the Client View section, check the check box in the Mapped column for the ISO file that you added and then wait for the mapping to complete. KVM Console displays the progress in the Details section.
- Step 10 Click the Reset button from your KVM Console to reboot your server.
- Step 11 Press F6 when the server starts to select a boot device.The Boot Selection menu appears. If you do not see the KVM mapped DVD option, modify the Boot Policy to loose.
  - **Note** Alternately, you can create a boot policy for the service profile. For more information about how to create a boot policy, see the Creating a Boot Policy section in the *Cisco UCS Manager GUI Configuration Guide, Release 2.1.*
- Step 12 Use the arrow keys to choose Cisco Virtual CD/DVD and then press Enter.The server boots using the Cisco UCS Blade Server Diagnostics image and launches the application in the KVM tab.

### **Exiting Cisco UCS Blade Server Diagnostics**

#### **Before You Begin**

Before you exit the diagnostics tool, make sure that all your test are completed.

#### Procedure

- **Step 1** Remove the .iso disk from the virtual media.
- **Step 2** Click **Reset** and then click **Yes** to confirm.

## Launching an ISO Image Using the USB Drive

Use the following steps to launch an ISO image using the USB drive.

#### Procedure

<b>Step 1</b> Start with a FA132 formatted USB flash di	irive.
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- Step 2 Extract the contents of the diagnostics ISO image into the USB flash drive.
- Step 3 Open the flash drive and find the directory MAKE\_USB. Navigate to Windows.
- **Step 4** Right-click makeboot.bat and click Run as Administrator. Follow the instructions on the prompt that comes up.

Your USB flash drive is now bootable with the diagnostic image. If you are updating a pre-existing diagnostic image, only the file kernel needs to be replaced on the flash drive.