Dominion® KX3G2

Quick Setup Guide

Thank for choosing the Dominion DKX3G2, the industry's highest performance enterprise-class, secure, digital KVM (Keyboard, Video, Mouse) switch.

This Quick Setup Guide describes typical setup for all DKX3G2 models.

Package Contents

Each DKX3G2 ships as a fully-configured stand-alone product in a standard 1U or 2U form with 19" rackmount chassis.

- 1 - DKX3G2 device
- 1 - Rackmount kit
- 2 - AC power cords
- 1 - Set of 4 rubber feet (for desktop use)

Safety

- Operation temperature in a closed rack environment may be greater than room temperature. Do not exceed the rated maximum ambient temperature of the appliances. See Specifications in Administrators Guide.
- Ensure sufficient airflow through the rack environment.
- Mount equipment in the rack carefully to avoid uneven mechanical loading.
- Connect equipment to the supply circuit carefully to avoid overloading circuits.

Ground all equipment properly, especially supply connections, such as power strips (other than direct connections), to the branch circuit.

Front View



Rear View



Diagram key	
1	Dual Power AC 100V/240V
2	Dual 10/100/1000 Ethernet access
3	Local USB ports
4	HDMI port
5	CLI Port
6	KVM ports for UTP Cabling (Cat5/5e/6)
7	Tier port
8	Reset

Initial Configuration

Equipment Setup

Rack Mounting

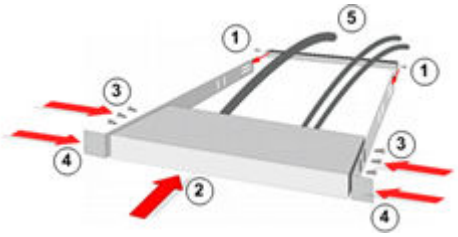
The DKX3G2 can be mounted in 1U (1.75", 4.4 cm) of vertical space in a standard 19" rack.

Note: Diagram may not depict your exact device. The mounting instructions are specific to your device.

► *To configure forward mount:*

The steps correspond to the numbers shown in the front rackmount diagrams.

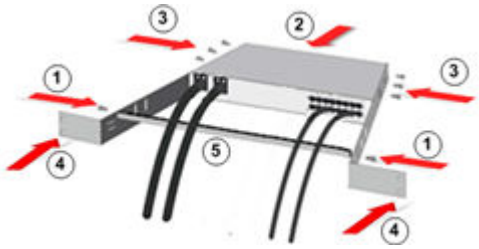
1. Secure the cable-support bar to the back end of the side brackets using two of the included screws.
2. Slide the DKX3G2 between the side brackets, with its rear panel facing the cable-support bar, until its front panel is flush with the “ears” of the side brackets.
3. Secure the DKX3G2 to the side brackets using the remaining included screws (three on each side).
4. Mount the entire assembly in your rack, and secure the side brackets' ears to the rack's front rails with your own screws, bolts, cage nuts, and so on.
5. When connecting cables to the rear panel, drape them over the cable-support bar.



► *To configure rear mount:*

The steps correspond to the numbers shown in the rear rackmount diagrams.

1. Secure the cable-support bar to the front end of the side brackets, near the side brackets' “ears,” using two of the included screws.
2. Slide the DKX3G2 between the side brackets, with its rear panel facing the cable-support bar, until its front panel is flush with the back edges of the side brackets.
3. Secure the DKX3G2 to the side brackets using the remaining included screws (three on each side).
4. Mount the entire assembly in your rack and secure the side brackets' ears to the rack's front rails with your own screws, bolts, cage nuts, and so on.
5. When connecting cables to the rear panel, drape them over the cable-support bar.



Connecting the Equipment

AC Power: Use the power cords that came with DKX3G2. Use both cords with AC power outlets for dual-power failover protection.

Network Ports: Connect a standard Ethernet cable from the LAN1 network port to an Ethernet switch, hub, or router.

To enable the failover or isolation mode capabilities, connect a standard Ethernet cable from the LAN2 network port to an Ethernet switch, hub, or router.

USB Ports: Connect a USB keyboard and mouse to the respective Local User port on the back of DKX3G2. The Local User port provides direct access for initial network configuration and target connections. After network setup, all further configuration can be performed from remote logins to the device. You can connect Dominion Serial Access Modules (DSAM) to any USB Port.

HDMI Port: HDMI cable is used to connect to a local monitor.

Target servers:

- Connect the keyboard, mouse and video plugs on the CIM to the corresponding ports on the target server.
- Connect the CIM to an available target server port on the back of the DKX3G2 via a Cat5/5e/6 cable.

Dominion Serial Access Module (DSAM): Connecting a DKX3G2 and a Dominion Serial Access Module (DSAM) provides access to devices such as LAN switches and routers that have a RS-232 serial port.

- Connect the DSAM unit's USB cable to the any USB port of the DKX3G2.
- Connect the serial devices to the serial ports on the DSAM unit.

Configuring the DKX3G2

You are forced to change the password at first login to a strong password as you connect via local port. After the password update you assign its IP address.

The DKX3G2 device is shipped with the following default settings.

Default login:

- Username = `admin`
- Password = `raritan`
- IP address = DHCP

All remaining steps can be completed through the Remote Console in a web browser by accessing the DKX3G2 via its IP address. The local port supports only limited configuration options.

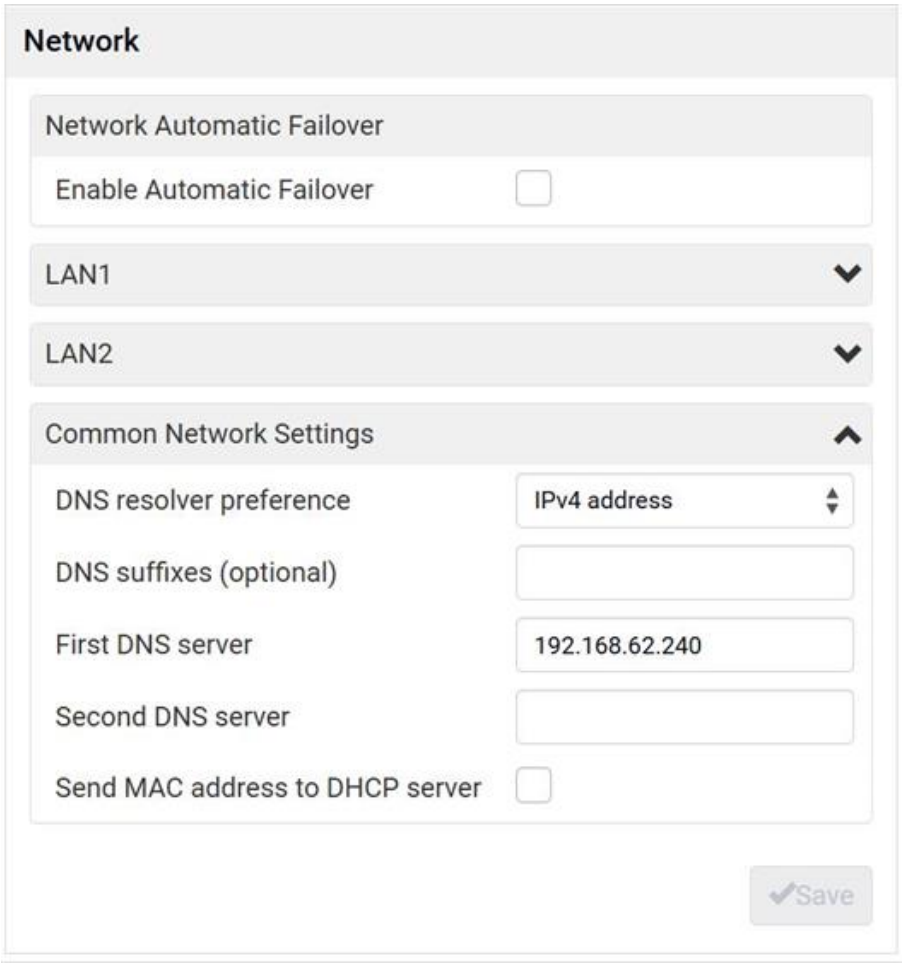
Important: For backup and business continuity purposes, it is strongly recommended you create a backup administrator username and password, and keep that information in a secure location.

► *To configure device name:*

1. Connect remotely to the DKX3G2 via it's IP address.
2. Log in with newly set password.
3. Choose Device Information and click on Edit.



4. Specify a meaningful Device Name for your DKX3G2 device.
   - Up to 32 alphanumeric and valid special characters, no spaces between characters.
5. Next, configure the IP address and DNS settings from Device Settings/Network.
6. Select "Send Mac address to DHCP server" to send the Mac address.



Configuring Network Firewall Settings

TCP Port 5000:

Enable remote access to DKX3G2 by allowing network and firewall communication on TCP Port 5000.

TCP Port 443:

- Allow access to TCP Port 443 (Standard HTTPS) so you can access DKX3G2 via a web browser.

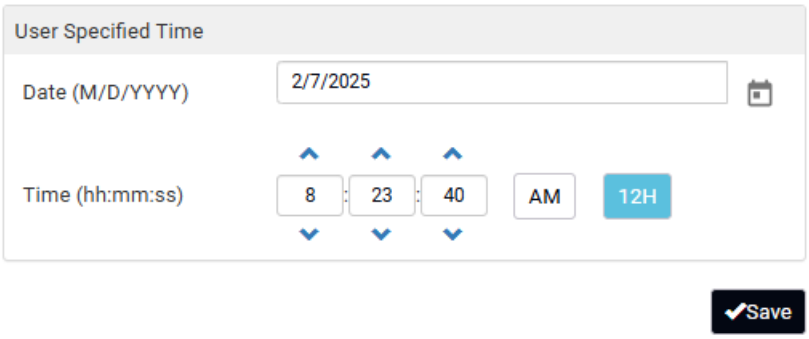
TCP Port 80:

Allow access to TCP Port 80 (Standard HTTP) to enable automatic redirection of HTTP requests to HTTPS.

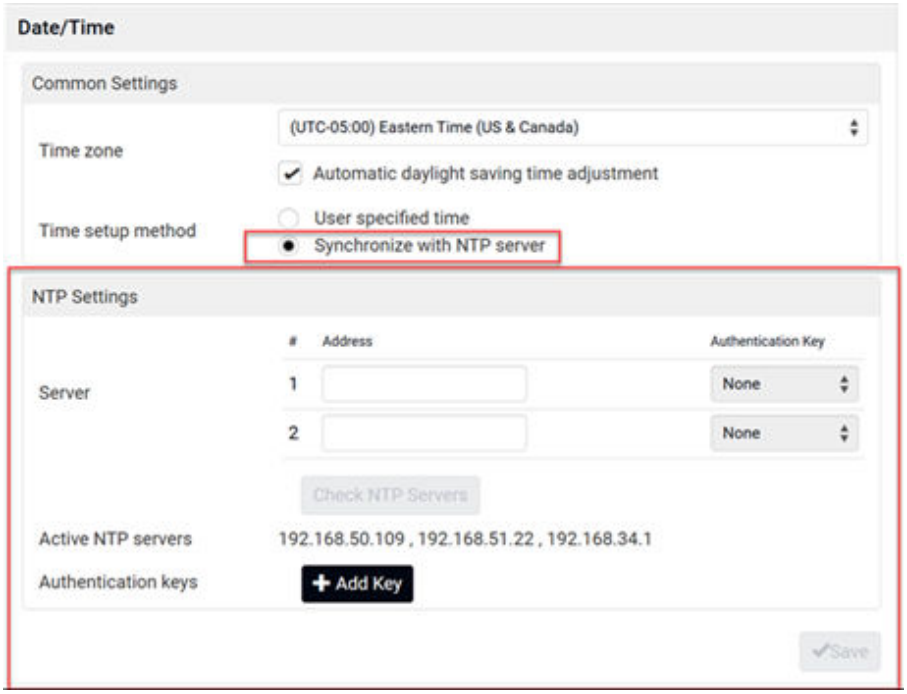
Configure Date/Time Settings

There are two ways to do this:

- Manually set the date and time.



- Synchronize the date and time with a Network Time Protocol (NTP) server.



Note: NTP security is added to the DKX3G2, which allows it to request the date and time with or without authentication. If the NTP server is configured to use authentication, it will accept the request along with the authentication key, and send back the date and time along with digital information of the authentication key. The DKX3G2 will verify the digital information and will use the date and time if the key matches; otherwise discard the received information.

► *To configure date/time settings:*

1. Choose Device Settings > Date/Time to open the Date/Time Settings page.
2. Choose your time zone from the Time Zone drop-down list.
3. Adjust for daylight savings time by checking the "Adjust for daylight savings time" checkbox.
4. Choose the method to use to set the date and time:
   - User Specified Time - use this option to input the date and time manually. For the User Specified Time option, enter the date and time. For the time, use the hh:mm format (using a 24-hour clock).
   - Synchronize with NTP Server - use this option to synchronize the date and time with the Network Time Protocol (NTP) Server.
5. For the Synchronize with NTP Server option:
   - Enter the IP address of the Primary Time server, Authentication Type, ID, key Format and key value.
   - Enter the IP address of the Secondary Time server, Authentication Type, ID, key Format and key value Optional

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   Note: If DHCP is selected for the Network Settings on the Network page, the NTP server IP address is automatically retrieved from the DHCP server by default. Manually enter the NTP server IP address by selecting the Override DHCP checkbox.

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6. Click OK.

Create and Install an SSL Certificate

It is strongly recommended to install your own SSL Certificate in each DKX3G2 device. This security best practice reduces the number of browser and Java™ warning messages, and avoids man-in-the-middle attacks. It also prevents future Java versions and browser versions from blocking access to your DKX3G2 device.

For information on creating and installing SSL certificates, see DKX3G2 Online Help.

Configuring KVM Target Servers

Absolute mouse mode:

Absolute mouse mode is recommended to minimize mouse settings on target servers.

In this mode, absolute coordinates are used to keep the client and target cursors in synch, even when the target mouse is set to a different acceleration or speed. This mode is supported on servers with USB ports and is the default mode for virtual media CIMs.

It requires the use of a virtual media CIM - D2CIM-VUSB, D2CIM-DVUSB, D2CIM-DVUSB-DVI, D2CIM-DVUSB-HDMI, D2CIM-DVUSB-DP, D2CIM-VUSB-USBC, D2CIM-DVUSB-MDP.

Target Server Video Resolutions:

See: Supported Target Server Video Resolutions in Online Help.

Choose Failover or Isolation Mode

Configure DKX3G2 for Dual LAN Failover Mode: In failover mode, LAN status is used to determine which LAN port is used in failover. LAN port #1 is switched as default. If the switched LAN port status is down, then the other LAN port will be switched to until a LAN port whose status is on is found.

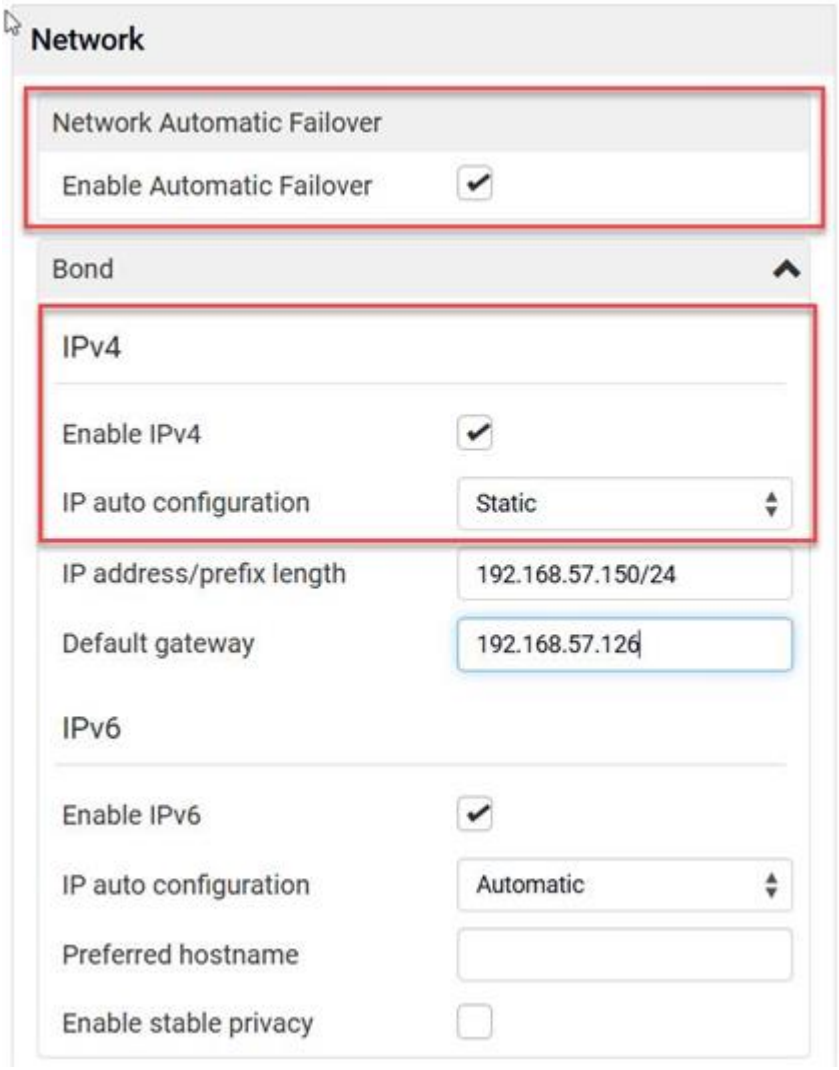
Configure DKX3G2 for Dual LAN Isolation Mode: In isolation mode the two LAN ports are configured with different IP addresses. They can be in the same or different subnets. Once DKX3G2 is in isolation mode failover can not be configured.

Configure DKX3G2 for Dual LAN Failover Mode

LAN1 and LAN2 share the same IP address within the same subnet to support automatic failover.

LAN1 is the primary port. If LAN1 fails, LAN2 is used to access DKX3G2.

1. Select Device Settings > Network to open the Device Network Settings page.
2. Select the "Enable Automatic Failover" to enable failover.
3. Expand Bond section, which has IPV4 and IPV6 setup. By default Enable IPV4 and Enable IPV6 are checked.
4. Set the IP Auto Configuration to Static in the IPv4 section.
5. Manually specify the network parameters by entering the Default Gateway.
6. Enter the IPv4 IP Address/Prefix.
7. Click Save and Apply Settings.
8. The LAN1 settings are applied to LAN2 if failover occurs.
9. Repeat steps 4 to 7 for IPV6 setup or disable by unchecking "Enable IPV6" checkbox.

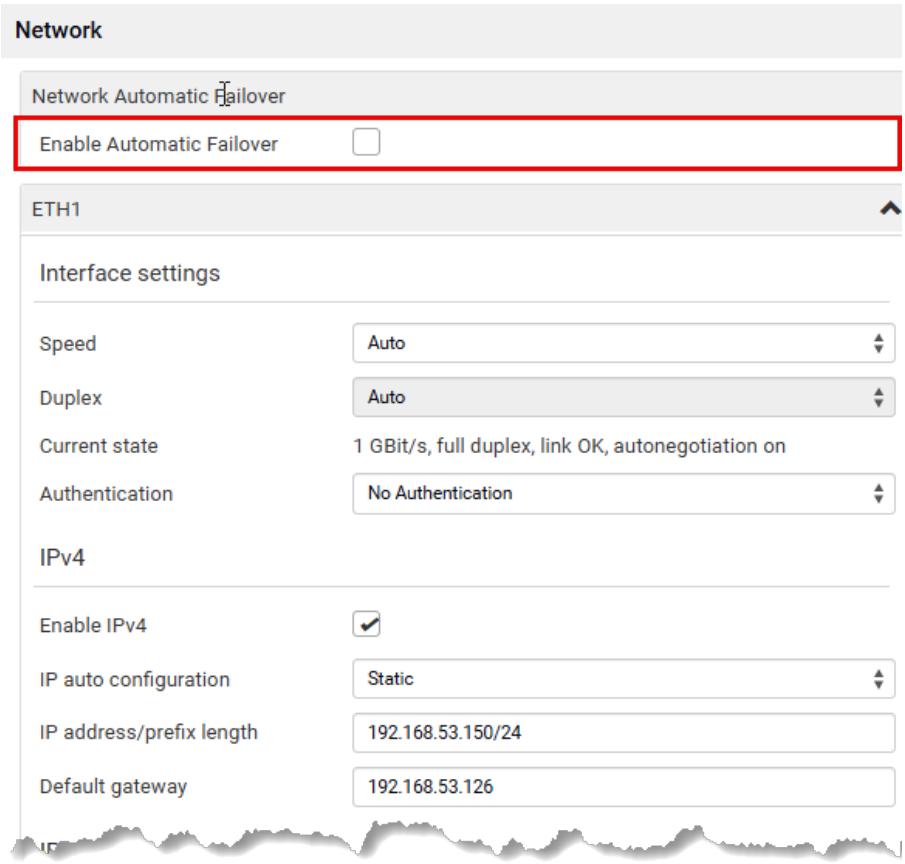


Configure DKX3G2 for Dual LAN Isolation Mode

Isolation mode allows you to access each LAN port independently using different IP addresses.

Note: Failover is not supported in this mode.

1. Select Device Settings > Network to open the Device Network Settings page.
2. Ensure the "Enable Automatic Failover" checkbox is not selected.
3. Set the IP Auto Configuration to Static in the IPv4 section.



4. If needed, manually specify the network parameters by entering the Default Gateway and then complete the steps that follow.
5. Enter the IP address you want to use to connect to the DKX3G2 LAN1.
6. Enter the LAN2 IPv4 Default Gateway.
7. In the LAN2 IPv4 section, set the IP Auto Configuration to Static.
8. Enter the IP address you want to use to connect to the DKX3G2 LAN2.
9. Enter the LAN2 IPv4 Default Gateway.
10. Complete the IPv6 sections, if applicable.
11. Select the IP Auto Configuration.

If Static is selected, you must manually specify -

- Global/Unique IP Address - this is the IP address assigned to DKX3G2.
- Prefix Length - this is the number of bits used in the IPv6 address.
- Gateway IP Address.

Select Automatic to configure IPv6 settings via DHCPv6.

Note that the following additional, read-only information appears in this section -

- Link-Local IP Address - this address is automatically assigned to the device. It is used for neighbor discovery or when no routers are present.
- Zone ID - Identifies the device the address is associated with. Read-Only

12. Select "Use the Following DNS Server Addresses" and enter the Primary DNS Server IP Address and Secondary DNS Server IP Address. The secondary address is used if the primary DNS server connection is lost due to an outage.

Note: "Obtain DNS Server Address Automatically" and "Preferred DHCP Host Name" are only enabled when DKX3G2 is configured in DHCP mode

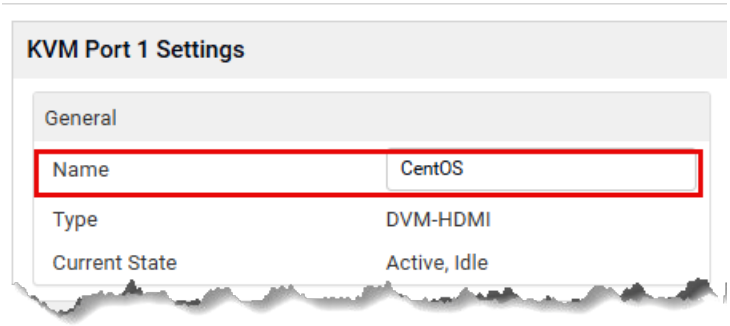
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13. Set the LAN 1/LAN 2 Interface Speed and Duplex, and the LAN 1/LAN 2 MTU.
    - Valid range for MTU is 576 - 1500.
14. When finished, click OK.

Your DKX3G2 device is now accessible via the LAN1 IP address and the LAN2 IP address.

Name Your Target Servers

1. Connect all of the target servers if you have not already done so.
2. Select KVM Ports > then click the settings of Port of the target servers named after remote login.



3. Enter a name for the server up to 32 alphanumeric and special characters. Click OK.

Power Supply Autodetection

DKX3G2 provides dual power supplies.

When both power supplies are connected, and Power Supply Auto Detection is remotely configured:

- DKX3G2 automatically detects both power supplies.
- DKX3G2 notifies you about their status.
- On the Power Supply Setup page the Powerln1 Auto Detect and Powerln2 Auto Detect checkboxes are automatically selected.

If you are using only one power supply, you can enable automatic detection for only the power supply in use.

When only one power input is connected, the Power LED on the front of the DKX3G2 device is Red when the checkbox is selected for an unconnected power supply, and White when the checkbox is not selected for an unconnected power supply.

► *To enable automatic detection for the power supply in use:*

1. Select Device Settings > Power Supply Setup.
   - Select the PowerIn1 Auto Detect option if you are plugging power input into power supply number one. (The left-most power supply at the back of the device when you are facing rear of the device.)

Or

   - Select the PowerIn2 Auto Detect option if you are plugging power input into power supply number two. (The right-most power supply at the back of the device when you are facing rear of the device.)
2. Click OK.

Launch the DKX3G2 Remote Console

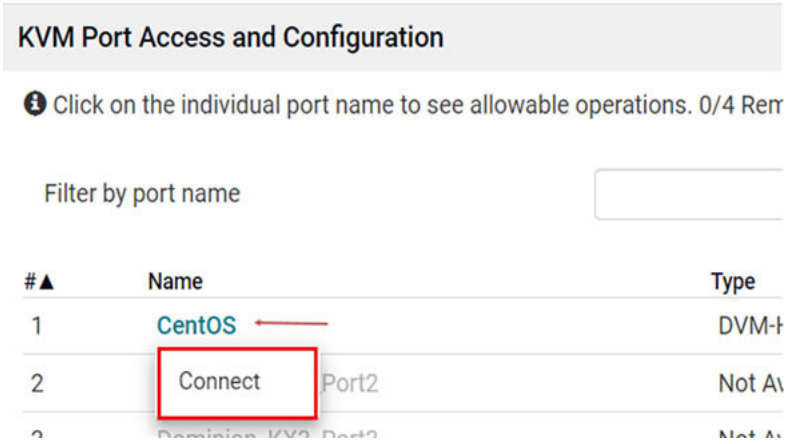
1. Launch a supported web browser, and enter the IP address assigned to the DKX3G2. HKC is the default client for all environments and will be launched as per your PC and browser settings. See the online help for details about clients.
2. Enter your username and password, then click Login.
3. Accept the user agreement (if applicable).
4. If security warnings appear, click to accept.

Tip: If you have a DKX3G2 User Station, you can use it to remotely access the DKX3G2 target servers. See Dominion KX III User Station in the online help.

Access and Control Target Server

The DKX3G2 KVM Port Access and Configuration page provides a list of all DKX3G2 ports.

The page also lists all of the target servers connected to the DKX3G2 along with their status and availability.

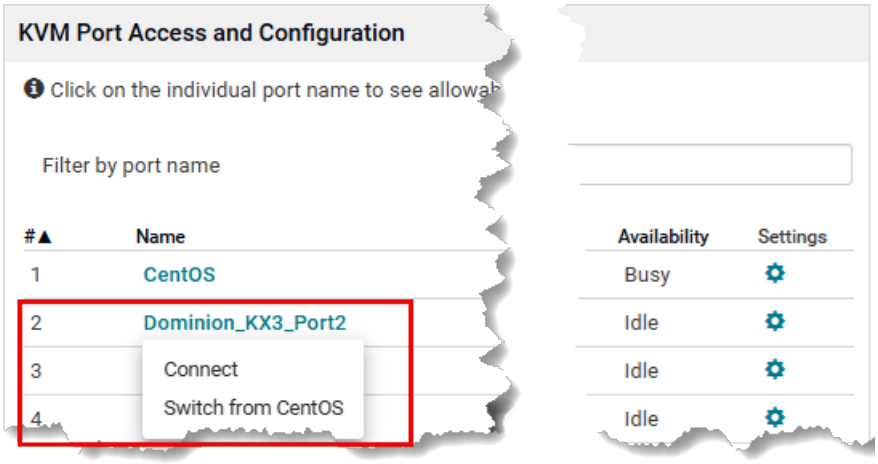


On the KVM Port Access and Configuration page, click the Port Name of the target you want to access. The Port Action Menu is displayed.

- Choose Connect from the Port Action menu.
- A KVM window opens with a connection to the target.

Switch and Disconnect Target Server

► *To switch between target servers:*



1 While already using a target server, access the DKX3G2 Port Access page.

2 Click the port name of the target you want to access. The Port Action menu appears.

3 Choose Switch From. The new target server you selected is displayed.

► *To disconnect a target server:*

- On the KVM Port Access and Configuration page, click the port name of the target you want to disconnect from, then click Disconnect on the Port Action menu when it appears.

  Or
- Close the KVM client window.

Additional Information

For more information about DKX3G2 and the entire Raritan product line, see Raritan's website (www.raritan.com). For technical issues, contact Raritan Technical Support. See the Contact Support page in the Support section on Raritan's website for technical support contact information worldwide.
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