KVM Console

KVM Console

The KVM console is an interface accessible from the Cisco UCS Manager GUI or the KVM Launch Manager that emulates a direct keyboard, video, and mouse (KVM) connection to the server. It allows you to connect and control the server from a remote location and also to map physical locations to virtual drives that can by accessed by the server during this Virtual KVM (vKVM) session. Unlike the KVM dongle, which requires you to be physically connected to the server, the KVM console allows you to connect to the server from a remote location across the network.

Beginning with Cisco UCS Manager Release 4.1(1), the KVM console is available as an HTML5-based application on Cisco UCS M4 and M5 servers. The console is no longer available as a Java-based application. For more information, see KVM Console for Cisco UCS M4 and M5 Servers, on page 2

Beginning with Cisco UCS Manager Release 4.2(1), an enhanced KVM console is available on Cisco UCS M6 servers. This enhanced KVM console offers the following additional features:

- The KVM console provides connection to KVM, SOL and vMedia.

- The vMedia connections are shared across KVM session and can be saved to the CIMC.

- Pasting text from the client has an advanced unsupported character support.

- CIMC vMedia mappings stored on the CIMC can be managed directly through the KVM console.

For more information, see Enhanced KVM Console for Cisco UCS M6 Servers, on page 5

You must ensure that either the server or the service profile associated with the server is configured with a CIMC IP address if you want to use the KVM console to access the server. The KVM console uses the CIMC IP address assigned to a server or a service profile to identify and connect with the correct server in a Cisco UCS domain.

Instead of using CD/DVD or floppy drives directly connected to the server, the KVM console uses virtual media, which are actual disk drives or disk image files that are mapped to virtual CD/DVD or floppy drives. You can map any of the following to virtual drives:

- CD/DVD or floppy drives on your computer

- Disk image files on your computer

- CD/DVD or floppy drives on the network

- Disk image files on the network

Note   When you launch the KVM console from the physical server, the system checks if the server is associated to a service profile. If the server is associated to a service profile with an associated management IP address, the KVM console is launched using that management IP address. If no management IP address is associated in the service profile, then the system launches the KVM console using the physical server.

Recommendations for Using the KVM Console to Install a Server OS

To install an OS from a virtual CD/DVD or floppy drive, you must ensure that the virtual CD/DVD or floppy drive is set as the first boot device in the service profile.

Installing an OS using the KVM console may be slower than using the KVM dongle because the installation files must be downloaded across the network to the server. If you map a disk drive or disk image file from a network share to a virtual drive, the installation may be even slower because the installation files must be downloaded from the network to the KVM console (your computer) and then from the KVM console to the server. When using this installation method, we recommend that you have the installation media as close as possible to the system with the KVM console.

KVM Console for Cisco UCS M4 and M5 Servers

Beginning with Cisco UCS Manager Release 4.1(1), the UCS Manager provides the KVM console to access and mange the vKVM sessions.

The following menu and the menu options are available only on Cisco UCS M4 and M5 servers.

Server Actions Menu

Choose the remote server operation you want to execute on the system.

Menu Item	Description
Boot Server	Powers on the system from the virtual console session.
Shutdown Server	Powers off the system from the virtual console session.
Reset	Resets the system from the virtual console session.

File Menu

Menu Item	Description
Capture to File button	Opens the **Save** dialog box that allows you to save the current screen as a JPG image. **Note** This option is only available on the **KVM** tab.
Paste Text From Clipboard	Allows you to paste content from the clipboard.
Exit button	Closes the KVM console.

View Menu

Menu Item	Description
Refresh	Updates the console display with the server's current video output.
Full Screen	Expands the KVM console so that it fills the entire screen.

Macros Menu

Choose the keyboard shortcut you want to execute on the remote system.

Menu Item	Description
Static Macros menu	Displays a predefined set of macros.
User Defined Macros menu	Displays the user-defined macros that have been created.
Server Defined Macros menu	Displays the server defined macros that have been created.
Manage button	Opens the **Configure User Defined Macros** dialog box, which allows you to create and manage macros. System-defined macros cannot be deleted.

Tools Menu

Menu Item	Description
Session Options	Opens the **Session Settings** dialog box that lets you specify: • Scaling allows you to choose how the aspect ratio is displayed on the KVM screen. • This defines which mouse acceleration to use on the target system. The default is **Absolute Positioning**.
Session User List	Opens the **Session User List** dialog box that shows all the user IDs that have an active KVM session.
Chat	Opens group chat window for any admins logged into the current KVM session.

Menu Item	Description
Virtual Keyboard	Opens an onscreen keyboard for the current KVM session.
Playback Controls	Opens a dialog box to select DVC recording files.

Virtual Media Menu

Name	Description
Activate Virtual Devices	Activates a vMedia session that allows you to attach a drive or image file from your local computer or network. **Note** If you have not allowed unsecured connections, you will be prompted to accept the session. If you reject the session, the virtual media session is terminated.
CD/DVD	Choose the CD/DVD that you want to access, and click the **Map Drive** button to map it to the host server device. **Note** If the **Read Only** checkbox is checked, the server cannot write to the vMedia device even if the device has write capability.
Removable Disk	Choose the removable disk that you want to access, and click the **Map Drive** button to map it to the host server device. **Note** If the **Read Only** checkbox is checked, the server cannot write to the vMedia device even if the device has write capability.
Floppy Disk	Choose the floppy that you want to access, and click the **Map Drive** button to map it to the host server device. **Note** If the **Read Only** checkbox is checked, the server cannot write to the vMedia device even if the device has write capability.

Online Help Menu

Name	Description
Contents and Index	Opens Online Help.
About KVM Viewer	Displays build version information about HTML5 KVM Viewer.

Enhanced KVM Console for Cisco UCS M6 Servers

Beginning with Cisco UCS Manager Release 4.2(1), the UCS Manager provides an Enhanced KVM console to access and mange the vKVM sessions.

The following menu and the menu options are available only on Cisco UCS M6 servers.

Console Menu

Menu Item	Description
KVM	Selects KVM (Keyboard Video and Mouse) as the active console.
SOL	Selects SOL (Serial over LAN) as the active console. **Note** **SOL** is not visible if SOL is inactive, instead **Activate SOL** is visible.
Activate SOL	Allows you to login to SOL session using user name and password. **Note** **Activate SOL** option is visible only when SOL session is not active for any reason.

File Menu

Menu Item	Description
Paste Clipboard Text	Opens the **Paste Clipboard Text** dialog box that allows you to paste content.

Menu Item	Description

Paste Clipboard Text dialog box	**Note** The unsupported character handling supports only English characters.
	
	Paste Clipboard Text dialog box has the following options:
	
	• **When an unsupported character is found in pasted text:** drop-down list:
	
	    • **Ignore all unsupported characters**—Ignores all the unsupported characters in the text
	
	    • **Cancel the paste operation**—Cancels the send operation.
	
	    • **Replace the character(s) with a mapped value**—If the character is not mapped, opens the Unsupported Character dialog box. See Table 1: Unsupported Characters Dialog box, on page 7 for more information.
	
	    • **Ask what to do with character**—Opens the Unsupported Character dialog box. See Table 1: Unsupported Characters Dialog box, on page 7 for more information.
	
	• **Character Mapping** button—Opens the sub-menu to edit/delete character mappings. Character mappings replace the unsupported character with a user-defined string (no character length).
	
	• **Save** button—Saves the option selected for **When an unsupported character is found in pasted text:** drop-down list.
	
	    Note This option is visible only when the setting is updated.
	
	• **Enter Text to Paste** field
	
	• **Send** button—Sends the text.

Capture to File	Opens the **Save** dialog box that allows you to save the current screen as a PNG image.

Table 1: Unsupported Characters Dialog box

Option	Description
Character context	Group of 11 characters where the unsupported character is found. Five characters before and five characters after the unsupported character. However, more characters from before or after the unsupported character are pulled if enough characters after or before are not available to make 11 characters.
Choose what to do with the unsupported character drop-down list	Allows you to select one of the following actions: • **Ignore the character(s)**—Provides additional options to determine unsupported character(s) to ignore. • **Cancel the paste operation**—Cancels the operation. • **Replace the character(s)**—Provides additional options to determine what to replace the unsupported character(s) with.
Replacement field	**Note** This option is visible only for **Replace the character(s)** option. Enter a replacement character.
Store a mapping of this replacement to the unsupported character check box	**Note** This option is visible only for **Replace the character(s)** option. Allows you to save the character mapping.
Repeat this action for all unsupported_character characters check box	Repeats the selected action for all instances of the unsupported character being evaluated.
Repeat this action for all unsupported characters check box	**Note** This option is not visible only for **Cancel the paste operation** option. Allows you to save the same action for the same unsupported character.

View Menu

Menu Item	Description
Refresh	Updates the console display with the current video output of the server.

Menu Item	Description
Video Quality	You can select one of the following from the sub-menu: • **High** • **Medium** • **Low** • **Ultra Low**
Clear SOL Console	Clears the Cisco SOL terminal.
Full Screen	Expands the vKVM console so that it fills the entire screen.

Macros Menu

Menu Item	Description
Static Macros	Displays a predefined set of macros sub-menu.
User Defined Macros	Displays a user defined set of macros sub-menu.
Manage	Opens the **Manage Macros** dialog box that allows you to add, delete, edit macros; restore the predefined set of macros; and assign hotkey to a macro. To create a new macro, click **Macros > Manage Macros > Create New Macro** Opens the **Create New Macro** dialog box. • **Enter keystrokes for new user defined macro**—Enter the desired key(s). • **Special Characters** drop-down list—Select the desired special character and click Add. • **Create button**—Save the new macro. To restore predefined set of macros, click **Macros > Manage Macros > Restore Static Macros**.

Tools Menu

Menu Item	Description
Stats	

Menu Item	Description
	Opens the Stats dialog box:
	KVM Stats:
	• **Total Bytes Rec**—Total bytes received.
	• **Total Bytes Sent**—Total bytes sent.
	• **Rx Bandwidth**—Received bandwidth measured in the number of KBs per second.
	• **Tx Bandwidth**—Transmitted bandwidth measured in the number of KBs per second.
	• **Frame Rate**—Frame rate measured in the number of frames per second.
	• **Video Tile Rate**—Video tiles rendered per second.
	When vMedia is activated, the vKVM-Mapped vMedia Stats area displays the following:
	• **Total Bytes Rec**—Total bytes received.
	• **Total Bytes Sent**—Total bytes sent.
	• **Device**—The type of local device.
	• **Mapped File**—The type of local device or image file to which the host server device is mapped.
	• **Duration**—The elapsed time of the device to map.
	• **Read Bytes**—The number of bytes read from the vKVM media.
	• **Write Bytes**—The number of bytes written to the vKVM media.
	• **Owner**—The user who mapped the media to the browser.
	CIMC-Mapped vMedia Stats area displays the following:
	• **Device**—The type of local device.
	• **Mapped File**—The type of local device or image file to which the host server device is mapped.
	• **Device Status**—Possible device status:
	• device mount in progress
	• device mounted

Menu Item	Description
	• device eject in progress
	• ejected from host
	Following are the error status:
	• mount failed
	• unmount failed
	• connection timed out
	• file server rejected connection
	• file server rejected credentials
	• file server path not found
	• file not found
	• file(s) still in use
	• open file as read only failed
	• open file as read/write failed
	• file input/output failed
	• HTTP server did not return content length
	• HTTPserver does not support range request
	• invalid parameters
	• invalid device usage
	• invalid device type
Session User List	Opens the **Session User List** dialog box that displays active vKVM session IDs, session types, and the user IDs.
	This dialog box can also be accessed from the **Session User List** icon on the top.
Keyboard	Displays the virtual keyboard for the vKVM console, which you can use to input data.
USB Reset	Provides you an option to reset keyboard, mouse, and virtual media.
	Note Resetting any USB connection affects all the input to the server including virtual media, keyboard, and mouse.

Power Menu

Menu Item	Description
Power On System	Powers on the system. This option is disabled when the system is powered on and it is enabled when the system is not powered.
Power Off System	Powers off the system from the virtual console session. This option is enabled when the system is powered on and disabled when the system is not powered on.
Reset System	Reboots the system without powering it off. This option is enabled when the system is powered on and disabled when the system is not powered on.
Power Cycle System	Turns off system and then back on. This option is enabled when the system is powered on and disabled when the system is not powered on.

Boot Device Menu

Menu Item	Description
No Override	Enables the host to boot to the first device configured.
Boot Device List	A list of boot devices that the server uses to boot from only for the next server boot, without disrupting the currently configured boot order. Once the server boots from the one time boot device, all its future reboots occur from the previously configured boot order. A maximum of 15 devices are displayed on the vKVM console.

Virtual Media Menu

Menu Item	Description
Create Image	Allows you to create an ISO image. Drag and drop files or folders in the **Create Image** dialog box; these files or folders are converted to an ISO image. You can use the **Download ISO Image** button to save the ISO image to your local machine. **Note** **Create Image** option is not available in Safari browser.

Menu Item	Description
Activate vMedia	Allows you to login to vMedia session using user name and password. **Note** **Activate vMedia** option is visible only when vMedia session is not active for any reason. If **Activate vMedia** otion is visible, other vMedia options are not displayed.
vKVM-Mapped vDVD	Opens the **Map Virtual Media - CD/DVD** dialog box, which allows you to select an ISO image from your local computer and map the drive. **Note** Virtual Media is not available for read-only users.
vKVM-Mapped vHDD	Opens the **Map Virtual Media - Removable Disk** dialog box, which allows you to select an ISO image from your local computer and map the drive. **Note** Virtual Media is not available for read-only users.
vKVM-Mapped vFDD	Opens the **Map Virtual Media - Floppy Disk** dialog box, which allows you to select an ISO image from your local computer and map the drive. **Note** Virtual Media is not available for read-only users.
CIMC-Mapped vDVD	Opens the Map **Virtual Media - CD/DVD** dialog box that allows you to select an ISO image from your local computer and map the drive. It also allows you to save, edit, and delete mappings. For more information on mount options, see Table 2: Add New Mapping Dialog Box, on page 14 **Note** Virtual Media is not available for read-only users.
CIMC-Mapped vHDD	Opens the **Map Virtual Media - vHDD** dialog box, which allows you to select an ISO image from your local computer and map the drive. It also allows you to save, edit, and delete mappings. For more information on mount options, see Table 2: Add New Mapping Dialog Box, on page 14. **Note** Virtual Media is not available for read-only users.

Table 2: Add New Mapping Dialog Box

Option	Description
Name field	User defined name of the virtual media.
NFS button	Network File System based mapping.
CIFS button	Common Internet File System based mapping.
HTTP/S	HTTP-based or HTTPS-based mapping.
File Location	Location of the .iso file in the following format: *<IP Address or DNS Name>[:Port]/.iso file path*
Username field	**Note** Available only for CIFS and HTTP/S based mappings. The username, if any.
Password field	**Note** Available only for CIFS and HTTP/S based mappings. The password for the selected username, if any.

Mount Options	**Note** Available only for CIFS and HTTP/S based mappings.
	
	The selected mount options.
	• NFS—For NFS, either leave the field blank or enter one or more of the following:
	  • wsize=Value
	  • vers=Value
	  • timeo=Value
	  • retrans=Value
	  • retry=Value
	  • rsize=Value
	
	• For CIFS, either leave the field blank or enter one or more of the following:
	  • nounix
	  • noserverino
	  • sec=VALUE
	  • vers=VALUE

Option	Description
Auto-remap	Cisco IMC automatically remapsthe device when the host system ejects the media.
Stored vMedia button	Opens an additional area on the right to select stored vMedia from the respective list.
Save button	Saves the vMedia.
Map Drive button	Saves and maps the mounted vMedia.
CD/DVD Panel button	Provides a list of stored vMedia. If you are mapping using **CIMC-Mapped vDVD** option, then you can also edit or delete any vMedia from this list.
Removable Disk panel	Provides a list of stored vMedia. If you are mapping using **CIMC-Mapped vHDD** option, then you can also edit or delete any vMedia from this list.

Chat Menu

Menu Item	Description
Chat	Opens the Chat box to communicate with other users.

Help Icon

Name	Description
Take a Site Tour	Provides a quick interactive tour of the new console.
Help Topics	Clicking this option brings you back to this window.
About	Displays the version number of the Cisco vKVM console.

Language Icon

Shows a drop-down list of the supported languages. You can select desired language from the list.

Profile Menu Icon

The **Profile Menu** icon is located on the top right hand corner of the console.

Name	Description
Role	Displays your user role name.
Server	Displays the host name or IP address.

Name	Description
Settings	Opens the **Settings** dialog box: • **Maintain Aspect Ratio toggle**—Maintains the aspect ratio of the viewer window. • **Mouse Mode** • **Absolute Positioning**—Cursor position in the view mirrors the local machine cursor position. • **Relative Positioning**—Cursor position in the view is calculated relative to the previous position. • **Video Inactivity Timeout** drop-down list—Allows you to select preset time period or inactivity on the console after which the console video times out. • **Number of terminal scrollback lines**—Cursor position in the view mirrors the local machine cursor position. • **Theme**—Allows you to toggle between dark and light theme. • **Save** button—Saves the settings for all users.
Sign Out	Signs out and closes the vKVM console.

KVM Direct Access

KVM direct access allows the administrators that manage the blade and rack servers in your Cisco UCS Manager domain to access the KVM console for their servers directly using a web browser. This feature allows you to restrict access to the IP addresses of the fabric interconnects, while still allowing your administrators to access the KVM console for the servers they manage.

Until Cisco UCS Manager Release 4.0, only out-of-band IPv4 management interface addresses were supported for KVM direct access. Cisco UCS Manager Release 4.0 introduces KVM direct access support for inband IPv4 or IPv6 management interface addresses as well.

Note KVM direct access is supported on Cisco UCS M5 and M6 servers.

KVM direct access over outband also supports custom applications from which users can navigate to a server management IP address without using the Cisco UCS Manager GUI interface or the KVM Launch Manager.

KVM direct access is supported by providing a management IP address assigned directly to the server or associated to the server with a service profile by the server's administrator. The server administrator enters

the assigned inband or outband IP address into a browser, and navigates to the Cisco UCS KVM Direct login page. In the login page, the users enter their username and password, and, for outband address, may choose an authentication domain. When they launch Cisco UCS KVM Direct, the console for the server is displayed, the same way it would if they had accessed the server from the Cisco UCS Manager GUI. Next to the **Launch** button, you can select a list of available outband and inband addresses associated with the server.Beginning with Cisco UCS Manager Release 4.1(1), the KVM Console GUI is available only as an HTML5-based application. It is no longer available as a Java-based application.

KVM direct access over inband employs self-signed certificates for authentication. When users access a server management IP address or service profile IP address for the first time, a dialog box will be displayed to alert them that they need to add a certificate exception to their browser's cache.

The default communications service that supports Cisco UCS KVM direct access is HTTPS. This cannot be disabled. When a user enters a management IP in a browser using HTTP as part of the address, they will be automatically redirected to the HTTPS service.

To accommodate KVM direct access over outband, ensure that the CIMC Web Service communication service in Cisco UCS Manager is enabled.

Note   The CIMC Web Service is enabled by default in Cisco UCS Manager.

KVM Direct Users

Cisco UCS Manager users with appropriate privileges can log into any blade server in the chassis through KVM direct over inband. To have login credentials specific to a blade server, you can use login privileges based on the IPMI profile associated with the blade server. These login privileges are:

- Read-Only—User does not have access to Host keyboard or mouse inputs, vMedia, Power Controls, or Macros.

- Admin—User has all privileges.

Starting the KVM Console from a Server

You can start multiple KVM Console sessions using the addresses assigned to the server.

Procedure

Step 1   In the **Navigation** pane, click **Equipment**.

Step 2   Expand **Equipment** > **Chassis** > *Chassis Number* > **Servers**.

Step 3   Choose the server that you want to access through the **KVM Console**.

Step 4   In the **Work** pane, click the **General** tab.

Step 5   Scroll down to the **Actions** area and then click the **>>** button to the right of **KVM Console**.

The **KVM Console** opens in a separate window and displays a list of available outband and inband addresses associated with the server.

Note　If you click **KVM Console** and not the **>>** button, your session will be started using server addresses in the preferential order of inband IPv6 first, inband IPv4 second, and out-of-band IPv4 third.

Step 6　Choose an address from the **Select IP Address** list.

Addresses displayed as **(Inband)** access the server via the uplink ports and those displayed as **(Outband)** access the server via the management interface port.

Step 7　Click **OK**.

The KVM Console is launched using the address you selected.

Tip　If the `Caps Lock` key on your keyboard is on when you open a KVM session, and you subsequently turn off your `Caps Lock` key, the **KVM Console** may continue to act as if Caps Lock is turned on. To synchronize the KVM Console and your keyboard, press `Caps Lock` once without the **KVM Console** in focus and then press `Caps Lock` again with the **KVM Console** in focus.

Step 8　To start another KVM session for the same server, repeat steps 5 through 7.

Another KVM session is started. You can start up to six sessions for a server, depending on the number of addresses that have been configured for it.

Starting the KVM Console from a Service Profile

Procedure

Step 1　In the **Navigation** pane, click **Servers**.

Step 2　Expand **Servers** > **Service Profiles**.

Step 3　Expand the node for the organization which contains the service profile for which you want to launch the KVM console.

If the system does not include multi tenancy, expand the **root** node.

Step 4　Choose the service profile for which you need KVM access to the associated server.

Step 5　In the **Work** pane, click the **General** tab.

Step 6　Scroll down to the **Actions** area then click the **>>** button to the right of **KVM Console**.

The **KVM Console** opens in a separate window and displays a list of available out-of-band and inband addresses associated with the server.

Note　If you click **KVM Console** and not the **>>** button, your session will be started using server addresses in the preferential order of inband IPv6 first, inband IPv4 second, and outband IPv4 third.

Step 7　Choose an address from the **Select IP Address** list.

Addresses displayed as **(Inband)** access the server via the uplink ports and those displayed as **(Outband)** access the server via the management interface port.

Step 8　Click **OK**.

The KVM Console is launched using the address you selected.

Tip   If the `Caps Lock` key on your keyboard is on when you open a KVM session, and you subsequently turn off your `Caps Lock` key, the **KVM Console** may continue to act as if Caps Lock is turned on. To synchronize the KVM Console and your keyboard, press `Caps Lock` once without the **KVM Console** in focus and then press `Caps Lock` again with the **KVM Console** in focus.

Step 9   To start another session for the same server, repeat steps 6 through 8.

Another KVM session is started. You can start up to six sessions for a server, depending on the number of addresses that have been configured for it.

Starting the KVM Console from the Cisco UCS KVM Direct Web Page

The Cisco UCS KVM Direct login page enables you to access a server directly from a web browser without logging in to Cisco UCS Manager.

Before you begin

To access the KVM console for a server using the Cisco UCS KVM Direct login page, you need the following:

- A Cisco UCS username and password.

- The server CIMC or service profile IPv4 outband or IPv4/IPv6 inband management address for the server you want to access.

Procedure

Step 1   In your web browser, type or select the web link for the management IP address of the server you want to access.

Step 2   If a **Security Alert** dialog box appears, click **Yes** to create a security exception.
The security exception is permanently stored in your browser's cache.

Step 3   In the Cisco UCS **KVM Direct** dialog box, specify the name, password, and domain.

Step 4   Click the **Lauch KVM** button to start HTML5 KVM. Next to the Launch button, you can select a list of available outband and inband addresses associated with the server.

Starting the KVM Console from the KVM Launch Manager

To access the KVM console for a server through the KVM Launch Manager, you need the following:

- Cisco UCS username and password.

- Name of the service profile associated with the server for which you want KVM access.

The KVM Launch Manager enables you to access a server through the KVM console without logging in to Cisco UCS Manager.

Procedure

Step 1 In your web browser, type or select the web link for Cisco UCS Manager GUI.

Example:

The default web link for HTTP access is `http://UCSManager_IP` for an IPv4 address, or `http://UCSManager_IP6` for an IPv6 address. The default web link for HTTPS access is `https://UCSManager_IP` for an IPv4 address, or `https://UCSManager_IP6` for an IPv6 address. In a standalone configuration, `UCSManager_IP` or `UCSManager_IP6` are the IPv4 or IPv6 addresses, respectively, for the management port on the fabric interconnect. In a cluster configuration, `UCSManager_IP` or `UCSManager_IP6` are the IPv4 or IPv6 addresses, respectively, assigned to Cisco UCS Manager.

Step 2 On the Cisco UCS Manager launch page, click **Launch KVM Manager**.

Step 3 If a **Security Alert** dialog box appears, click **Yes** to accept the security certificate and continue.

Step 4 On the **UCS - KVM Launch Manager Login** page, do the following:

a) Enter your Cisco UCS username and password.

b) (Optional) If your Cisco UCS implementation includes multiple domains, select the appropriate domain from the **Domain** drop-down list.

c) Click **OK**.

Step 5 In the **Service Profiles** table of the KVM Launch Manager, do the following:

a) Locate the row containing the service profile and associated server for which you need KVM access.

b) In the **Launch KVM** column for that server, click **Launch**. Next to the Launch button, you can select a list of available outband and inband addresses associated with the server.

The KVM console opens in a separate window.

Tip If the `Caps Lock` key on your keyboard is on when you open a KVM session, and you subsequently turn off your `Caps Lock` key, the **KVM Console** may continue to act as if Caps Lock is turned on. To synchronize the KVM Console and your keyboard, press `Caps Lock` once without the **KVM Console** in focus and then press `Caps Lock` again with the **KVM Console** in focus.

KVM Folder Mapping

KVM Folder Mapping is supported in UCS Manager 3.2(1). Folder mapping provides external file access to the KVM console through the HTML5 KVM interface for remote system updates. This feature is available for B-series and C-series servers with systems running Google Chrome version 57 and higher.

Procedure

Step 1 Start the KVM console.

Step 2   Click the **Create Image** button.

Step 3   Drag and drop any files into the Create Image dialog box.

Step 4   Click **Download ISO Image File** to create the ISO image. Only ISO images are available through the HTML5 KVM interface.

Step 5   Click the **Virtual Media** button, then select **Activate Virtual Devices**. Wait a few seconds for the virtual devices to load.

Step 6   Click the **Virtual Media** button, then select **CD/DVD**.

Step 7   Drag the new ISO file or a folder into the Virtual Disk Management dialog box then click **Map Drive**. The new files are now mapped to this KVM session for read only access.

KVM Certificate

Changing the KVM Certificate

You can use this procedure to change the KVM certificate to a user-generated public certificate.

Procedure

Step 1   In the **Navigation** pane, click **Equipment**.

Step 2   Expand **Equipment** > **Chassis** > *Chassis Number* > **Servers**.

Step 3   Click the server for which you want to change the KVM certificate.

Step 4   In the **Work** pane, click the **Inventory** tab.

Step 5   Click the **CIMC** subtab.

Step 6   In the **Actions** area, click **Change KVM Certificate**:

Step 7   In the **Change KVM Certificate** dialog box, complete the following fields:

Field	Description
Certificate field	A user-generated public certificate.
Key field	The corresponding user-generated private key. **Note** Password protected X.509 certificate private key is not supported.

Step 8   Click **OK**.

Step 9   If a confirmation dialog box appears, click **Yes**.

This operation will result in a reboot of the CIMC

Clearing the KVM Certificate

Procedure

Step 1 In the **Navigation** pane, click **Equipment**.

Step 2 Expand **Equipment** > **Chassis** > *Chassis Number* > **Servers**.

Step 3 Click the server for which you want to clear the KVM certificate.

Step 4 In the **Work** pane, click the **Inventory** tab.

Step 5 Click the **CIMC** subtab.

Step 6 In the **Actions** area, click **Clear KVM Certificate**:

Step 7 In the **Clear KVM Certificate** dialog box, click **Yes**.

This operation will result in a reboot of the CIMC