Dominion® LX II

Thank for choosing the Dominion LX II, designed for economical, reliable and secure remote access and management.

This Quick Setup Guide explains how to install and configure the LX II.

Package Contents

Each LX II ships as a stand-alone product in a standard 1U 19" rackmount chassis.

The LX II device ships with the following contents:

- 1 - LX II device
- 1 - LX II Quick Setup Guide
- 1 - Rackmount kit
- 1 - AC power cord
- 1 - Set of 4 rubber feet (for desktop use)
- 1 - Warranty card

In Raritan products that require Rack Mounting, please follow these precautions:

- 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.
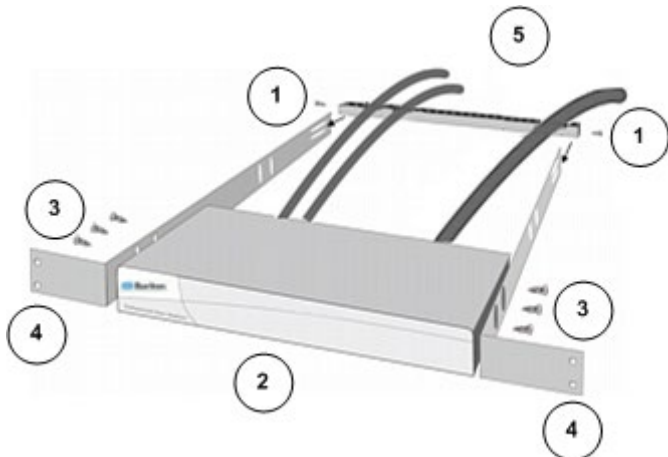
Rack Mounting

The LX II can be mounted in 1U (1.73", 44 mm) of vertical space in a standard 19" equipment rack. You can mount the LX II facing the front of the rack or facing the rear of the rack.

To rack-mount the LX II, use the brackets and screws that came with the device.

Forward Mount

The steps in the table 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 LX II 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 LX II 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 of the LX II, drape them over the cable-support bar.

Rear Mount

The steps in the table 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 LX II 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 LX II 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 of the LX II, drape them over the cable-support bar.

Step 1: Configuring Network Firewall Settings

TCP Port 5000

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

Alternatively, configure LX II to use a different TCP port, and allow that port network and firewall communication.

TCP Port 443

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

TCP Port 80

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

Step 2: Configuring KVM Target Servers

Mouse Settings

Absolute Mouse Synchronization 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.

- Absolute Mouse Synchronization requires the use of a virtual media CIM - D2CIM-VUSB, D2CIM-DVUSB, D2CIM-DVUSB-DVI, D2CIM-DVUSB-HDMI, D2CIM-DVUSB-DP

Target Server Video Resolutions

See **Supported Target Server Video Resolutions** in **Online Help**.

![Raritan. A brand of legrand]

Step 3: Connecting the Equipment
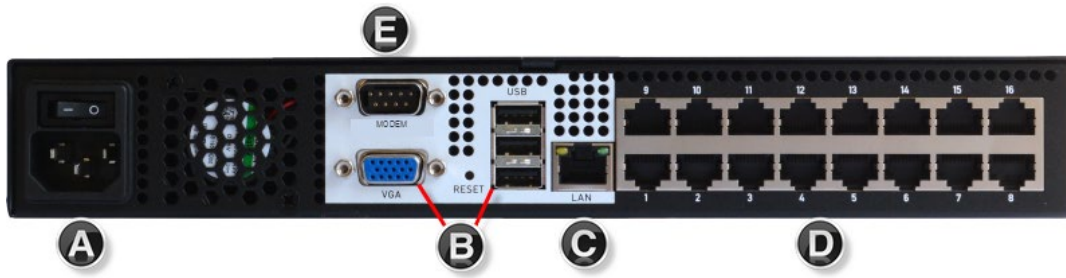
A. AC Power

▸ **To connect the power supply:**

- Attach the included AC power cord to the LX II and plug it into an AC power outlet.

B: Local Access Ports

▸ **To connect a local PC:**

Attach a multi-sync VGA monitor, and USB mouse and keyboard.

C: Network Port

▸ **To connect the network:**

- Connect a standard Ethernet cable from the network port to an Ethernet switch, hub, or router.

D: Target Server Ports

▸ **To connect target servers:**

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

E: Modem Port (Optional)

See Configuring Modem Settings, in the **Online Help**.

Step 4: Configuring the LX II

For the following steps, you must change the default password and assign the LX II its IP address at the Local Console.

All other steps can be performed either from the Local Console, or the LX II Remote Console via a supported web browser using the LX II's default IP address.

Java is required to use the Java-based VKC/VKCS client. See the Release Notes for supported versions.

Microsoft .NET is required to use the Microsoft Windows-based AKC client. See the Release Notes for supported versions.

Factory Default Login Information

The LX II device is shipped with the following default settings:

- Username = `admin`
- Password = `raritan`
- IP address = `192.168.0.192`

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.

Change the Default Password

The first time you start the LX II device, you are required to change the default password.

1. Once the unit has booted, enter the default username `admin` and password `raritan`.
2. Click Login.
3. Enter the old password `raritan`, then enter and reenter a new password.
   - Up to 64 English alphanumeric and special characters.
4. Click Apply, then click OK on the Confirmation page.

Assign the LX II a Device Name

Choose Device Settings > Network to go to the Basic Network Settings page in the LX II Remote client.

Basic Network Settings

Device Name *
Name

IPv4 Address

IP Address
192.168.61.160

Subnet Mask
255.255.255.0

Default Gateway
192.168.61.126

IP Auto Configuration
None ▼

- Specify a meaningful Device Name for your LX II device.
  - Up to 32 alphanumeric and valid special characters, no spaces between characters.

Next, configure the IP address and DNS settings.

Configure the Network: IPv4 and IPv6 Settings

1. Set the IP Auto Configuration to None in the IPv4 section.
2. Enter the IP address you want to use to connect to the LX II LAN1. The default IP address is 192.168.0.192.
3. Enter the IPv4 Subnet Mask. The default subnet mask is 255.255.255.0.
4. Complete the IPv6 sections, if applicable.
5. Select the IP Auto Configuration. If None is selected, you must manually specify -
   - Global/Unique IP Address - this is the IP address assigned to LX II.
   - Prefix Length - this is the number of bits used in the IPv6 address.
   - Gateway IP Address.

   Select Router Discovery to locate a Global or Unique IPv6 address instead of a Link-Local subnet. Once located, the address is automatically applied.

   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
6. Select "Use the Following DNS Server Addresses" and enter the Primary DNS Server IP Address and Secondary DNS Server IP Address. The secondary addresse 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 LX II is configured in DHCP mode

7. When finished, click OK. Your LX II device is now accessible via the LAN IP address.

Name Your Target Servers

1. Connect all of the target servers if you have not already done so.
2. Select Device Settings > Port Configuration, then click the Port Name of the target server you want to name.

Port 2

Type:
DVM-DP

Sub Type: ● Standard KVM Port

○ KVM Switch

Name:
Dominion_LX2_Port2

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

Configure Date/Time Settings

The date and time settings impact SSL certificate validation if LDAPS is enabled. Configuring the date and time also ensures your audit logs will be timestamped correctly.

There are two ways to do this:

- Manually set the date and time.

Date/Time Settings

Time Zone
(GMT -05:00) US Eastern ▼

☑ Adjust for daylight savings time

● User Specified Time

Date (Month, Day, Year)
February ▼ 19 , 2019

Time (Hour, Minute)
03 : 22 : 19 (hh:mm:ss)

○ Synchronize with NTP Server

Primary Time Server

Secondary Time Server

OK   Reset To Defaults   Cancel

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

Date/Time Settings

Time Zone
(GMT -05:00) US Eastern ▼

☑ Adjust for daylight savings time
◯ User Specified Time
Date (Month, Day, Year)
February ▼ | 19 | , | 2019
Time (Hour, Minute)
03 | : | 26 | : | 37 | (hh:mm:ss)

◉ Synchronize with NTP Server ⬅
Primary Time Server
192.168.22.222
Secondary Time Server
192.168.22.224

OK | Reset To Defaults | Cancel

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.

     For the Synchronize with NTP Server option:
     - Enter the IP address of the Primary Time server.
     - Enter the IP address of the Secondary Time server. **Optional**

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.

5. Click OK.

Step 5: Launching the Remote Console

1. Launch a supported web browser, and enter the IP address assigned to the LX II. A default client is launched based on 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.

Access and Control Target Servers Remotely

The LX II Port Access page provides a list of all LX II ports.

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

Access a Target Server from the LX II

Port Access

Click on the individual port name to see allowable operations.
0 / 2 Remote KVM channels currently in use.

View By Port | Set Scan

▲ No.	Name	Type	Status	Availability
1	Connect Dominion_LX2_Port1	VM	up	idle
2	Dominion_LX2_Port2	Not Available	down	idle
3	Dominion_LX2_Port3	Not Available	down	idle

1. On the Port Access page, click the Port Name of the target you want to access. The Port Action Menu is displayed.
2. Choose Connect from the Port Action menu.

A KVM window opens with a connection to the target.

Switch between Target Servers

Port Access ⬅ ①

Click on the individual port name to see allowable operations.
1 / 2 Remote KVM channels currently in use.

View By Port | Set Scan

Switch From Dominion_LX2_Por...		Type	Status	Availability
Connect		VM	up	busy
2	② Dominion_LX2_Port2	DVM-DP	up	idle
3	Dominion_LX2_Port3	Not Available	down	idle
4	Dominion_LX2_Port4	Not Available	down	idle

① While already using a target server, access the LX II 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.

Disconnect from a Target Server

▶ **To disconnect a target:**

- On the Port Access 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 client window.

Step 6: Configuring the Keyboard Language (Optional)

Note: This step is not required if you are using the US/International language keyboard.

If you are using a non-US language, the keyboard must be configured for the appropriate language.

Additionally, the keyboard language for the client machine and the KVM target servers must match.

Consult your operating system documentation for additional information about changing the keyboard layout.

Step 7: Create and Install an SSL Certificate

It is strongly recommended to install your own SSL Certificate in each LX II device.

This security best practice reduces the number of Java™ warning messages, and avoids man-in-the-middle attacks.

It also prevents future Java versions and browser versions from blocking access to your LX II device.

For information on creating and installing SSL certificates, see LX II **Online Help**.

Converting a Binary Certificate to a Base64-Encoded DER Certificate (Optional)

LX II requires an SSL certificate in either Base64-Encoded DER format or PEM format.

If you are using an SSL certificate in binary format, you cannot install it.
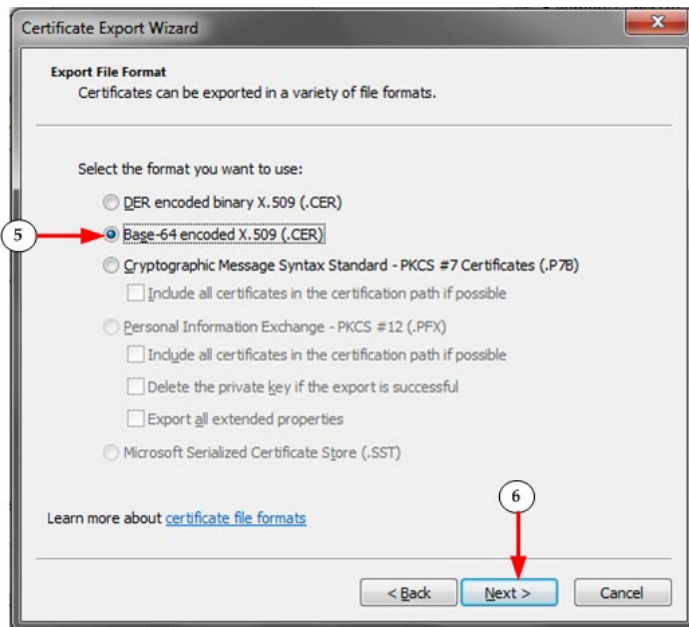
However, you can convert your binary SSL certificate.
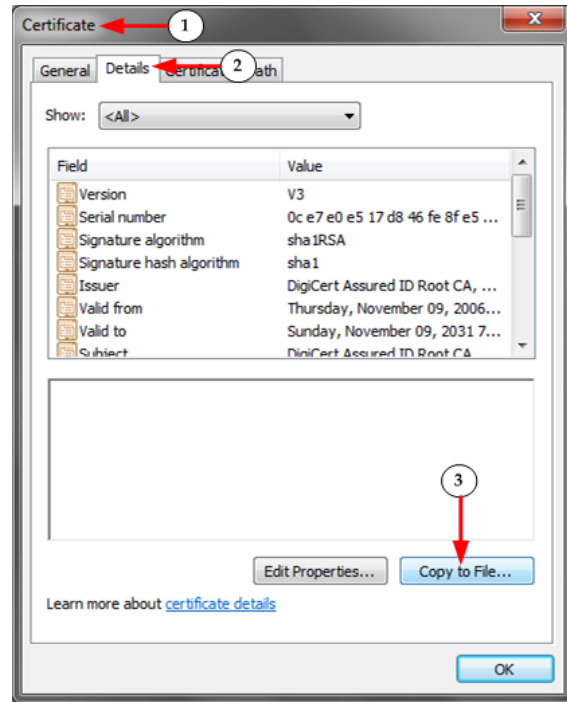
1. Locate the DEGHKVM0001.cer binary file on your Windows machine.

   Double-click on the DEGHKVM0001.cer file to open its Certificate dialog.

2. Click the Detail tab.

3. Click "Copy to File...".

4. The Certificate Export Wizard opens. Click Next to start the Wizard.

5. Select "Base-64 encoded X.509" in the second Wizard dialog.

6. Click Next to save the file as a Base-64 encoded X.509.

You can now install the certificate on your LX II.

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Additional Information

For more information about LX II 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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