

# Managing Dominion™ KX II-101 USB Connections

## USB Connections

To broaden the KX II-101's compatibility with different KVM target servers, Raritan provides a user defined real-time selection of USB configuration profile options for a wide range of operating system and BIOS-level server implementations.

The default USB Connection Settings meets the needs of the vast majority of deployed KVM target server configurations. Additional configuration items are provided to meet the specific needs of other commonly deployed server configurations (for example, Linux and Mac OS X.. There are also a number of configuration items, designated by platform name and BIOS revision) to enhance virtual media function compatibility with the target server, for example, when operating at the BIOS level.

USB profiles are configured on the Device Settings > Port Configuration > Port page of the KX II-101 Remote Console. A device administrator can configure the port with the profiles that best meet the needs of the user and the target server configuration.

**WARNING:** It is possible, based on the selections you make in the Advanced USB Connection Settings section, to cause configuration problems between the KX II-101 and the target server.

Therefore, Raritan strongly recommends that you refer to the most recent User Defined KX II-101 USB Profile Configuration Table hyperlink, which can be accessed directly from the Advanced USB Connection Settings section on the Port page. The information available at the time of this publication can be found in **Known USB Profiles** (on page 2).

A user connecting to a KVM target server chooses among these USB Connection Settings depending on the operational state of the KVM target server. For example, if the server is running and the user wants to use the Windows operating system, it would be best to use the default settings. But if the user wants to change settings in the BIOS menu or boot from a virtual media drive, depending on the target server model, a different USB Connection Setting may be more appropriate.

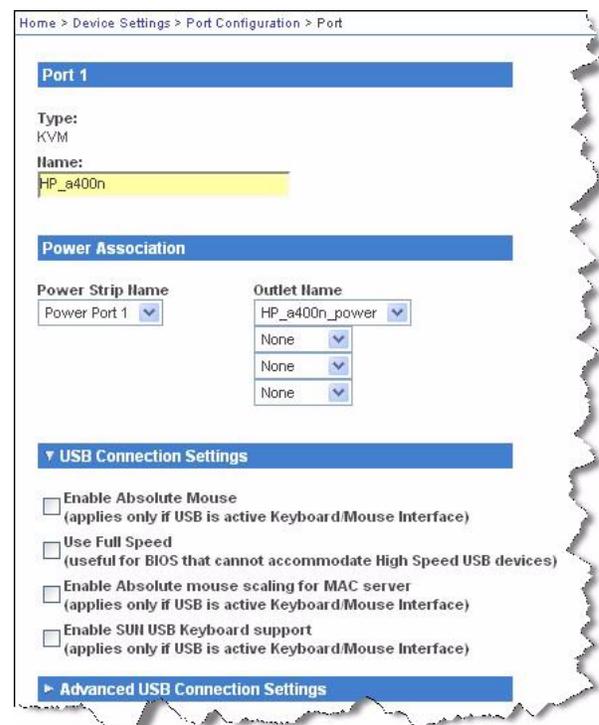
Should none of the USB Connection settings provided by Raritan work with a given KVM target, please contact Raritan Technical Support for assistance.

## Basic USB Connection Settings

### ► To define USB connections for the target server:

1. Click Device Settings > Port Configuration to open the Port Configuration page. Click on the port you want to configure.
2. Click the **► USB Connection Settings** icon to expand the USB Connection Settings section.
3. Select the USB connection settings you will be using:
  - Enable Absolute Mouse - Applies only if USB is active Keyboard/Mouse Interface
  - Use Full Speed - Useful for BIOS that cannot accommodate High Speed USB devices
  - Enable Absolute mouse scaling for MAC server - Applies only if USB is active Keyboard/Mouse Interface
  - Enable SUN USB Keyboard support - Applies only if USB is active Keyboard/Mouse Interface

4. Click OK.



## Advanced USB Connection Settings

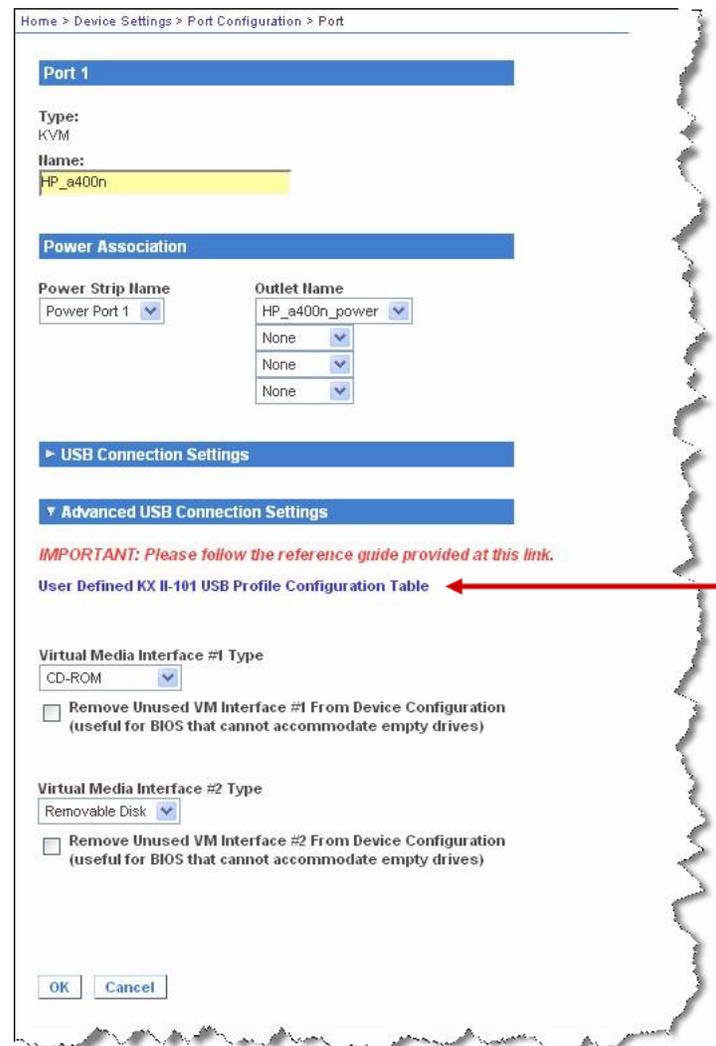
**WARNING:** It is possible, based on the selections you make in the Advanced USB Connection Settings section, to cause configuration problems between the KX II-101 and the target server.

Therefore, Raritan strongly recommends that you refer to the **Known USB Profiles** (on page 2) or to the User Defined KX II-101 USB Profiles Connection Configuration Table, which can be accessed by clicking its corresponding link on the Advanced USB Connection Settings section of the Port page .

### ► To define advanced USB connections for the target server:

1. Click Device Settings > Port Configuration to open the Port Configuration page. Click on the port you want to configure.
2. Click the **► Advanced USB Connection Settings** icon to expand the section.
3. Click the User Defined KX II-101 USB Profile Configuration Table link to access the recommended configurations to apply to the Advanced USB Connection Settings section.
4. Configure the following as needed:
  - Virtual Media Interface #1 Type
  - Check the Remove Unused VM Interface #1 From Device Configuration checkbox to remove the specified VM type interface (for #1).
  - Virtual Media Interface #2 Type
  - Check the Remove Unused VM Interface #2 From Device Configuration checkbox to remove the specified VM type interface (for #2).

5. Click OK.



Home > Device Settings > Port Configuration > Port

**Port 1**

Type:  
KVM

Name:  
HP\_a400n

**Power Association**

Power Strip Name: Power Port 1

Outlet Name: HP\_a400n\_power

None

None

None

► **USB Connection Settings**

▼ **Advanced USB Connection Settings**

*IMPORTANT: Please follow the reference guide provided at this link.*

[User Defined KX II-101 USB Profile Configuration Table](#)

Virtual Media Interface #1 Type: CD-ROM

Remove Unused VM Interface #1 From Device Configuration (useful for BIOS that cannot accommodate empty drives)

Virtual Media Interface #2 Type: Removable Disk

Remove Unused VM Interface #2 From Device Configuration (useful for BIOS that cannot accommodate empty drives)

OK Cancel

## Known USB Profiles

The current release of the KX II-101 includes the known USB profiles described in the following tables. However, for the most up-to-date USB profile information, please click on the User Defined KX II-101 USB Profiles Connection Configuration Table link in the Advanced USB Connection Settings section of the page.

### Hardware/BIOS: Dell PowerEdge 1950/2950/2970/6950/R200

**Server attributes:** BIOS v1.0.0, Windows Server 2003, Intel Duo Core 800 MHz

**Keyboard & mouse:** USB

#### USB connection settings: Advanced USB settings:

Absolute mouse	<input checked="" type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	

**Comments:** Standard configuration.

### Hardware/BIOS: Dell PowerEdge 1850

**Server attributes:** BIOS A06, Windows Server 2003, Intel Xeon 2.8GHz, provides support for USB Flash Emulation

**Keyboard & mouse:** PS/2

#### USB connection settings: Advanced USB settings:

Absolute mouse	<input type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	

**Comments:** Change the BIOS setup order to boot from an USB emulated device.

### Hardware/BIOS: Dell PowerEdge 650

**Server attributes:** BIOS A05, Windows Server 2003, Intel P 4 3GHz

**Keyboard & mouse:** USB

#### USB connection settings: Advanced USB settings:

Absolute mouse	<input checked="" type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	

**Comments:** BIOS accessible YES. No BIOS support to boot from USB emulated devices.

### Hardware/BIOS: Dell PowerEdge 1650

**Server attributes:** BIOS A11, Windows Server 2003, Intel P III 1.26GHz

**Keyboard & mouse:** PS/2

#### USB connection settings: Advanced USB settings:

Absolute mouse	<input type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	

**Comments:** BIOS accessible YES. No BIOS support to boot from USB emulated devices.

### Hardware/BIOS: Dell PowerEdge 2650

**Server attributes:** BIOS A21, Windows Server 2003, Intel Xeon 2.3 GHz

**Keyboard & mouse:** USB

**USB connection settings:** **Advanced USB settings:**

Absolute mouse	<input checked="" type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server		Virtual Media Intf#2	REM disk
SUN USB keyboard		Remove Unused VM Intf#2	

**Comments:** BIOS accessible YES. No BIOS support to boot from USB emulated devices.

### Hardware/BIOS: HP Compaq DC7100/7600

**Server attributes:** BIOS HP Pentium 4/mini tower

**Keyboard & mouse:** PS/2

**USB connection settings:** **Advanced USB settings:**

Absolute mouse	<input checked="" type="checkbox"/>	Virtual media Intf#1	Auto
Force full speed		Remove Unused VM Intf#1	
Absolute mouse Mac server		Virtual Media Intf#2	Disabled
SUN USB keyboard		Remove Unused VM Intf#2	

**Comments:** Virtual CD-ROM and disk drives cannot be used simultaneously.

### Hardware/BIOS: Other Dell Optiplex, keyboard only

**Server attributes:** GX620 BIOS A11 11/20/06

**Keyboard & mouse:** USB

**USB connection settings:** **Advanced USB settings:**

Absolute mouse	<input checked="" type="checkbox"/>	Virtual media Intf#1	Disabled
Force full speed		Remove Unused VM Intf#1	
Absolute mouse Mac server		Virtual Media Intf#2	Disabled
SUN USB keyboard		Remove Unused VM Intf#2	

**Comments:** BIOS keyboard access. Cannot boot from redirected drives (CD-ROM/USB)

### Hardware/BIOS: HP Integrity RX1600

**Server attributes:** HP-UX 8.11 / CDE

**Keyboard & mouse:** USB

**USB connection settings:** **Advanced USB settings:**

Absolute mouse		Virtual media Intf#1	CD-ROM
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server		Virtual Media Intf#2	REM disk
SUN USB keyboard		Remove Unused VM Intf#2	

**Comments:** Boot options accessible - YES. Intelligent Mouse mode, Standard Mouse mode, and Single Mouse mode are OK.

### Hardware/BIOS: HP Proliant DL145

<b>Server attributes:</b>		PhoenixBIOS HP System BIOS-005 version 2.17, Build Date 9/26/06	
<b>Keyboard &amp; mouse:</b>		PS/2	
<b>USB connection settings:</b>		<b>Advanced USB settings:</b>	
Absolute mouse	<input type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	
<b>Comments:</b> Boot from CD-ROM.			

### Hardware/BIOS: HP Proliant DL360/DL380

<b>Server attributes:</b>		HP Proliant DL360/DL380 G4 (HP SmartStart CD)	
<b>Keyboard &amp; mouse:</b>		PS/2	
<b>USB connection settings:</b>		<b>Advanced USB settings:</b>	
Absolute mouse	<input type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	
<b>Comments:</b> Use PS/2 keyboard/mouse for BIOS/SmartStart Installs.			

### Hardware/BIOS: HP Proliant DL145

<b>Server attributes:</b>		PhoenixBIOS HP System BIOS-005 version 2.17, Build Date 9/26/06	
<b>Keyboard &amp; mouse:</b>		PS/2	
<b>USB connection settings:</b>		<b>Advanced USB settings:</b>	
Absolute mouse	<input type="checkbox"/>	Virtual media Intf#1	Disable
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	
<b>Comments:</b> Boot from flash disk.			

### Hardware/BIOS: HP Proliant DL360/DL380

<b>Server attributes:</b>		HP Proliant DL360/DL380 G4 (HP SmartStart CD)	
<b>Keyboard &amp; mouse:</b>		USB	
<b>USB connection settings:</b>		<b>Advanced USB settings:</b>	
Absolute mouse	<input checked="" type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	
<b>Comments:</b> Use USB keyboard/mouse and set the mouse to Absolute Mouse mode for normal desktop use.			

### Hardware/BIOS: HP Proliant DL360/DL380

**Server attributes:** HP Proliant DL360/DL380 G4 (Windows 2003 Server Installation)

**Keyboard & mouse:** PS/2

**USB connection settings:** **Advanced USB settings:**

Absolute mouse	<input type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	

**Comments:** Use PS/2 keyboard/mouse for BIOS/Windows Server 2003 installs.

### Hardware/BIOS: IBM eServer System P5

**Server attributes:** AIX Common Desktop Environment (CDE)

**Keyboard & mouse:** USB

**USB connection settings:** **Advanced USB settings:**

Absolute mouse	<input type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	

**Comments:** Boot options accessible - YES. Only use Intelligent Mouse mode or Single Mouse mode.

### Hardware/BIOS: HP Proliant DL360/DL380

**Server attributes:** HP Proliant DL360/DL380 G4 (Windows 2003 Server Installation)

**Keyboard & mouse:** USB

**USB connection settings:** **Advanced USB settings:**

Absolute mouse	<input checked="" type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	REM disk
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	

**Comments:** Use USB keyboard/mouse and set the mouse to Absolute Mouse mode for normal desktop use.

### Hardware/BIOS: IBM ThinkCentre Lenovo

**Server attributes:** BIOS Date 5-26-06, Intel P4 2.8 GHz

**Keyboard & mouse:** PS/2

**USB connection settings:** **Advanced USB settings:**

Absolute mouse	<input type="checkbox"/>	Virtual media Intf#1	Auto
Force full speed	<input type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server	<input type="checkbox"/>	Virtual Media Intf#2	Disabled
SUN USB keyboard	<input type="checkbox"/>	Remove Unused VM Intf#2	

**Comments:** ONLY redirected CD-ROM drives are supported. USB flash drives are not supported. Virtual CD-ROM and disk drives cannot be used simultaneously.

### Hardware/BIOS: Lenovo ThinkPad X61

<b>Server attributes:</b>		BIOS v1.11 2007-11-15 Intel Duo Core 2.20 GHz	
<b>Keyboard &amp; mouse:</b>		USB	
<b>USB connection settings:</b>		<b>Advanced USB settings:</b>	
Absolute mouse	<input checked="" type="checkbox"/>	Virtual media Intf#1	Auto
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server		Virtual Media Intf#2	Disabled
SUN USB keyboard		Remove Unused VM Intf#2	

**Comments:** Press F1 during startup to enter BIOS. Press F12 to boot from the appropriate virtual media mount (CD-ROM/USB HDD).

### Hardware/BIOS: Mac

<b>Server attributes:</b>		BIOS Mac	
<b>Keyboard &amp; mouse:</b>		USB	
<b>USB connection settings:</b>		<b>Advanced USB settings:</b>	
Absolute mouse		Virtual media Intf#1	CD-ROM
Force full speed		Remove Unused VM Intf#1	<input checked="" type="checkbox"/>
Absolute mouse Mac server		Virtual Media Intf#2	Disabled
SUN USB keyboard		Remove Unused VM Intf#2	

**Comments:** BIOS access setup. Virtual CD-ROM and disk drives cannot be used simultaneously.

### Hardware/BIOS: Lenovo ThinkPad T61

<b>Server attributes:</b>		BIOS v1.26 2007-10-18 Intel Core Duo 2.00GHz	
<b>Keyboard &amp; mouse:</b>		USB	
<b>USB connection settings:</b>		<b>Advanced USB settings:</b>	
Absolute mouse	<input checked="" type="checkbox"/>	Virtual media Intf#1	Auto
Force full speed	<input checked="" type="checkbox"/>	Remove Unused VM Intf#1	
Absolute mouse Mac server		Virtual Media Intf#2	Disabled
SUN USB keyboard		Remove Unused VM Intf#2	

**Comments:** Press F1 during startup to enter BIOS. Press F12 to boot from the appropriate virtual media mount (CD-ROM/USB HDD).

### Hardware/BIOS: Mac

<b>Server attributes:</b>		BIOS Mac	
<b>Keyboard &amp; mouse:</b>		USB	
<b>USB connection settings:</b>		<b>Advanced USB settings:</b>	
Absolute mouse	<input checked="" type="checkbox"/>	Virtual media Intf#1	CD-ROM
Force full speed		Remove Unused VM Intf#1	
Absolute mouse Mac server	<input checked="" type="checkbox"/>	Virtual Media Intf#2	Disabled
SUN USB keyboard		Remove Unused VM Intf#2	

**Comments:** Works normally on the Desktop. Virtual CD-ROM and disk drives cannot be used simultaneously.

### Hardware/BIOS: RUBY Industrial Mainboard (AwardBIOS)

<b>Server attributes:</b>	RUBY Industrial Mainboard (AwardBIOS)		
<b>Keyboard &amp; mouse:</b>	PS/2		
<b>USB connection settings:</b>	<b>Advanced USB settings:</b>		
Absolute mouse		Virtual media Intf#1	Auto
Force full speed		Remove Unused VM Intf#1	
Absolute mouse Mac server		Virtual Media Intf#2	Disabled
SUN USB keyboard		Remove Unused VM Intf#2	

**Comments:** Use this for the RUBY-9715VG2A series industrial mainboards with Phoenix/AwardBIOS v6.00PG. Virtual CD-ROM and disk drives cannot be used simultaneously.