Managing Remote Presence

This chapter includes the following sections:

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Managing the Virtual KVM

KVM Console

The KVM console is an interface accessible from CIMC that emulates a direct keyboard, video, and mouse (KVM) connection to the server. The KVM console allows you to connect to the server from a remote location. Instead of using CD/DVD or floppy drives physically 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 a virtual drive:

- CD/DVD or floppy drive on your computer
- Disk image files on your computer
- CD/DVD or floppy drive on the network
- Disk image files on the network

You can use the KVM console to install an OS on the server.

Enabling the Virtual KVM

Before You Begin

You must log in as a user with admin privileges to enable the virtual KVM.
Managing the Virtual KVM

Disabling the Virtual KVM

Before You Begin
You must log in as a user with admin privileges to disable the virtual KVM.

Procedure

<table>
<thead>
<tr>
<th>Command or Action</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Server# scope kvm</td>
</tr>
<tr>
<td>Step 2</td>
<td>Server /kvm # set enabled no</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>Server /kvm # commit</td>
</tr>
<tr>
<td>Step 4</td>
<td>Server /kvm # show [detail]</td>
</tr>
</tbody>
</table>

This example disables the virtual KVM:

Server# scope kvm
Server /kvm # set enabled no
Server /kvm # commit
Server /kvm # show
Encryption Enabled Local Video Active Sessions Enabled KVM Port
------------------ ---------------- --------------- ------- --------
no yes 0 yes 2068

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Server /kvm #

## Configuring the Virtual KVM

### Before You Begin

You must log in as a user with admin privileges to configure the virtual KVM.

### Procedure

<table>
<thead>
<tr>
<th>Step</th>
<th>Command or Action</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Server# <code>scope kvm</code></td>
<td>Enters KVM command mode.</td>
</tr>
<tr>
<td>2</td>
<td>Server /kvm # `set enabled {yes</td>
<td>no}`</td>
</tr>
<tr>
<td>3</td>
<td>Server /kvm # `set encrypted {yes</td>
<td>no}`</td>
</tr>
<tr>
<td>4</td>
<td>Server /kvm # <code>set kvm-port port</code></td>
<td>Specifies the port used for KVM communication.</td>
</tr>
<tr>
<td>5</td>
<td>Server /kvm # `set local-video {yes</td>
<td>no}`</td>
</tr>
<tr>
<td>6</td>
<td>Server /kvm # <code>set max-sessions sessions</code></td>
<td>Specifies the maximum number of concurrent KVM sessions allowed. The <code>sessions</code> argument is an integer between 1 and 4.</td>
</tr>
<tr>
<td>7</td>
<td>Server /kvm # <code>commit</code></td>
<td>Commits the transaction to the system configuration.</td>
</tr>
<tr>
<td>8</td>
<td>Server /kvm # <code>show [detail]</code></td>
<td>(Optional) Displays the virtual KVM configuration.</td>
</tr>
</tbody>
</table>

This example configures the virtual KVM and displays the configuration:

Server# `scope kvm`
Server /kvm # `set enabled yes`
Server /kvm # `set encrypted no`
Server /kvm # `set kvm-port 2068`
Server /kvm # `set max-sessions 4`
Server /kvm # `set local-video yes`
Server /kvm # `commit`
Server /kvm # `show detail`

KVM Settings:
- Encryption Enabled: no
- Max Sessions: 4
- Local Video: yes
- Active Sessions: 0
- Enabled: yes
- KVM Port: 2068

Server /kvm #

### What to Do Next

Launch the virtual KVM from the GUI.
Configuring Virtual Media

Before You Begin
You must log in as a user with admin privileges to configure virtual media.

Procedure

<table>
<thead>
<tr>
<th>Step</th>
<th>Command or Action</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Server# scope vmedia</td>
<td>Enters virtual media command mode.</td>
</tr>
<tr>
<td>Step 2</td>
<td>Server /vmedia # set enabled {yes</td>
<td>no}</td>
</tr>
<tr>
<td>Step 3</td>
<td>Server /vmedia # set encryption {yes</td>
<td>no}</td>
</tr>
<tr>
<td>Step 4</td>
<td>Server /vmedia # commit</td>
<td>Commits the transaction to the system configuration.</td>
</tr>
<tr>
<td>Step 5</td>
<td>Server /vmedia # show [detail]</td>
<td>(Optional) Displays the virtual media configuration.</td>
</tr>
</tbody>
</table>

This example configures virtual media encryption:

```
Server# scope vmedia
Server /vmedia # set enabled yes
Server /vmedia *# set encryption yes
Server /vmedia *# commit
Server /vmedia # show detail

vMedia Settings:  
  Encryption Enabled: yes  
  Enabled: yes  
  Max Sessions: 4  
  Active Sessions: 0
```

Server /vmedia #

What to Do Next
Use the KVM to attach virtual media devices to a host.

Managing Serial over LAN

Serial Over LAN

Serial over LAN (SoL) is a mechanism that enables the input and output of the serial port of a managed system to be redirected via an SSH session over IP. SoL provides a means of reaching the host console via CIMC.
Guidelines and Restrictions for Serial Over LAN

For redirection to SoL, the server console must have the following configuration:

- console redirection to serial port A
- no flow control
- baud rate the same as configured for SoL
- VT-100 terminal type
- legacy OS redirection disabled

The SoL session will display line-oriented information such as boot messages, and character-oriented screen menus such as BIOS setup menus. If the server boots an operating system or application with a bitmap-oriented display, such as Windows, the SoL session will no longer display. If the server boots a command-line-oriented operating system (OS), such as Linux, you may need to perform additional configuration of the OS in order to properly display in an SoL session.

In the SoL session, your keystrokes are transmitted to the console except for the function key F2. To send an F2 to the console, press the Escape key, then press 2.

Configuring Serial Over LAN

Before You Begin

You must log in as a user with admin privileges to configure serial over LAN (SoL).

Procedure

<table>
<thead>
<tr>
<th>Command or Action</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td>Enters SoL command mode.</td>
</tr>
<tr>
<td>Server# <code>scope sol</code></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>Enables or disables SoL on this server.</td>
</tr>
<tr>
<td>Server `/sol # set enabled {yes</td>
<td>no}`</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td>Sets the serial baud rate the system uses for SoL communication.</td>
</tr>
<tr>
<td>Server `/sol # set baud-rate {9600</td>
<td>19200</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td>Commits the transaction to the system configuration.</td>
</tr>
<tr>
<td>Server <code>/sol # commit</code></td>
<td></td>
</tr>
<tr>
<td><strong>Step 5</strong></td>
<td>(Optional) Displays the SoL settings.</td>
</tr>
<tr>
<td>Server <code>/sol # show [detail]</code></td>
<td></td>
</tr>
</tbody>
</table>

This example configures SoL:

```
Server# `scope sol
Server `/sol # set enabled yes
Server `/sol *# set baud-rate 115200
Server `/sol *# commit
Server `/sol # show
Enabled Baud Rate(bps)
--------- ---------------
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OL-21105-01
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```
Launching Serial Over LAN

Procedure

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Command or Action</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Server# connect host</td>
<td>Opens a serial over LAN (SoL) connection to the redirected server console port. You can enter this command in any command mode.</td>
</tr>
</tbody>
</table>

What to Do Next

To end the SoL session, you must close the CLI session. For example, to end an SoL session over an SSH connection, disconnect the SSH connection.