Dominion User Station User Guide

KXUST-1P-v5.2-E
July 2025
Release 5.2.0

Contents

FCC Information

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

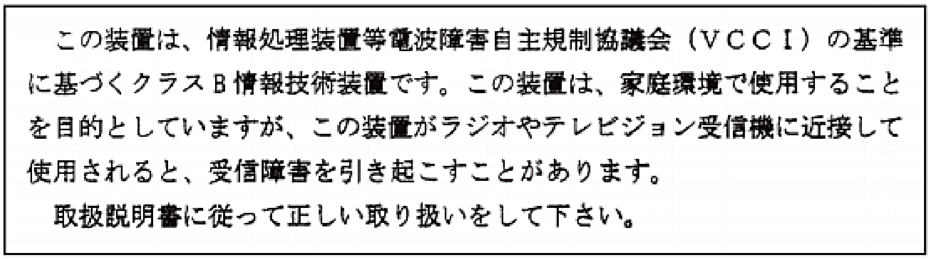
- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

VCCI Information (Japan)



　この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

　取扱説明書に従って正しい取り扱いをして下さい。

Raritan is not responsible for damage to this product resulting from accident, disaster, misuse, abuse, non-Raritan modification of the product, or other events outside of Raritan's reasonable control or not arising under normal operating conditions.

If a power cable is included with this product, it must be used exclusively for this product.

What's New in Dominion User Station Release 5.2.0?

- Syslog forwarding to a remote Syslog server
- Firefox Web Browser is accessible to support some special websites
- User will logout after idle time elapses
- Full-Screen Mode covers all Monitors
- Remote audio playback is available for RDP client
- System Diagnostics is available

Introduction

This chapter introduces the Dominion User Station.

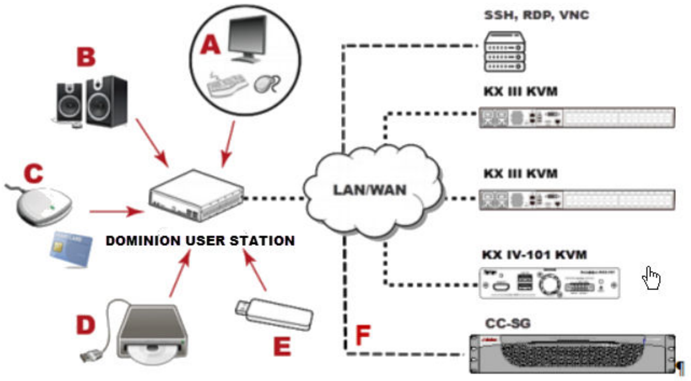
Overview

The Dominion User Station (DKX3/DKX4-UST, DKX3/DKX4-EUST) is designed to access servers and computer devices connected to Dominion KX III and Dominion KX IV-101 KVM and SXII Serial switches from customer LAN/WAN networks. Access to servers and devices on the network via RDP, SSH, and VNC is also supported. Additional access to web applications can be added using WEB and ESXi access points.

Note: For information on Dominion KVM and Serial switches, access the user documentation from its application or the Raritan website's Support page.

You can store the IP addresses of multiple KVM and Serial switches on the Dominion User Station so that you can remotely access any IT device connected to these KVM and Serial switches with only one click.

► *Illustration diagram:*



A	***A USB Keyboard, USB mouse, and one or two HDMI- or DisplayPort-interfaced monitors***
B	***Analog or digital audio appliances***
C	***Optional SmartCard reader for remote IT device authentication and SmartCard login as Cc-SG user***
D	***External drives as virtual media, such as CD-ROM***
E	***USB drives for virtual media or User Station software update***
F	***Optional integration with CC-SG***

Package Contents

DKX3/DKX4-UST and DKX3-EUST:

- Dominion User Station hardware
- Power adapter
- VESA mount kit
- Quick Setup Guide
- L-type rackmount kit (optional) is only available for DKX3/DKX4-UST and DKX3/DKX4-EUST

Note: To mount the User Station in a 19-inch data center rack, you must purchase the L-type rackmount kit from Raritan. Refer to the online help or user guide for rackmount instructions.

DKX4-EUST:

- Dominion User Station hardware
- Power adapter
- VESA mount kit

Product Features

- Support KVM and Serial-over-IP connections to target servers

Note: The User Station CANNOT access a KVM port that is connected to a tiered KVM switch or a blade chassis server.

- Support of RDP, VNC, SSH, ESXi and Web targets
- Support a HDMI or DisplayPort-interfaced monitor
- Support for up to 4 monitors
- Support dual LAN connections
- Support virtual media, including external DVD, USB drives or network storage

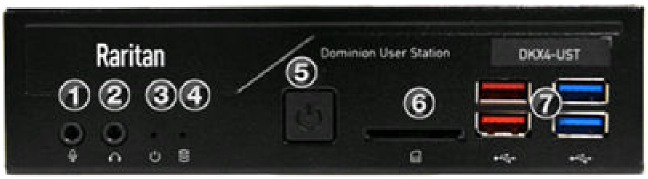
Note: Virtual media is supported only when the accessed KX device supports it and you have permissions to use virtual media. See Virtual Media.

- Support USB audio
- Support power control for target servers (with Raritan PX PDUs)
- Support authentication to target servers via an optional SmartCard
- Support authentication and authorization via LDAP
- Support the optional FIPS 140-2 mode
- Support authentication and authorization via CC-SG

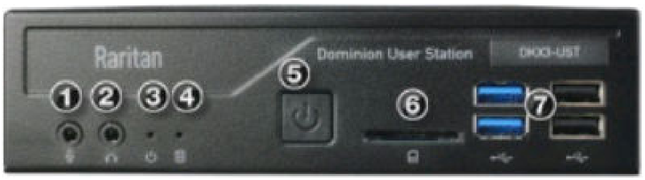
Introduction to the User Station

Front View

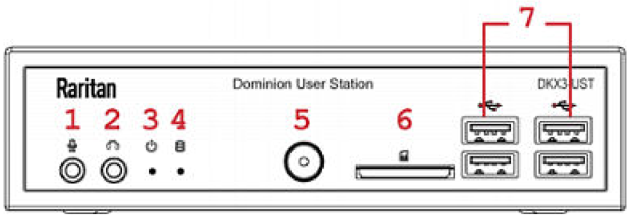
DKX4-UST:



DKX3-UST Version 2:



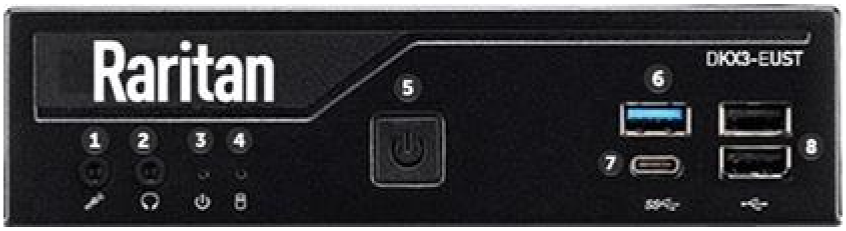
DKX3-UST Version 1:



1. Microphone input
2. Audio output
3. Power LED
4. Hard disk LED
5. Power button
6. SD card reader (not available)
7. USB 2.0 and 3.1* ports

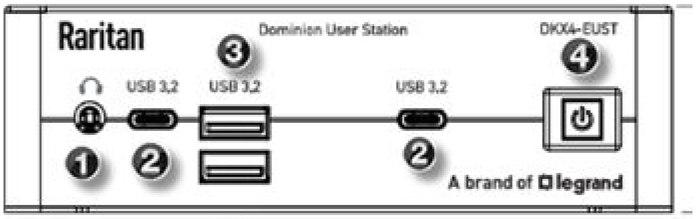
**DKX4-UST and DKX3-UST Version 2 models only*

DKX3-EUST:



1. Microphone output
2. Audio output
3. Power LED
4. Hard Disk LED
5. Power button
6. Type-A USB 3.2
7. Type -C USB 3.2
8. USB 2.0 ports

DKX4-EUST:

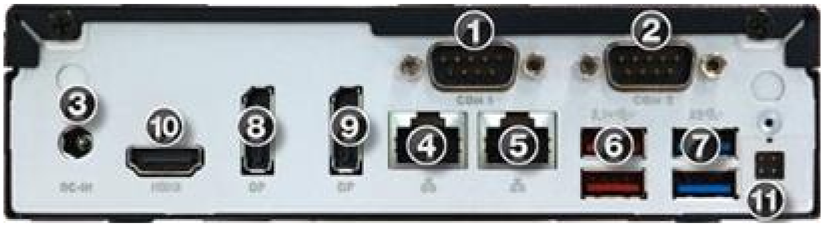


1. Audio output*
2. Type-C USB 3.2
3. Type -A USB 3.2
4. Power button

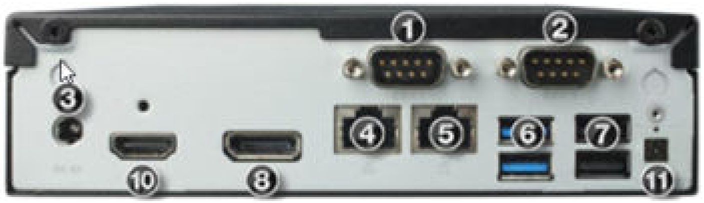
**Audio output port can support speaker and microphone via a 3.5 mm stereo Y cable (not included in the package).*

Rear View

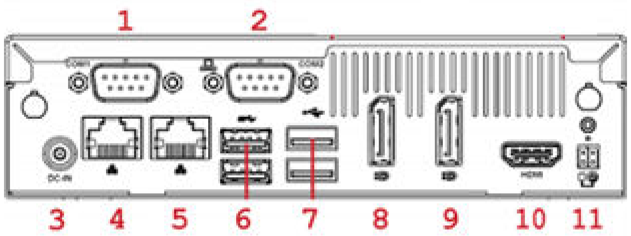
DKX4-UST:



DKX3-UST Version 2:



DKX3-UST Version 1:



1. RS232/RS422/ RS485

2. RS232

3. DC power input

4. Gigabit LAN port 1

5. Gigabit LAN port 2

6-7. USB Ports

KX3-UST and KX3-UST Version 2: USB 2.0, 3.0

KX4-UST only: USB 3.1

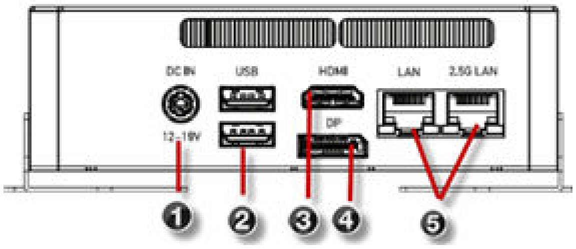
8. DisplayPort (DP) video 1

9. DisplayPort (DP) video 2

10. HDMI video

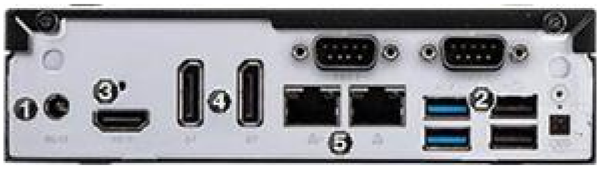
11. Connector for external power button

DKX4-EUST:



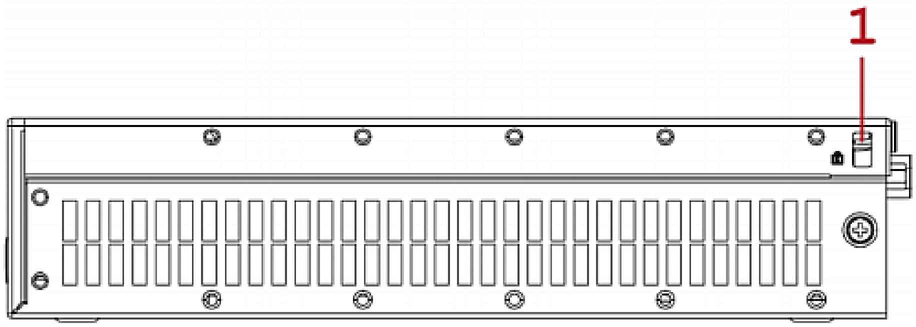
1. DC power input
2. USB ports
3. HDMI video
4. DisplayPort video
5. 1 Gigabit & 2.5 Gigabit LAN port

DKX3-EUST:



1. DC power input
2. USB ports
3. HDMI video
4. DisplayPort video
5. 2 Gigabit LAN ports

Side View



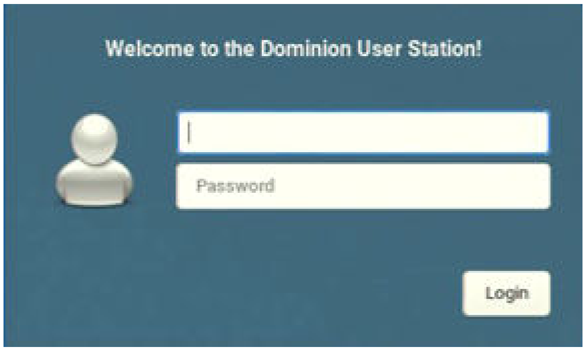
1. Kensington Lock holes

Introduction to the Software

After powering on the User Station, the Login Screen is shown.

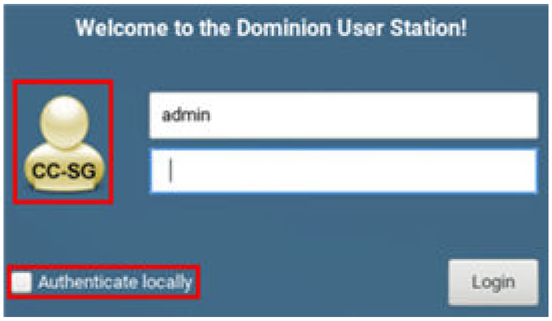
After successfully logging in to the User Station, the Main Screen displays.

Login Screen



Welcome to the Dominion User Station!

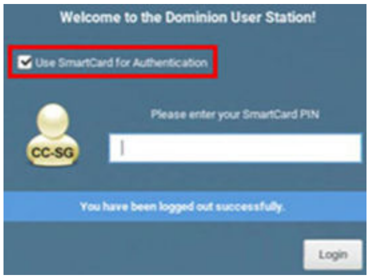
- System date and time
- US Keyboard language (default US English) and ⏻ Restart or Shut Down
- Login: The login icon indicates the authentication type being used: Local, LDAP, CC-SG, or SmartCard with CC-SG intergration.
- A local authentication checkbox is available whenever the user name "admin" is entered, and for all users when "Allow access for local users" is enabled in either LDAP or CC-SG integration mode.



Welcome to the Dominion User Station!

admin

□ Authenticate locally

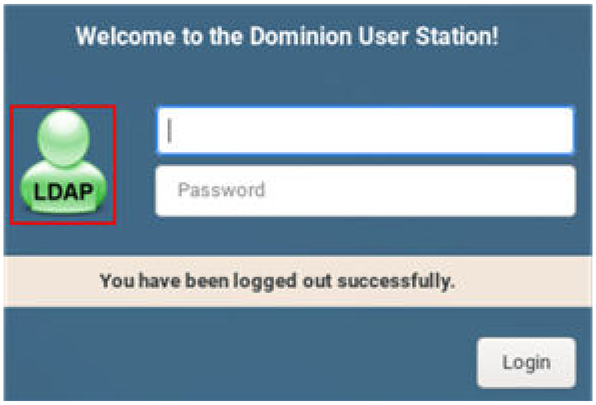


Welcome to the Dominion User Station!

☑ Use SmartCard for Authentication

Please enter your SmartCard PIN

You have been logged out successfully.



Welcome to the Dominion User Station!

Password

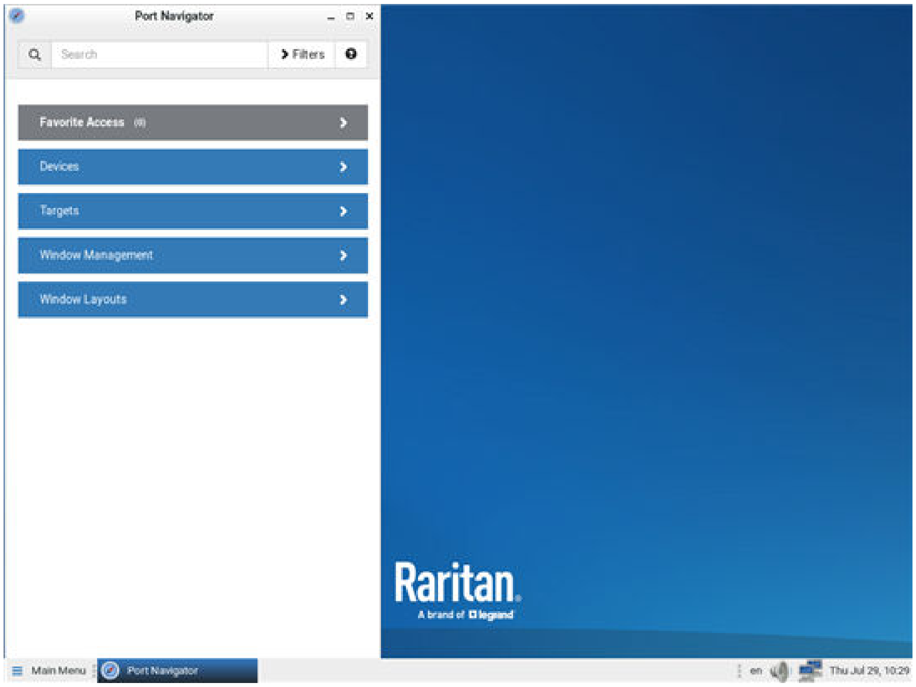
You have been logged out successfully.

Main Menu, Port Navigator, Toolbar

The screen displayed after login is the Main Screen. When logging in for the first time, a welcome message is displayed.

The Main Menu and toolbar is located at the bottom of this screen. This toolbar shows the Main Menu, shortcut icons and lists any open User Station and KVM and Serial Client windows.

The Port Navigator opens by default, and can be closed then re-opened from the Main Menu.



- Main Menu:

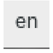
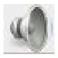
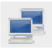
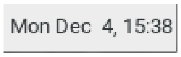
  This menu contains the primary User Station commands and system settings.
- Open window(s):

  If any window is launched, its name is shown in the Toolbar. In the above diagram, only the Port Navigator window is launched.

  You can right-click any open window in the Toolbar to minimize, maximize, move, resize and so on.
- Shortcut icons for viewing/configuring system settings:

  Hover your mouse pointer over an icon to view information, or click or right-click it to configure settings.

Note: The above diagram shows factory default icons. More icons may be available if you change any system settings. For example, Monitor (on page 30).

Default icons	Description
 en	The Keyboard Layout icon indicates the current keyboard layout. The default is *en* (American English). See Keyboard Layout Icon (on page 52).
	This icon controls the volume. See Volume Icon (on page 52).
	This icon shows or configures the network information. See Network Icon (on page 52).
 Mon Dec 4, 15:38	The Clock icon indicates the day of the week, date and current time. See Clock Icon (on page 54).

Main Menu

Main menu provides access to the following items:

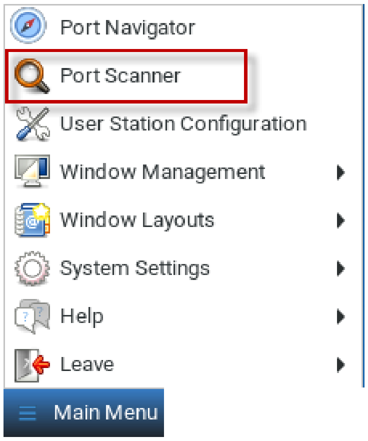
- Port Navigator See: Port Navigator (on page 115)
- Port Scanner See: Port Scanner (Launch) (on page 18)
- User Station Configuration See: User Station Configuration (Launch) (on page 19)
- Firefox Web Browser See: Firefox Web Browser (on page 19)
- Window Management See: Window Management (on page 20)
- Window Layouts See: Window Layouts (Create) (on page 22)
- System Settings See: System Settings (on page 23)
- Help See:Online Help (on page 57)
- Leave See: Logout or Shutdown (on page 60)

In This Chapter

Port Scanner (Launch)

The Port Scanner displays an assortment of ports that you select, by scanning through each connection for a specified period of time. You can launch a KVM connection to any port shown in the scanner. The Port Scanner can also save target snapshots to an external USB device or network storage, when enabled. This is useful for forensic or surveillance purposes. See Port Scanner Settings (on page 153) for details on configuration and user privilege.

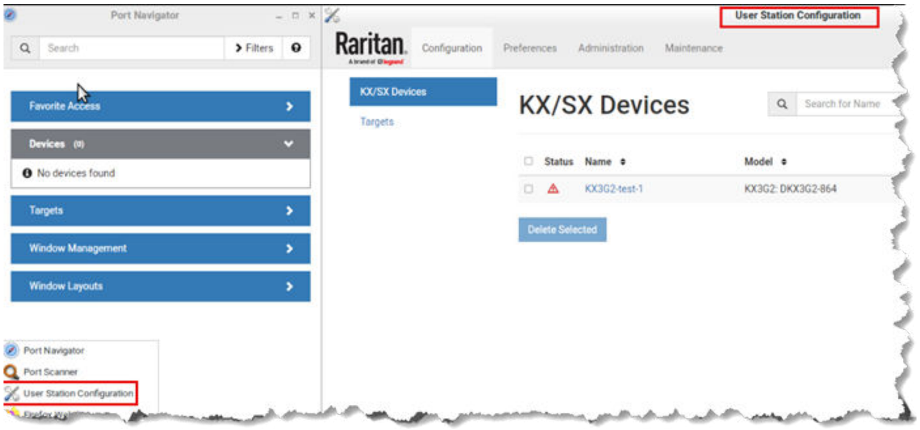
- Launch the Port Scanner from the Main Menu.



User Station Configuration (Launch)

The User Station Configuration displays various options to configure the Dominion User Station. See Getting Started (on page 61) for options on configuration, administration and maintenance.

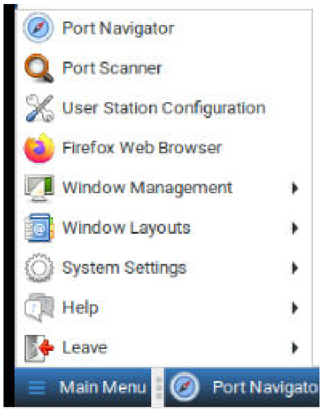
- Launch the User Station Configuration from the Main Menu.



Firefox Web Browser

Admin user or users with Launch the Web Browser privilege can configure "Open in Firefox" for web targets; either for all (Access Client Settings) or for specific targets (Access Point Priorities).

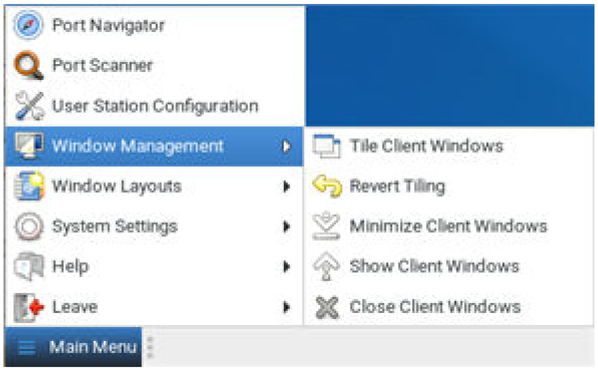
Firefox option is available in the main menu when login with appropriate permission.

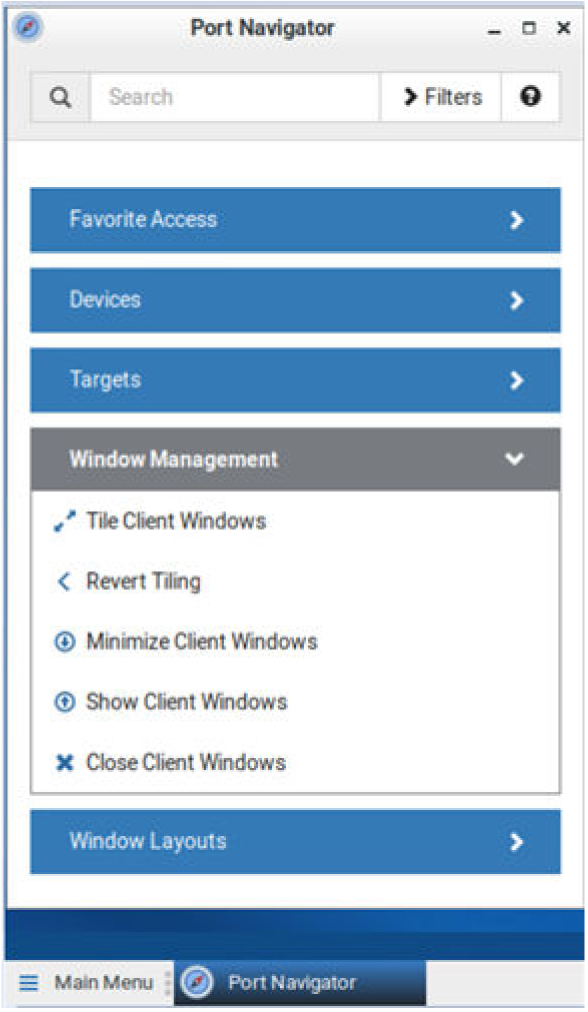


Window Management

Window Management helps you organize open sessions. All client types are included. Other User Station windows, such as Port Navigator and the Port Scanner, are not included in window management. If two monitors are connected to the User Station, the feature works separately on each monitor. Windows are not moved from one monitor to another.

For information about saving and restoring window layouts, see Window Layouts (on page 151).





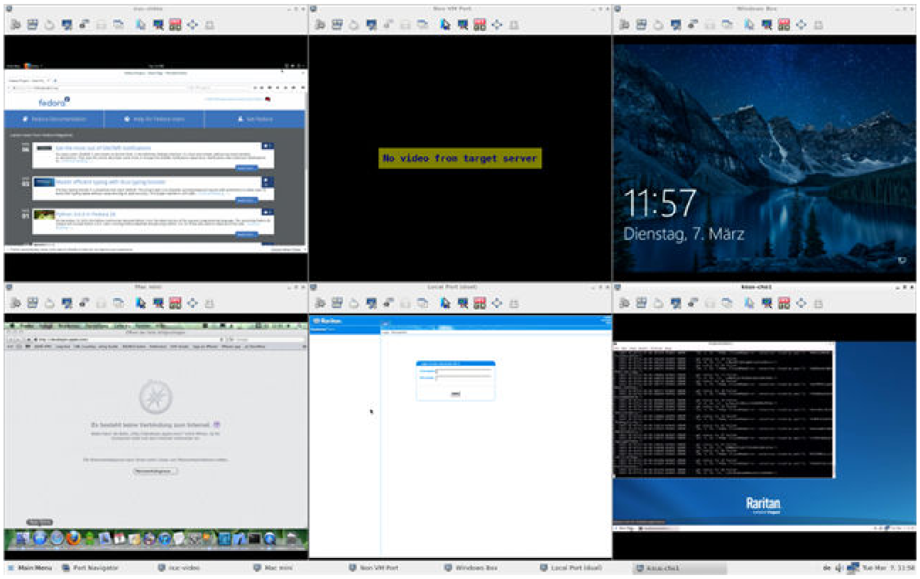
► *To use Window Management:*

1. Choose Main Menu > Window Management, then select an option.

OR

2. Open the Port Navigator, then open the Window Management panel to select an option.

- Tile Client Windows: arranges all client windows in a tiled layout on desktop. Minimized windows will be unminimized.
- Revert Tiling: Undo last tiling operation and restore previous window sizes. Previously minimized windows will be minimized again.
- Minimize Client Windows: Minimizes all client windows from desktop to task bar.
- Show Client windows: Restores all client windows from task bar and to desktop
- Close Client Windows: Closes all client windows.

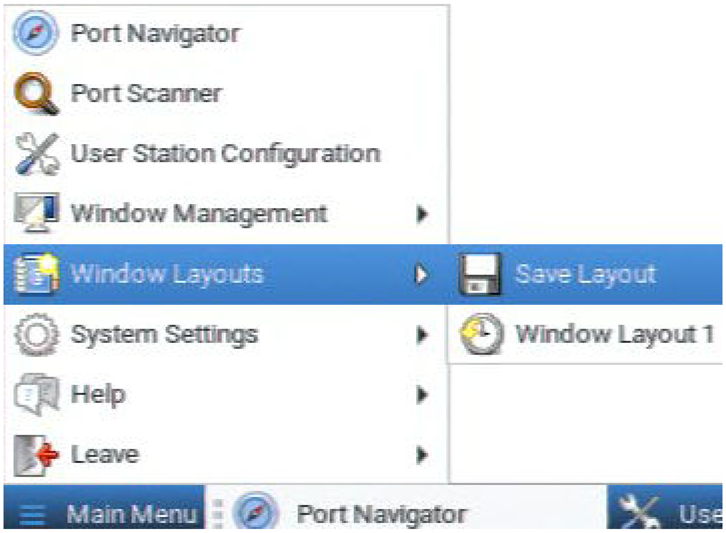


Window Layouts (Create)

The window layouts feature allows you to save layouts of running access client windows so that the specific layout can be restored upon selection. The window layout data that is saved includes the visual attributes of each access client session, such as size, position, and displaying monitor, as well as the connection information for each.

Layouts are saved on a per user basis. The layouts saved by one user are not available to other users. There is a maximum of 16 named layouts per user.

You can access Window Layouts in the Port Navigator or the Main Menu.



► *To save a layout:*

1. Arrange your client windows as desired. They can be freely sized and positioned across all monitors.
2. In Main Menu: Click Window Layouts > Save Layout. If previously saved layouts exist, the menu also includes an option to save as new, or overwrite a named layouts, such as Save Layout (current layout name). New layouts are automatically assigned names.
3. A desktop notification pops up to confirm the layout is saved and to display the name.

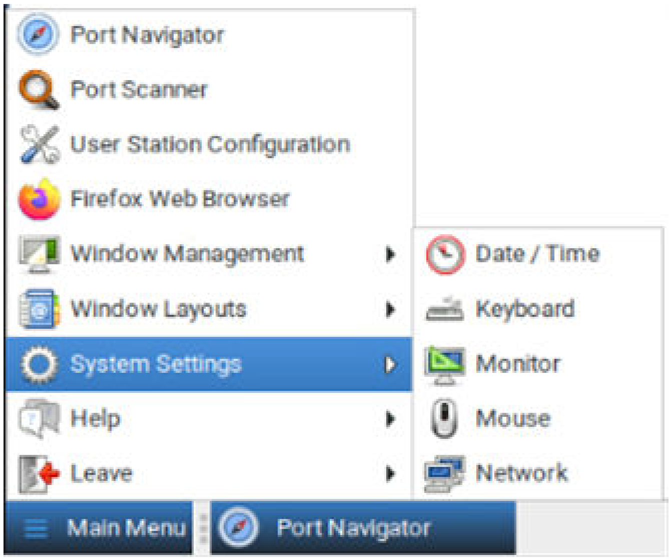
► *To restore a layout:*

- In Main Menu: Click Window Layouts, then click the named layout you want to restore.

When the layout is selected, all currently open clients are closed, and the selected layout is restored. Upon restoring a layout, some targets may not be available. The clients for those targets are restored anyway with their visual attributes and an error message that their target cannot be connected.

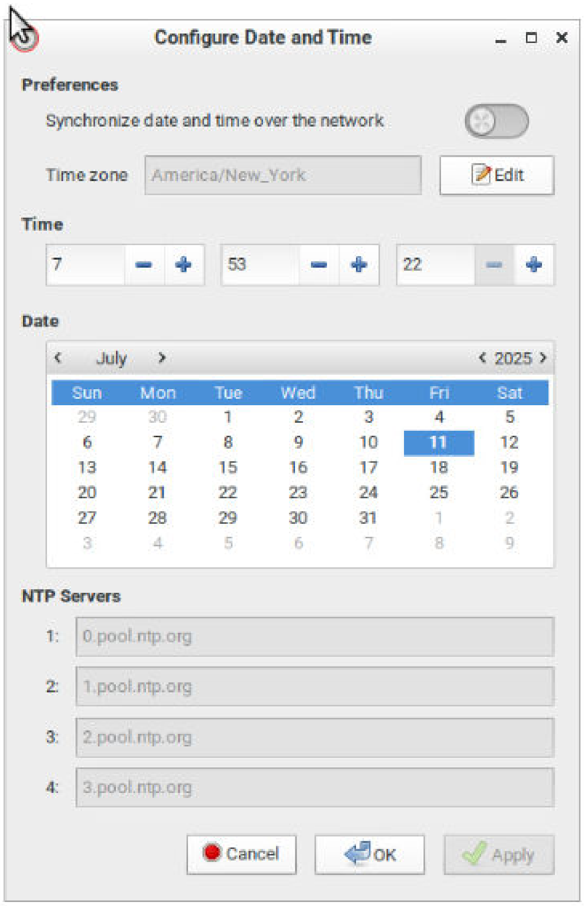
System Settings

System Settings are found in the Main Menu.



Date/Time

1. Choose Main Menu > System Settings > Date/Time. The date/time dialog appears.
2. See Time Zone (on page 25) for details on how time zone is used by manual and NTP date/time configurations.
3. Up to 4 NTP servers can be added.



Preferences

Synchronize date and time over the network ○

Time zone: America/New_York

Time

7 : 53 : 22

Date

July 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	1	2	3	4	5
6	7	8	9	10	**11**	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

NTP Servers

1: 0.pool.ntp.org

2: 1.pool.ntp.org

3: 2.pool.ntp.org

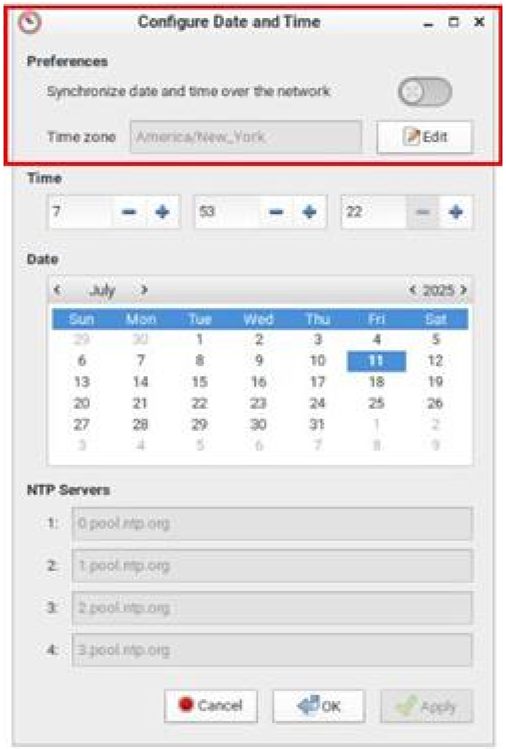
4: 3.pool.ntp.org

- ***To manually set date and time:***

  - Click Edit and set the correct Time Zone if needed, then use the Time and Date sections to configure the current date and time. Note that the Time section uses a 24-Hour clock. Click Apply or OK when complete.

- ***To use NTP:***

  - Turn on "Synchronize date and time over network".
  - Click Edit and set the correct Time Zone if needed.
  - Click OK.



Configure Date and Time

Preferences

Synchronize date and time over the network ○

Time zone: America/New_York Edit

Time

7 − + 53 − + 22 − +

Date

‹ July › ‹ 2025 ›

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

NTP Servers

1: 0.pool.ntp.org

2: 1.pool.ntp.org

3: 2.pool.ntp.org

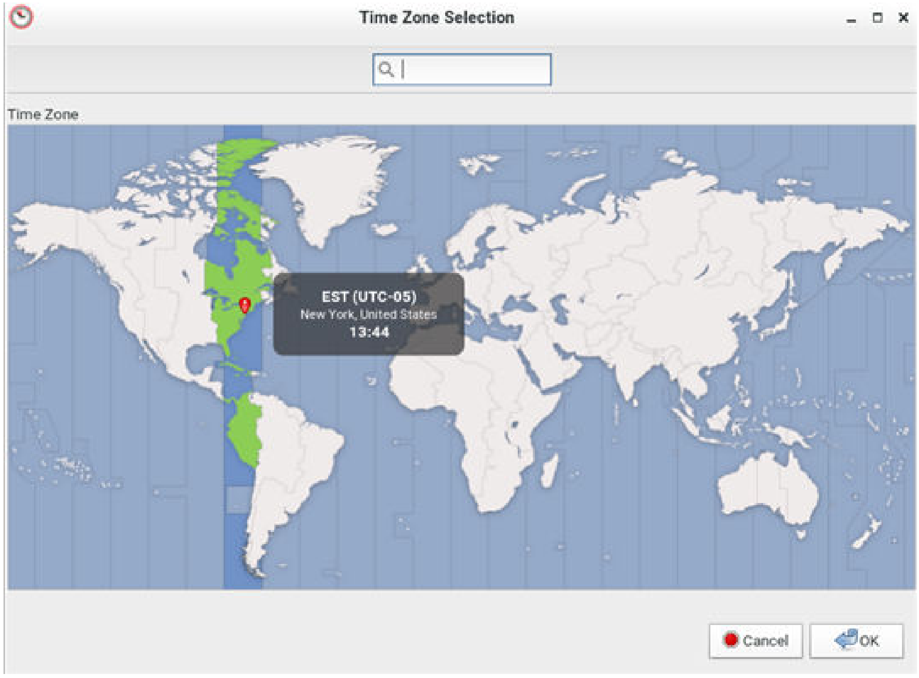
4: 3.pool.ntp.org

Note: It may take a few minutes before the NTP Date and Time is applied. It is not recommended to use Windows NTP Servers.

Time Zone

The time zone setting is important for both manual and NTP-synchronized time. If it is correct, do NOT change it unless required.

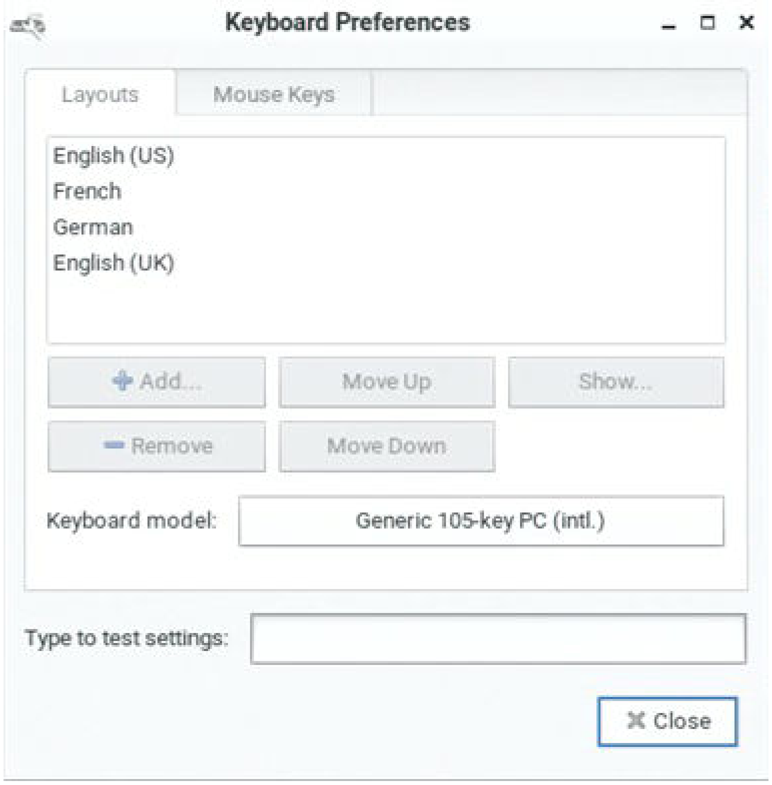
- For the time synchronized with an NTP server, time zone changes affect the time displayed onscreen, daylight savings time, and internal UTC-based clock of the User Station.
- For the manual date and time, time zone changes do NOT affect the time displayed onscreen, but they affect the internal UTC-based clock.



- Click Edit in the Date/Time settings to access the time zone map.
- Use the search box to find your city or zone Select it to highlight it on the map, then click OK.

Keyboard

1. Choose Main Menu > System Settings > Keyboard. The Keyboard Preferences dialog appears.



English (US)
French
German
English (UK)

Keyboard model: Generic 105-key PC (intl.)

2. Click any tab to configure different keyboard settings.

- Configure the keyboard layout in the tab labeled Keyboard Layouts (on page 27).
- To use the keypad to move the mouse pointer, configure Mouse Keys (on page 29).

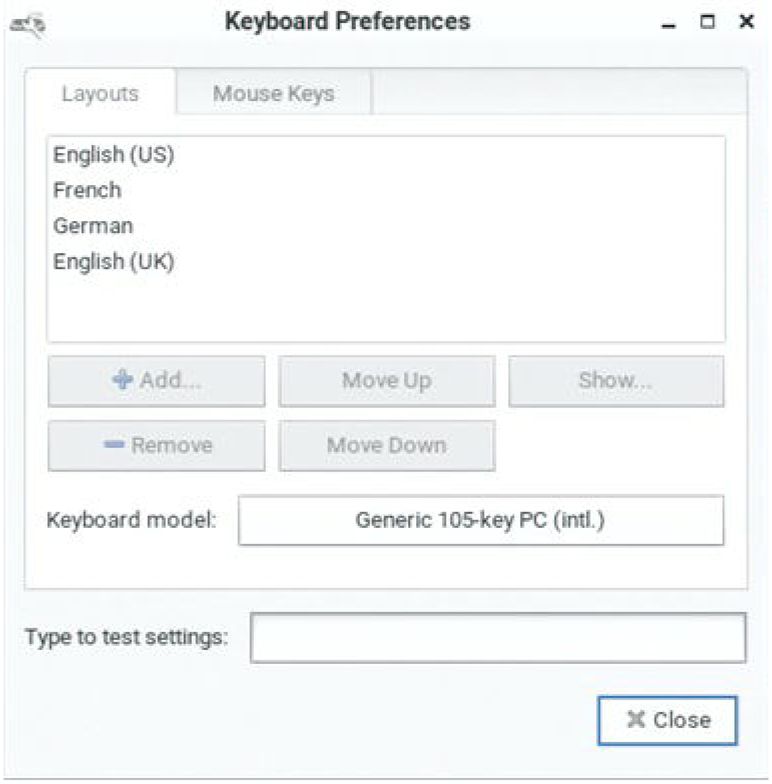
1. In the "Type to test settings" field, type anything to verify the current keyboard settings.

Keyboard Layouts

In the Layouts tab, available keyboard layouts are all shown. The same keyboard layout list is also available when working with the keyboard icon in the Main Toolbar. Any changes made to the dialog's keyboard changes the keyboard. Layout list also change the keyboard layout list available in the Main Toolbar. See Main Menu, Port Navigator, Toolbar (on page 15).

A maximum of four layouts are supported. If you have four layouts, you must remove one before you can add a new layout.

► *To manage available keyboard layouts:*



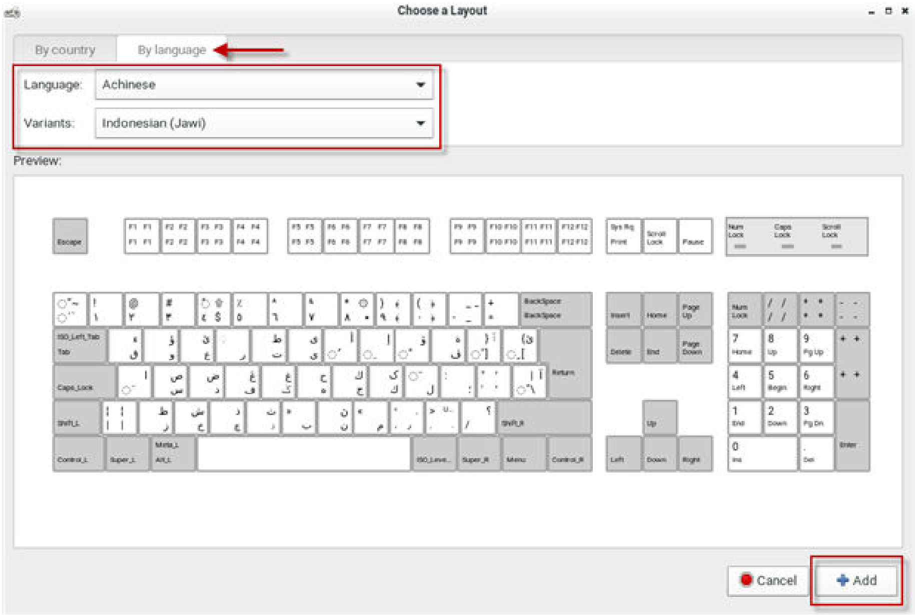
Keyboard Preferences

English (US)
French
German
English (UK)

Keyboard model: Generic 105-key PC (intl.)

Type to test settings:

- To restore the keyboard layout list, select one layout and click Move Up or Move Down.
- To delete a layout from the list, select it and click Remove.
- To view keyboard layout, select it and click Show.
- To add a layout to the list, click Add. If four layouts are already listed, you must remove one before you can add another. After clicking Add, select a layout by County or Language to preview the keyboard layout. Click Add to add the layout to your list.



Choose a Layout

By country

By language

Language: Achinese

Variants: Indonesian (Jawi)

Preview:

► *To determine the keyboard model:*

- Click the button in the "Keyboard model" field. Then select the vendor and model of your keyboard.

Mouse Keys

When you want to use the numeric keypad to control the mouse pointer/cursor, select the checkbox labeled "Pointer can be controlled using the keyboard."

When enabled, each keypad key functions as the following table.

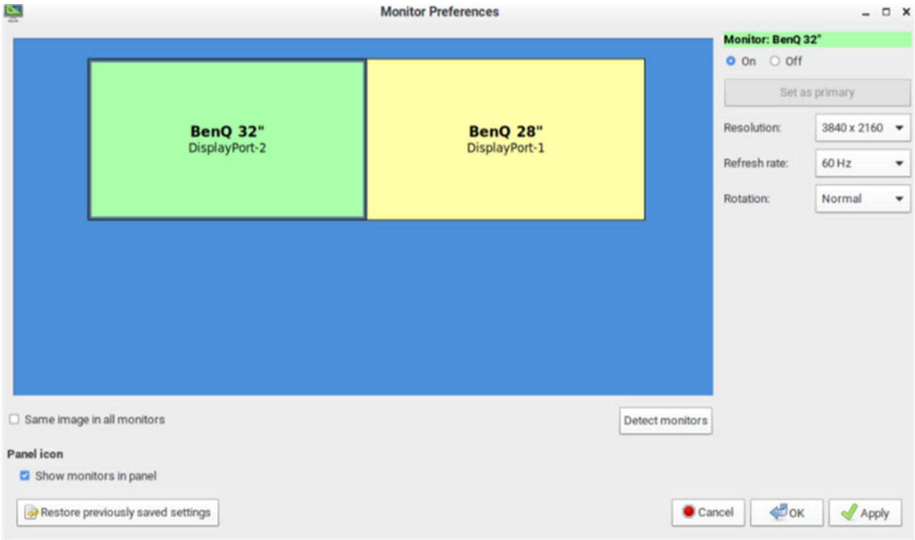
Key	Function
0	Depress the selected button
.	Release the selected button
1	Move toward the bottom-left corner
2	Move down
3	Move toward the bottom-right corner
4	Move left
5	Click the selected button
6	Move right
7	Move toward the top-left corner
8	Move up
9	Move toward the top-right corner

Key	Function
/	Select primary button
-	Select alternate button
+	Double click the selected button
Enter	Enter

- Acceleration: Use the slider bar to adjust the pointer acceleration rate. Left side is faster and right side is slower.
- Speed: Use the slider bar to adjust the pointer speed. Left side is slower and right side is faster.
- Delay: Use the slider bar to adjust the delay prior to pointer movement. Left side is shorter and right side is faster.

Monitor

1. Choose Main Menu > System Settings > Monitor. The Monitor Preferences dialog appears.



Monitor Preferences

Monitor: BenQ 32"

● On ○ Off

Resolution: 3840 x 2160

Refresh rate: 60 Hz

Rotation: Normal

□ Same image in all monitors

Panel icon

☑ Show monitors in panel

2. Perform or configure any of the following functions:

Setting/button	Function
On/Off	Turn on or off this monitor, if more than one monitor is connected to the User Station. This setting is disabled when only one monitor is connected.
Set as primary	Click this button to specify this monitor as the primary monitor, when there are multiple monitors connected. This button is disabled when: • Only one monitor is connected. • Or this monitor has been set as the primary one.
Resolution	Determine the video resolution applied to this monitor.

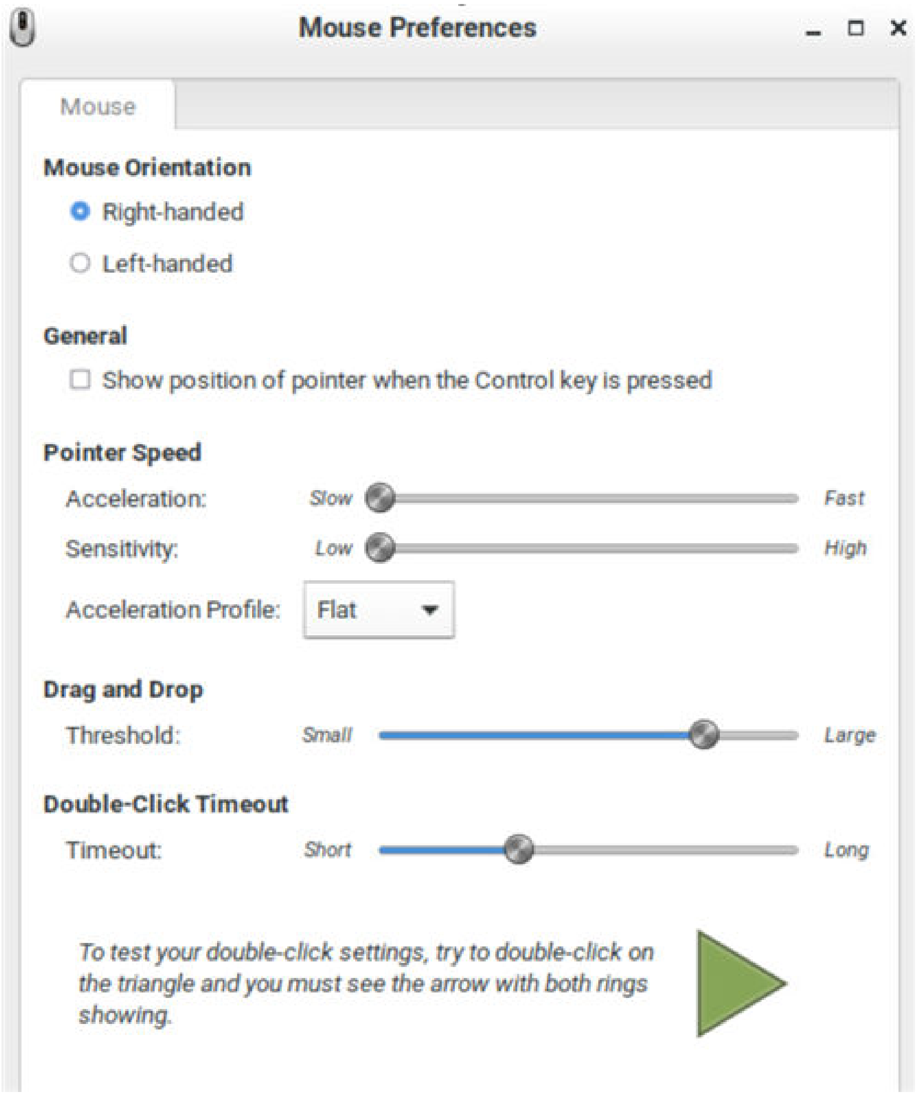
Setting/button	Function
Refresh rate	Determine the refresh rate applied to this monitor.
Rotation	Determine how the image on the screen should be rotated, if intended.
Same image in all monitors	If more than one monitor is a connected, determine whether all monitors show the same image. This setting is disabled when only one monitor is connected.
Detect monitors	Click this button if any connected monitor is not detected. Usually it is not necessary to use this function when there is only one monitor connected.
Show monitors in panel	Determine whether the monitor shortcut icon is added to the Main Toolbar. See Main Menu, Port Navigator, Toolbar (on page 15).
Restore previously saved settings	Click this button to restore the previous saved settings of all the monitors.

3. If any settings are changed, click OK to save and close the dialog, Apply to save and keep the dialog open, or Cancel to cancel.
   - If clicking OK or Apply, a confirmation message appears. Click Restore Previous Configuration to restore to the original settings, or click Keep This Configuration to apply the new settings.

Mouse

The mouse preferences dialog affects how your mouse works in Dominion User Station screens only. These settings do not affect your mouse in the KVM Client. For those settings, see Mouse Settings

1. Choose Main Menu > System Settings > Mouse. The Mouse Preferences dialog appears.



Mouse Orientation

● Right-handed

○ Left-handed

General

□ Show position of pointer when the Control key is pressed

Pointer Speed

Acceleration: *Slow* — *Fast*

Sensitivity: *Low* — *High*

Acceleration Profile: Flat

Drag and Drop

Threshold: *Small* — *Large*

Double-Click Timeout

Timeout: *Short* — *Long*

To test your double-click settings, try to double-click on the triangle and you must see the arrow with both rings showing.

2. The following mouse settings can be adjusted:
   - Mouse Orientation: Right-handed or Left-handed
   - General: With option to show the position of the pointer when the Control key is pressed.
   - Pointer Speed: Adjust Acceleration and Sensitivity.
   - Acceleration Profile: Adaptive, Default, Flat.
   - Drag and Drop: Adjust the threshold for drag and drop operations.
   - Double-Click Timeout: Adjust from short to long. Double-click the green triangle to test the setting.
3. Click Close to exit the dialog.

Network

Network Connections - Ethernet

You can connect the two LAN ports of the User Station to the same or diverse subnets.

If you have connected both LAN ports to the network(s) when turning on or restarting the User Station, the User Station *randomly* selects one of the network connections as the default one. However, if you change the network settings of either or both connections, the "final" one that is changed will automatically become the default connection.

Note: You can identify the default connection in the Connection Information dialog. See Network Icon (on page 52).

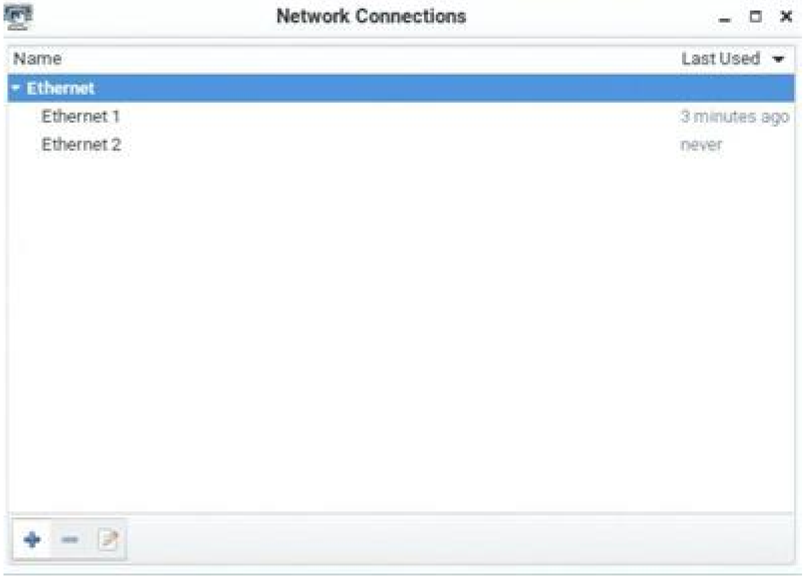
By default, both IPv4 and IPv6 addressing are enabled for both LAN ports, and the following are the default network settings:

- IPv4: *Automatic (DHCP)*
- IPv6: *Automatic*

You can also set additional ethernet options, such as MTU and Wake on LAN: See Ethernet Settings (on page 35). You can also configure bond devices: See Network Connections - Bond Connections (on page 46).

► *To change network settings:*

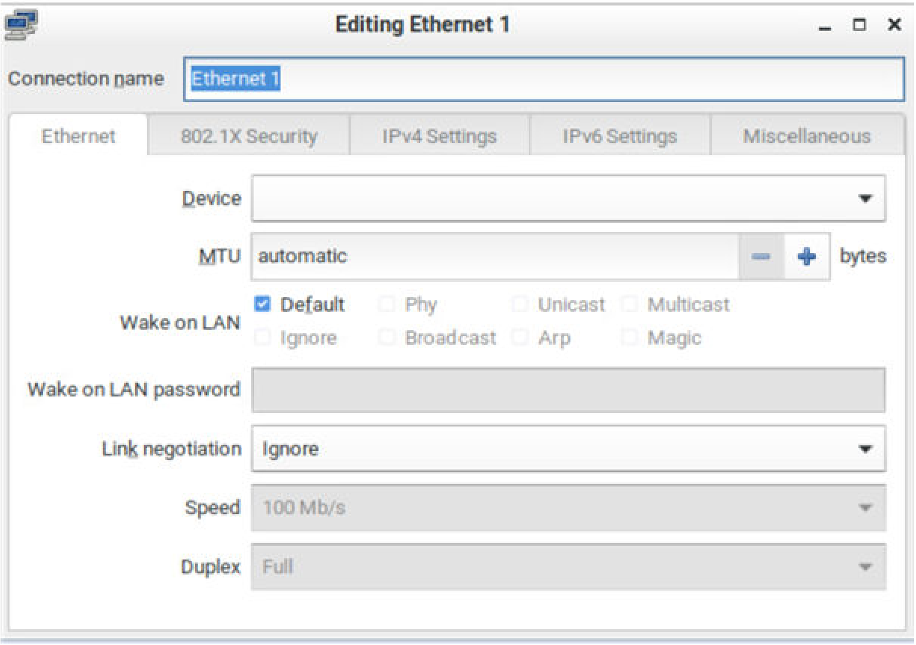
1. Choose Main Menu > System Settings > Network. The Network Connections dialog appears, with two factory default connections listed for two LAN ports.
   - *Ethernet 1* is for LAN port 1, and *Ethernet 2* is for the other.



Network Connections

Name	Last Used
Ethernet	
Ethernet 1	3 minutes ago
Ethernet 2	never

2. Select the desired connection, and click Edit. A dialog appears.
3. Enter a new name in the Connection name field if desired.



Connection name: Ethernet 1

Device:

MTU: automatic bytes

Wake on LAN: ☑ Default □ Phy □ Unicast □ Multicast □ Ignore □ Broadcast □ Arp □ Magic

Wake on LAN password:

Link negotiation: Ignore

Speed: 100 Mb/s

Duplex: Full

4. Click the IPv4 Settings or IPv6 Settings tab to configure network settings properly.

- IPv4 Settings:

Setting	Description
Method	Select one of the following as the connection method and configure associated settings: • Automatic (DHCP) • Automatic (DHCP) addresses only • Manual • Disabled See IPv4 Settings (on page 36).

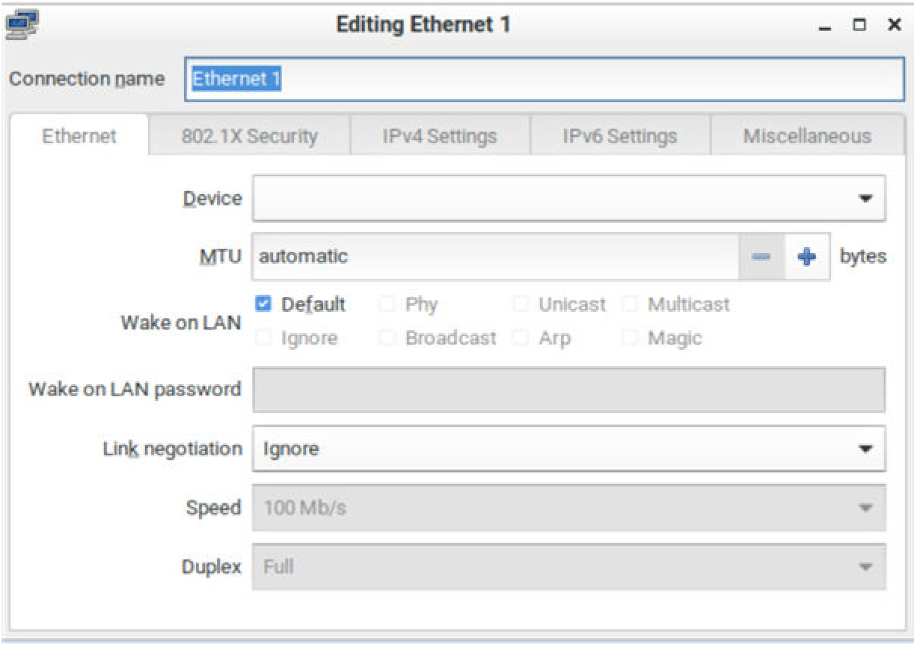
- IPv6 Settings:

Setting	Description
Method	Select one of the following as the connection method: • Ignore • Automatic • Automatic, addresses only • Automatic, DHCP only • Manual • Disabled See IPv6 Settings (on page 38).

5. Click OK. The new network settings apply now.

Note: You can retrieve current IP addresses from the Connection Information dialog. See Network Icon (on page 52).

Ethernet Settings



Connection name: Ethernet 1

Device:

MTU: automatic bytes

Wake on LAN: ☑ Default □ Phy □ Unicast □ Multicast □ Ignore □ Broadcast □ Arp □ Magic

Wake on LAN password:

Link negotiation: Ignore

Speed: 100 Mb/s

Duplex: Full

MTU:

- Select Automatic, or click plus/minus to specify the maximum number of bytes per packet.

MTU: 5 bytes

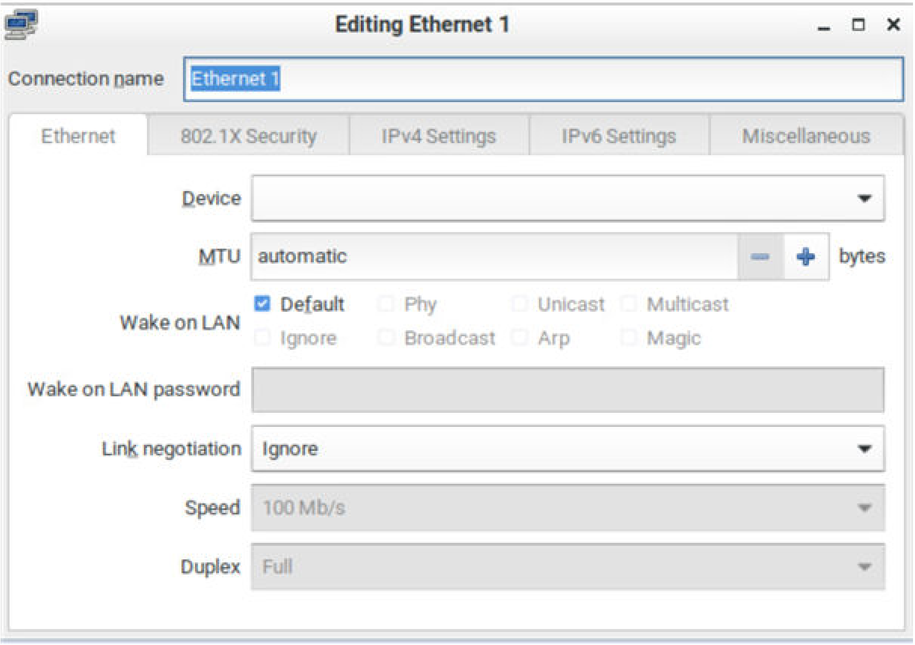
Wake on LAN:

- Default: Leave as default, or deselect to enable other options.
- Phy
- Unicast
- Multicast
- Ignore
- Broadcast
- Arp
- Magic: Requires Wake on LAN password.

- ▶ *Link Negotiation:*

  - Ignore
  - Automatic
  - Manual: Set Speed and Duplex.

IPv4 Settings



Connection name: Ethernet 1

Device:

MTU: automatic bytes

Wake on LAN: ☑ Default □ Phy □ Unicast □ Multicast □ Ignore □ Broadcast □ Arp □ Magic

Wake on LAN password:

Link negotiation: Ignore

Speed: 100 Mb/s

Duplex: Full

- ▶ *Automatic (DHCP):*

The DHCP server in the network automatically assigns an IPv4 address to the User Station as well as DNS server(s) and domain(s).

The following settings are configurable for this method.

Setting	Description
Additional DNS servers	Optional. You may specify IP addresses of one or multiple additional DNS servers for resolving host names. Use commas to separate multiple servers.
Additional search domains	Optional. You may specify IP addresses of one or multiple additional domains for resolving host names. Use commas to separate multiple domains.

Setting	Description
DHCP client ID	Optional. You can specify a DHCP client ID for identifying this User Station in the network.
DHCP hostname	Optional. You can specify a preferred hostname to send to the DHCP server to use for DNS name resolution
Require IPv4 addressing for this connection to complete	When deselected, either IPv4 or IPv6 addressing can be used to establish the connection. When selected, only IPv4 addressing is used for making the connection.
Routes	Optional. Configure the IPv4 routing for this User Station. • Click Add to add one or multiple routing addresses for the User Station to reach in the network. • To remove any existing routes, select it and click Delete. • *Ignore automatically obtained routes*: Select this checkbox only when you want to use manually-specified routes. • *Use this connection only for resources on its network*: If selected, this connection will be used only when retrieving resources from the network. It will never be used as the default network connection.

Note: You can retrieve current IP addresses from the Connection Information dialog. See Network Icon (on page 52).

► *Automatic (DHCP) addresses only:*

The DHCP server in the network automatically assigns an IPv4 address to the User Station, but no DNS servers or domain servers are specified.

The following settings are configurable for this method.

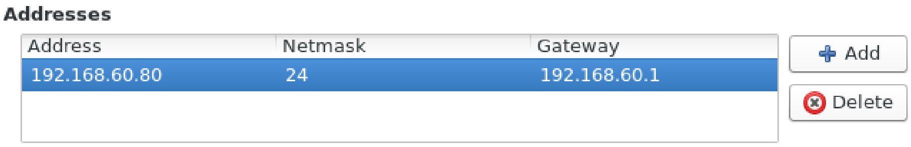
Setting	Description
DNS servers	Specify IP addresses of one or multiple DNS servers. Use commas to separate multiple servers.
Search domains	Specify IP addresses of one or multiple domains for resolving host names. Use commas to separate multiple domains.

Setting	Description
DHCP client ID	See the above table for information of these fields/ options.
Require IPv4 addressing for this connection to complete	
DHCP hostname	
Routes	

► *Manual:*

Select this method when intending to manually assign a static IP address to the User Station.

In the Addresses section, click Add and then type the User Station's IPv4 address, netmask and gateway in this section. At least one IPv4 address, netmask and gateway must be specified.



Addresses

Address	Netmask	Gateway
192.168.60.80	24	192.168.60.1

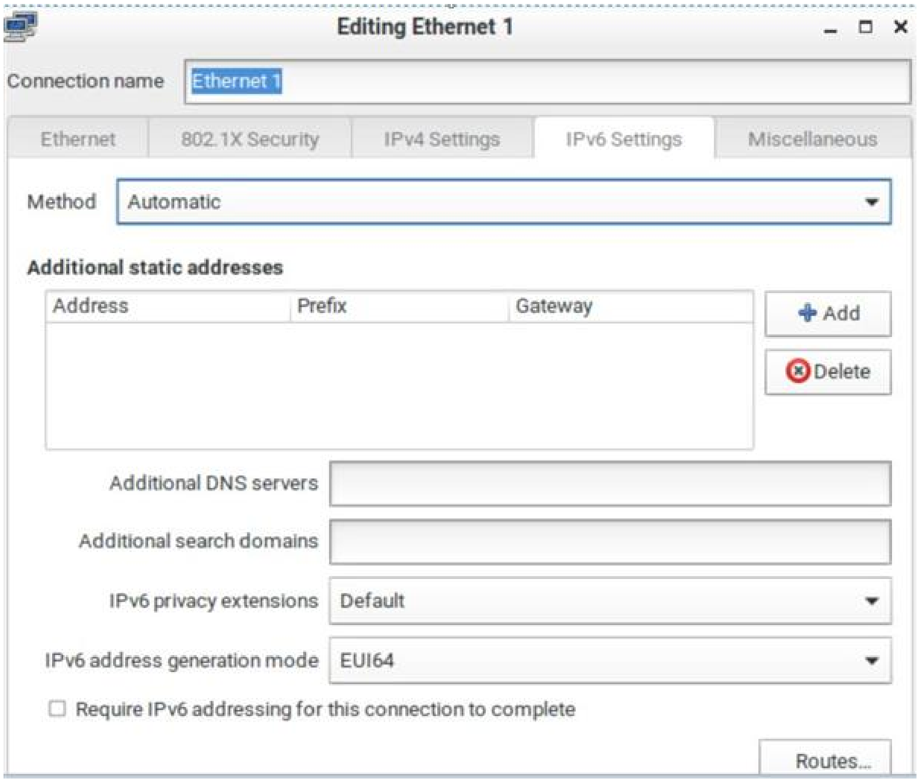
The following settings are configurable for this method. See the above table for associated information.

- DNS servers
- Search domains
- Require IPv4 addressing for this connection to complete
- Routes

► *Disabled:*

The IPv4 networking settings are all disabled.

IPv6 Settings



Connection name: Ethernet 1

Method: Automatic

IPv6 privacy extensions: Default

IPv6 address generation mode: EUI64

□ Require IPv6 addressing for this connection to complete

► *Automatic:*

IPv6 auto-configuration automatically assigns an IPv6 address to the User Station, and retrieves the information of DNS server(s) and domain(s) from the DHCP server.

The following settings are configurable for this method.

Setting	Description
Additional DNS servers	Optional. You may specify IP addresses of one or multiple additional DNS servers for resolving host names. Use commas to separate multiple servers.
Additional search domains	Optional. You may specify IP addresses of one or multiple additional domains for resolving host names. Use commas to separate multiple domains.

Setting	Description
IPv6 privacy extensions	Determine whether and how privacy extensions apply to the IPv6 addressing. • Disabled: Disables privacy extensions. • Enabled (prefer public address): Enables privacy extensions and a public address is preferred. • Enabled (prefer temporary address): Enables privacy extensions and a temporary address is preferred.
IPv6 address generation mode	Determine how the address is generated: • Stable privacy • EUI 64
Require IPv6 addressing for this connection to complete	When deselected, either IPv4 or IPv6 addressing can be used to establish the connection. When selected, only IPv6 addressing is used for making the connection.
Routes	Optional. Configure the IPv6 routing for this User Station. • Click Add to add one or multiple routing addresses for the User Station to reach in the network. • To remove any existing routes, select it and click Delete. • *Ignore automatically obtained routes*: Select this checkbox only when you want to use manually-specified routes. • *Use this connection only for resources on its network*: If selected, this connection will be used only when retrieving resources from the network. It will never be used as the default network connection.

Note: You can retrieve current IP addresses from the Connection Information dialog. See Network Icon (on page 52).

► *Automatic, addresses only:*

IPv6 autoconfiguration automatically assigns an IPv6 address to the User Station, but no DNS servers or domain servers are specified.

The following settings are configurable for this method.

Setting	Description
DNS servers	Specify IP addresses of one or multiple DNS servers. Use commas to separate multiple servers.

Setting	Description
Search domains	Specify IP addresses of one or multiple domains for resolving host names. Use commas to separate multiple domains.
IPv6 privacy extensions	See the above table for information of these fields/ options.
Require IPv6 addressing for this connection to complete	
IPv6 address generation mode	
Routes	

► *Automatic, DHCP only:*

The DHCPv6 server in the network automatically assigns an IPv6 address to the User Station, and specify DNS server(s) and domain(s).

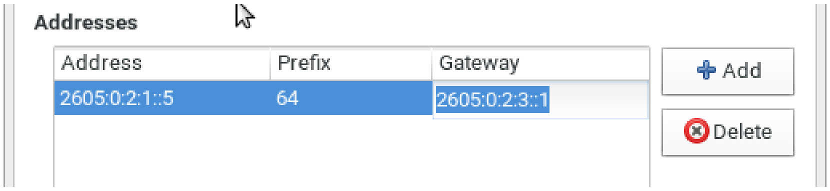
The following settings are configurable for this method. See the above table for associated information.

- IPv6 address generation mode
- Require IPv6 addressing for this connection to complete
- Routes

► *Manual:*

Select this method when intending to manually assign a static IP address to the User Station.

In the Addresses section, click Add and then type the User Station's IPv6 address, prefix and gateway in this section. At least one IPv6 address, prefix and gateway must be specified.



Addresses

Address	Prefix	Gateway
2605:0:2:1::5	64	2605:0:2:3::1

The following settings are configurable for this method. See the above table for associated information.

- DNS servers
- Search domains
- IPv6 address generation mode
- Require IPv6 addressing for this connection to complete
- Routes

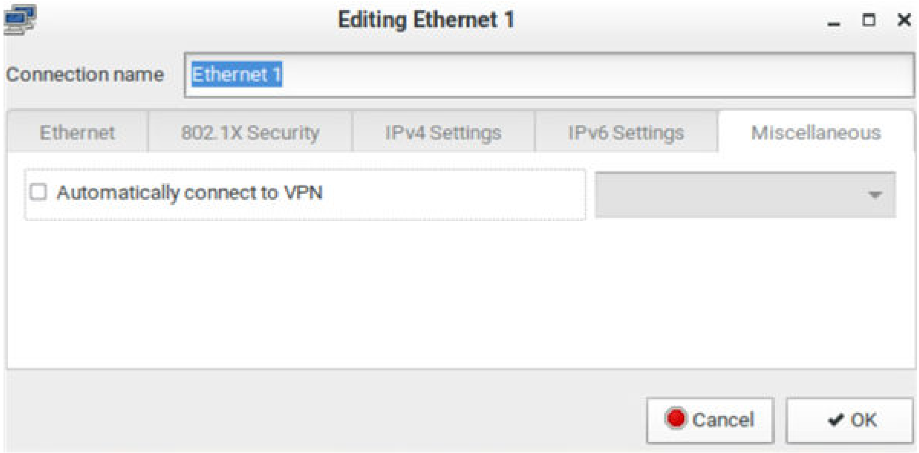
▶ *Disabled:*

The IPv6 networking settings are all disabled.

Miscellaneous Settings

The Miscellaneous settings tab is used when you have a VPN configuration.

- Select the "Automatically connect to VPN when using this connection" to make sure your configured VPN is used automatically whenever the selected network is active.



Editing Ethernet 1

Connection name: Ethernet 1

□ Automatically connect to VPN

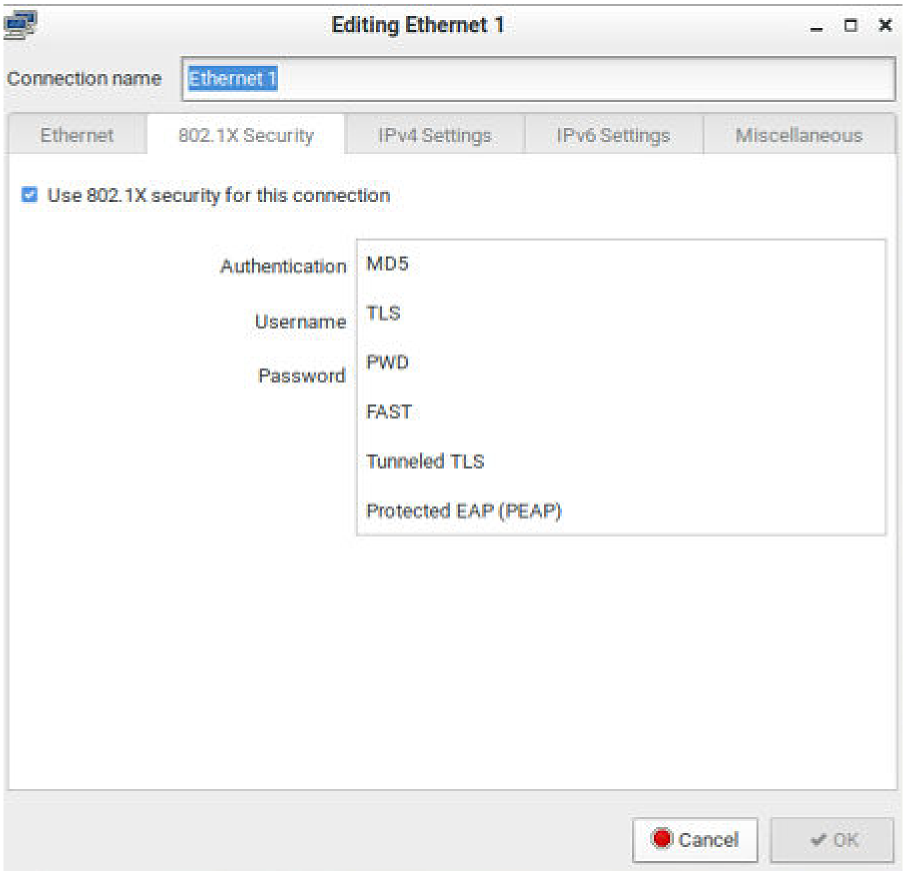
802.1X Security Settings

IEEE 802.1X authentication can be configured independently on each LAN port to give the Dominion User Station secure access to your wired LAN. You have to configure an authentication server which supports Radius and EAP protocols.

Note: 802.1X authentication fails if FIPS 140-2 Mode is enabled on the KXUST

Dominion User Station supports following authentication methods with 802.1 security:

- MD5
- TLS
- PWD
- FAST
- Tunneled TLS
- Protected EAP (PEAP)


Editing Ethernet 1

Connection name: Ethernet 1

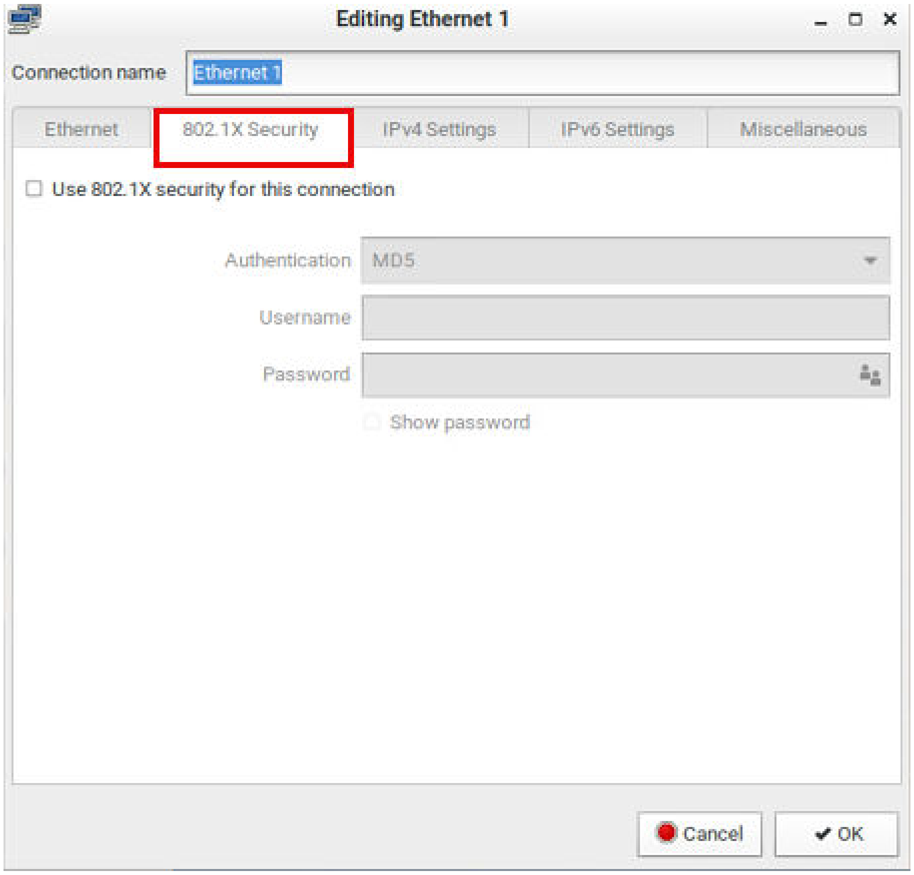
☑ Use 802.1X security for this connection

Configure 802.1X Security

► *To configure 802.1X security:*

1. Choose Main Menu > System Settings >Network >Ethernet 1 > 802.1X Security tab. The settings page opens.

Note: LAN1 and LAN2 settings are separate.



Connection name: Ethernet 1

□ Use 802.1X security for this connection

Authentication: MD5

Username:

Password:

□ Show password

2. Select the "Use 802.1X security for this connection" check box to begin.
3. Select your Authentication method from the list.
   - MD5:
     - Enter the Username and Password.
     - Select Show password to see password unmasked.
   - TLS:
   - No CA Certificate required:
     - Enter the identity and domain.
     - Select "No CA Certificate is required" option. This will disable the CA Certificate field.
     - Choose option to select from file for User certificate.
     - Enter user certificate password if required.
     - Choose option to select from file for User private key.
     - Enter User key password.
   - Certificate required:
     - Enter a identity and domain.
     - Choose option to select from file to upload the CA certificate.
     - Enter the CA certificate password if required.
     - Select Show passwords to verify.

  - Choose option to select from file to upload User Certificate.
  - Enter User certificate password if required.
  - Enter User private key.
  - Enter User key password.
- PWD:
  - Enter the Username and Password.
  - Select Show password to see password unmasked.
- FAST:
  - Enter Anonymous identity
  - If "Allow automatic PAC provisioning" is selected, choose a provisioning method from the list.
  - Upload PAC file.
  - Choose a method for Inner Authentication from the list.
  - Enter Username and Password.
- Tunneled TLS:
- No CA Certificate required:
  - Enter an Anonymous identity and Domain.
  - Select "No CA Certificate is required" option. This will disable the CA Certificate field.
  - Enter Inner Authentication option from the list.
  - Enter Username and Password.
- Certificate required:
  - Enter an Anonymous identity and Domain.
  - Choose option to select from file to upload the CA certificate.
  - Enter the CA certificate password if required.
  - Select Show passwords to verify.
  - Enter Inner Authentication option from the list.
  - Enter Username and Password.
- Protected EAP (PEAP):
- No Certificate required:
  - Enter an Anonymous identity and Domain.
  - Select "No CA Certificate is required" option. This will disable the CA Certificate field.
  - Select PEAP version.
  - Enter Inner Authentication option from the list.
  - Enter Username and Password.
- Certificate required:
  - Enter an Anonymous identity and Domain.
  - Choose option to select from file to upload the CA certificate.
  - Enter the CA certificate password if required.
  - Select Show passwords to verify.

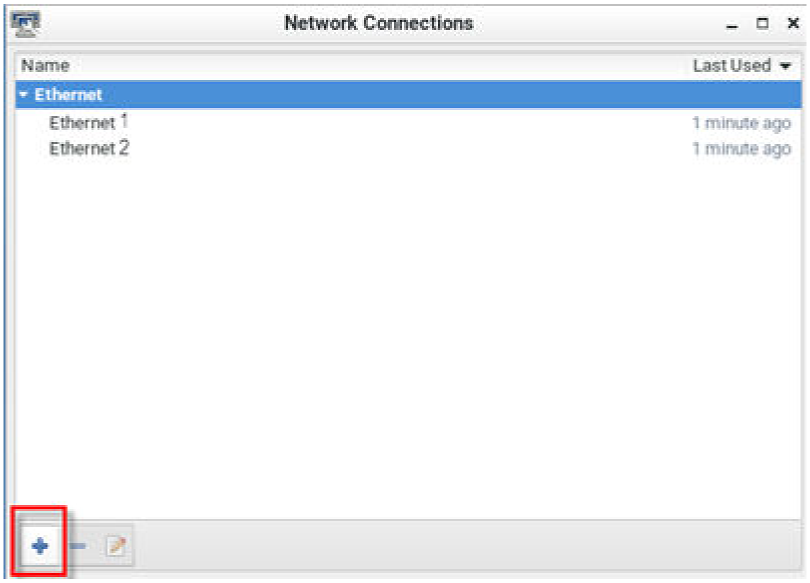
- Select PEAP version.
- Enter Inner Authentication option from the list.
- Enter Username and Password.

4. Click OK.

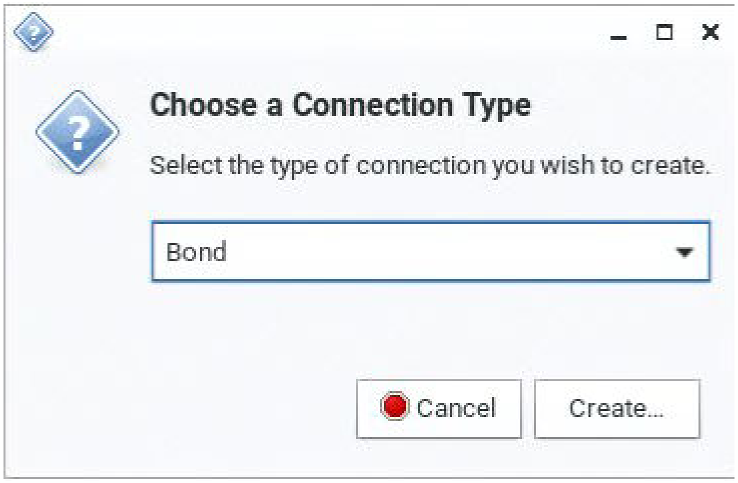
Network Connections - Bond Connections

To create NIC redundancy, you can configure network bonding devices to replace the standard Ethernet configuration. This setup doubles the maximum network speed if both ports are used and provides redundancy. The Dominion User Station network will continue to work if either one of the ports fails.

1. Choose Main Menu > System Settings > Network. The Network Connections dialog opens.
2. Click the Add Icon (plus sign).



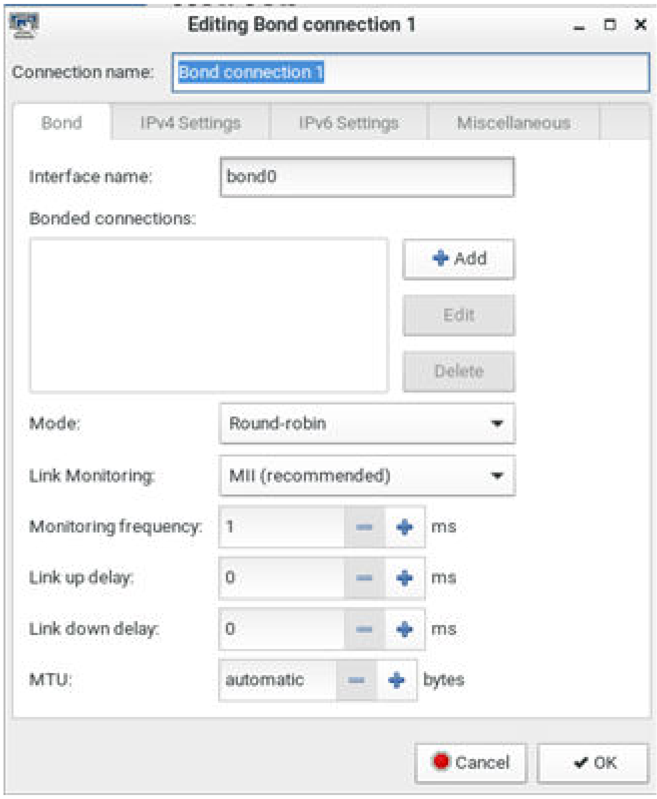
3. In the Choose a Connection Type dialog, select Bond, then click Create.


Choose a Connection Type

Select the type of connection you wish to create.

Bond

4. The Bond Connection dialog opens.



Editing Bond connection 1

Connection name: Bond connection 1

Interface name: bond0

Bonded connections:

Mode: Round-robin

Link Monitoring: MII (recommended)

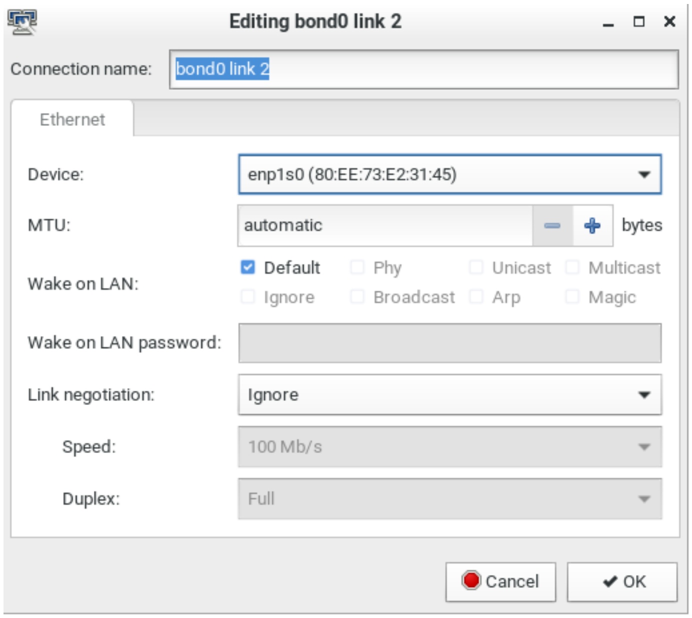
Monitoring frequency: 1 ms

Link up delay: 0 ms

Link down delay: 0 ms

MTU: automatic bytes

5. In the Bond tab, click Add.
6. Select the connection type you want to use for the bond connection, then click Create to create the first bond link for the first network interface.
7. In the bond link dialog, select the MAC address of the interface in the Device field. Click OK.
8. Click Add again to add the second bond link, which is automatically set as the same connection type.



Connection name: bond0 link 2

Device: enp1s0 (80:EE:73:E2:31:45)

MTU: automatic bytes

Wake on LAN: ☑ Default □ Phy □ Unicast □ Multicast □ Ignore □ Broadcast □ Arp □ Magic

Wake on LAN password:

Link negotiation: Ignore

Speed: 100 Mb/s

Duplex: Full

9. Click OK to save.
10. Return to the Main Menu > System Settings > Network page. Remove the old "Ethernet" entries, and keep the newly created "Bond Connection" entries.

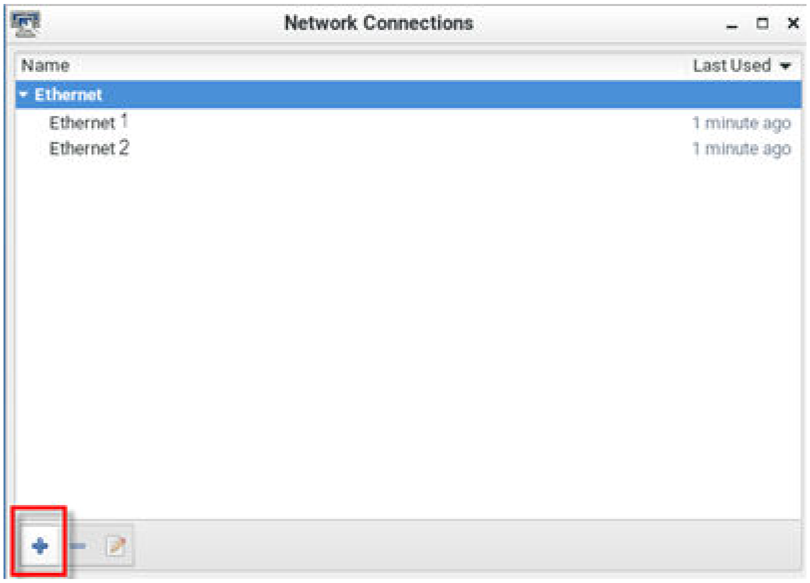
OpenVPN Connections

An OpenVPN configuration can be uploaded to the Dominion User Station to use a VPN client for all connections. You must provide a valid config file including certificates server details as filetype .OVPN. Consult the OpenVPN documentation for details on creating the file. Once uploaded, if your configuration setup includes "connect automatically", the VPN will be connected when Dominion User Station reboots.

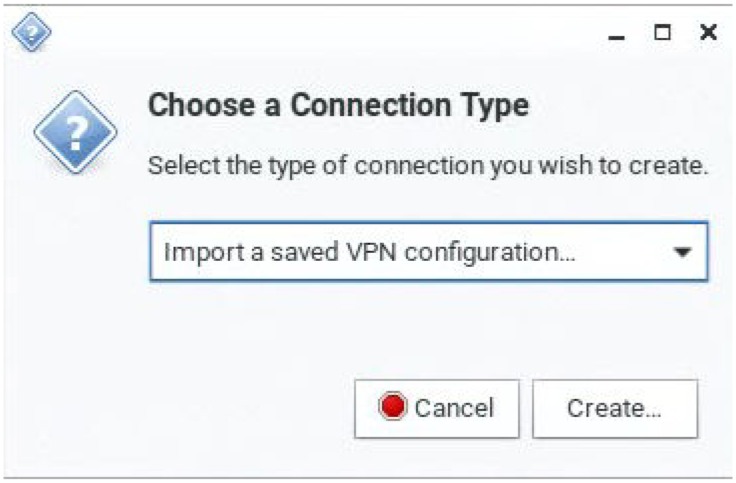
For CC-SG users to connect with VPN, the network setup must be done in advance by a local user.

► *To add OpenVPN connection:*

1. Choose Main Menu > System Settings > Network. The Network Connections dialog opens.
2. Click the Add Icon (plus sign).



- In the Choose a Connection Type dialog, select "Import a saved VPN configuration..." then click Create.

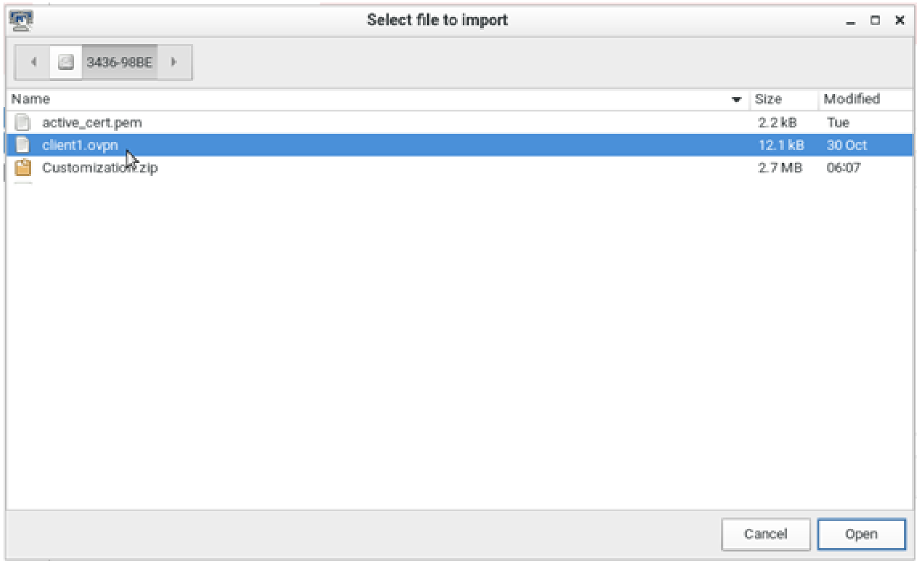


Choose a Connection Type

Select the type of connection you wish to create.

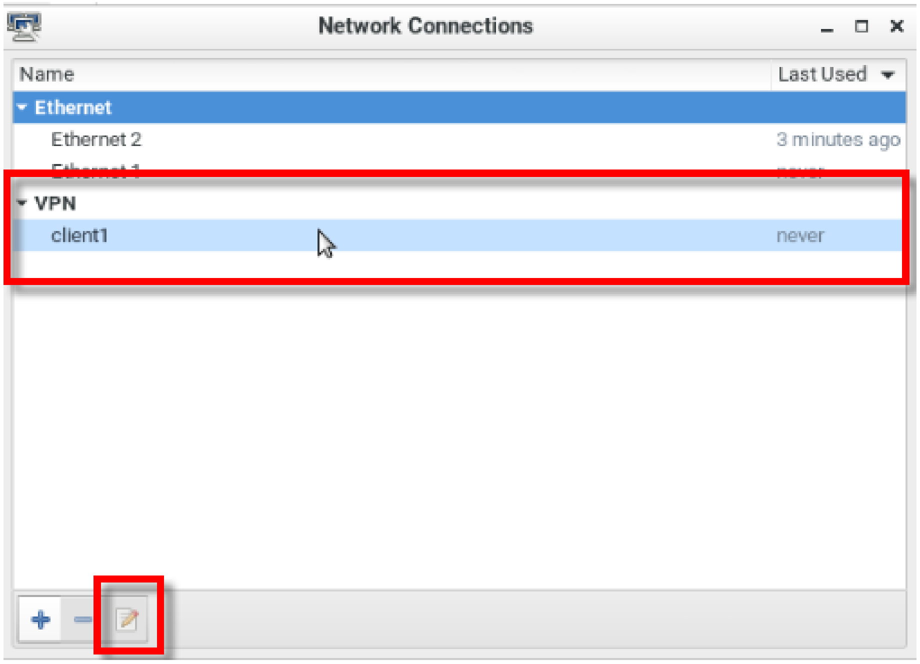
Import a saved VPN configuration...

1. An upload dialog appears. Select the .ovpn config file, then click Open.



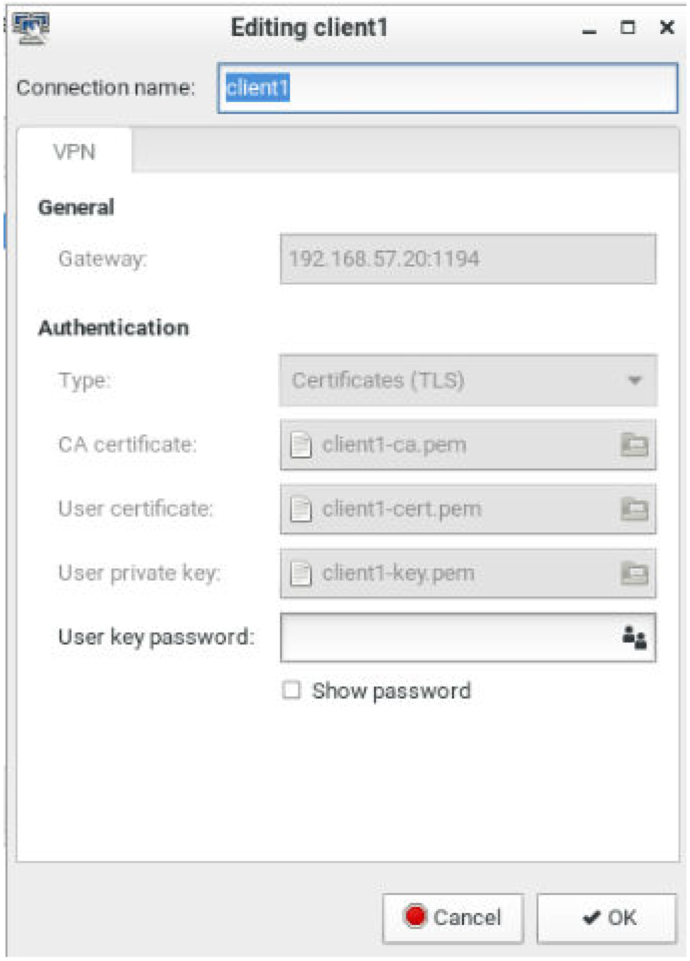
Name	Size	Modified
active_cert.pem	2.2 kB	Tue
client1.ovpn	12.1 kB	30 Oct
Customization.zip	2.7 MB	06:07

2. The VPN client is added. Select it and click the Edit icon.



Name	Last Used
Ethernet	
Ethernet 2	3 minutes ago
Ethernet 1	never
VPN	
client1	never

3. Edit the VPN Connection name and/or enter password.



Connection name: client1

General

Gateway: 192.168.57.20:1194

Authentication

Type: Certificates (TLS)

CA certificate: client1-ca.pem

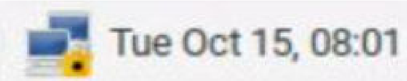
User certificate: client1-cert.pem

User private key: client1-key.pem

User key password:

□ Show password

4. Click OK. When the VPN is connected, status bar will show that it is active. The "Lock" icon displays in the status bar when a user logs in with active VPN.



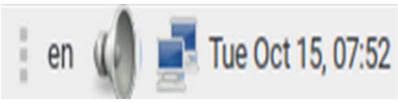
Tue Oct 15, 08:01

5. To automatically connect to VPN, edit the network connection, go to the Miscellaneous tab, and select "Automatically connect to VPN when using this connection". See Miscellaneous Settings (on page 42)

Default Shortcut Icons in the Main Toolbar

Shortcut icons in the Main Toolbar provides quick access to some system settings. For information on the Main Toolbar, see Main Menu, Port Navigator, Toolbar (on page 15).

This section introduces the following factory default icons.



Keyboard Layout Icon

en

- ▶ *Clicking the icon:*

The keyboard layout switches among available languages. By default, the following languages are available.

- *en* - English (US)
- *fr* - French
- *de* - German

- ▶ *Right-clicking the icon:*

A shortcut menu with these commands displays.

- *Layouts*: Changes the keyboard layout.
- *Keyboard Preferences*: Triggers the Keyboard Preferences dialog. See Keyboard (on page 26).
- *Show Current Layout*: Shows a keyboard image to indicate the current layout.

Volume Icon

- ▶ *Clicking the icon:*

A slider bar displays for you to adjust the volume.

- ▶ *Right-clicking the icon:*

A shortcut menu with this command displays.

- *Mute*: Mutes the sound.

Network Icon

- ▶ *Clicking the icon:*

A list of available Ethernet networks and connections displays.

- Only one network connection is shown if only one LAN port is connected to the network.
- Two network connections are listed if both LAN ports are connected to the network.
- By default, *Ethernet 1* is for LAN port 1, and *Ethernet 2* is for the other.
- You must have the System permission to make changes to network settings.

An "active" network connection is highlighted in bold, with a Disconnect command following it. To disable any active connection, select Disconnect.

- The formatting of that connection's name turns from bold to normal, indicating that it becomes inactive.

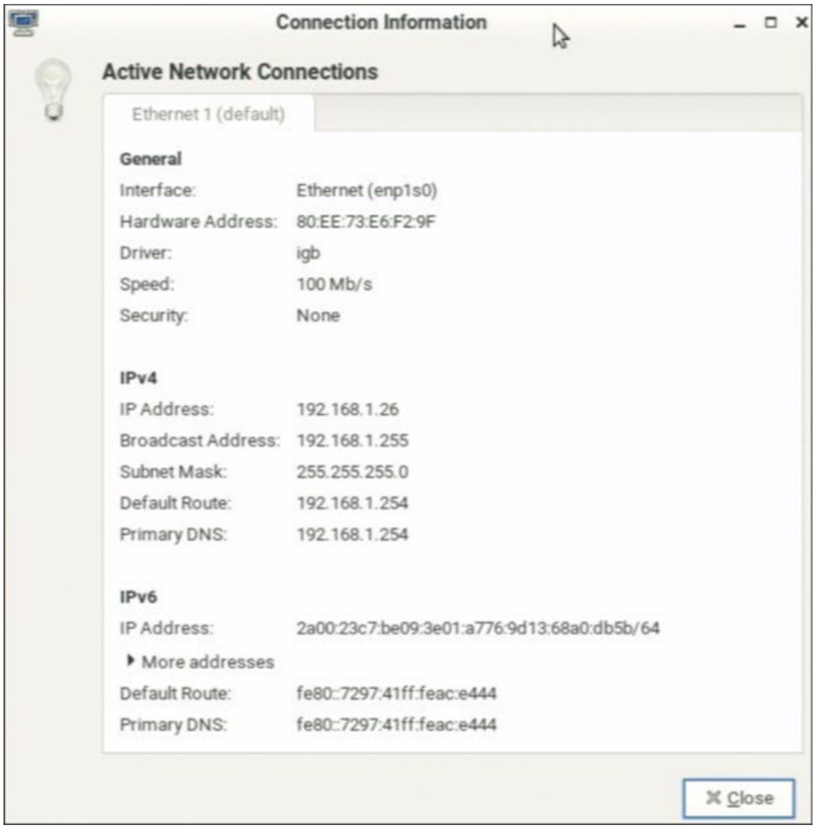
To activate any disabled network connection shown in the list, click it.

- The formatting of that connection's name turns from normal to bold, indicating that it becomes active.

► *Right-clicking the icon:*

A shortcut menu with these commands displays.

- *Enable Networking*: Enables or disables the networking capability. The default is to enable it.
- *Connection Information*: This command shows the networking information of the User Station, including IPv4 and IPv6 addresses.



General

Interface:	Ethernet (enp1s0)
Hardware Address:	80:EE:73:E6:F2:9F
Driver:	igb
Speed:	100 Mb/s
Security:	None

IPv4

IP Address:	192.168.1.26
Broadcast Address:	192.168.1.255
Subnet Mask:	255.255.255.0
Default Route:	192.168.1.254
Primary DNS:	192.168.1.254

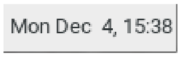
IPv6

IP Address:	2a00:23c7:be09:3e01:a776:9d13:68a0:db5b/64
▸ More addresses	
Default Route:	fe80::7297:41ff:feac:e444
Primary DNS:	fe80::7297:41ff:feac:e444

- When only one network connection is active, this dialog shows one tab.
- When both network connections are active, this dialog shows two tabs.
- The default connection has the word "default" shown on its tab.

- *Edit Connections*: This triggers the Network Connections dialog. See Network Connections - Ethernet (on page 32).

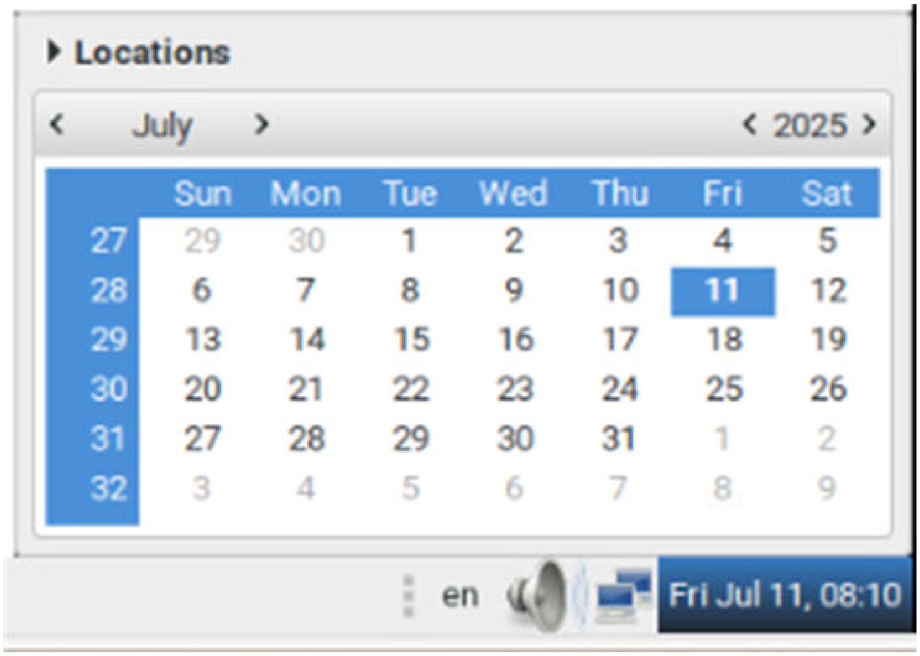
Clock Icon



Mon Dec 4, 15:38

► *Clicking the icon:*

A calendar with Locations section displays.



‹ July › ‹ 2025 ›

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	29	30	1	2	3	4	5
28	6	7	8	9	10	11	12
29	13	14	15	16	17	18	19
30	20	21	22	23	24	25	26
31	27	28	29	30	31	1	2
32	3	4	5	6	7	8	9

Fri Jul 11, 08:10

Click Locations to:

- Determine the location and time zone of the User Station.
- Change the time format of the clock shown in the Main Toolbar.

For details, see Location and Clock Time Format (on page 55).

To close the calendar, click the clock icon in the Main Toolbar again.

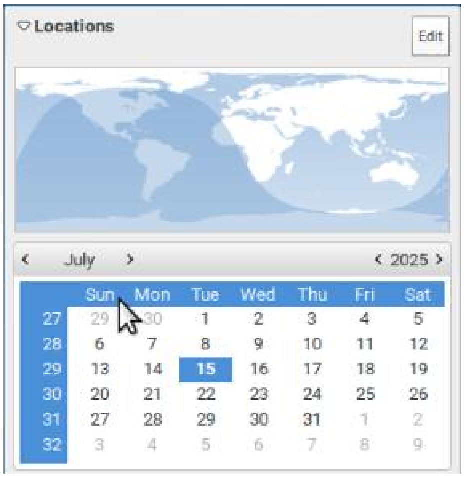
▶ *Right-clicking the icon:*

A shortcut menu with this command displays. You must have the System permission to change Date/Time settings.

- *Adjust Date & Time*: This triggers the date/time dialog. You must have Systems permissions to change the date and time. See Date/Time (on page 23).

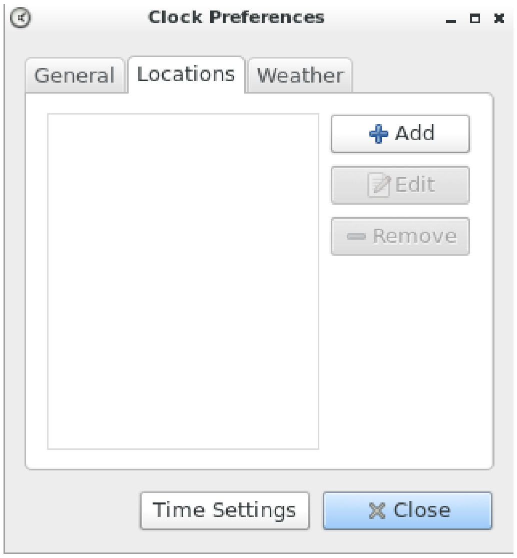
Location and Clock Time Format

After expanding the Locations section, click Edit.



	Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	29	30	1	2	3	4	5
28	6	7	8	9	10	11	12
29	13	14	15	16	17	18	19
30	20	21	22	23	24	25	26
31	27	28	29	30	31	1	2
32	3	4	5	6	7	8	9

The Clock Preferences dialog appears. Click the desired tab or button to configure settings.



▶ *Time Settings:*

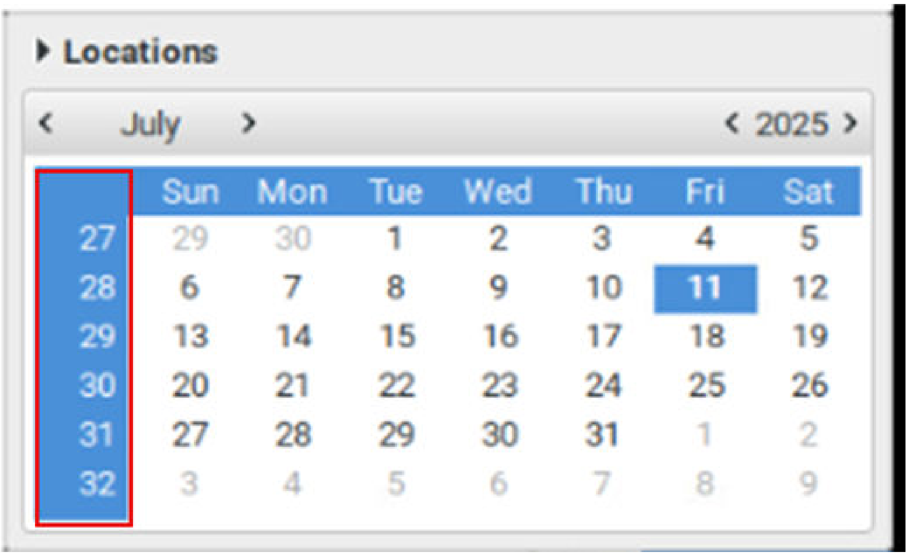
- See Date/Time (on page 23).

▶ *Locations:*

- Click Add to specify your city or country.
  - You can simply type the city or country name in the Location Name field and then select the correct one from the list that appears.
  - If your city's or country's name is not available in the list, you can manually specify the Timezone, Latitude and Longitude.
- To modify or delete any existing location in the Locations tab, select it and click Edit or Remove.

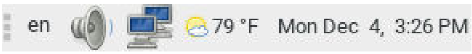
▶ *General:*

- *Clock Format*: Select the desired clock format to be shown in the Main Toolbar - 12 or 24 hour format.
- *Panel Display*: Select the information that is shown or available via the Main Toolbar - date, seconds, week numbers, weather and temperature.
  - Date and seconds, if selected, are shown in the clock on the Main Toolbar.
  - Week numbers, if selected, are shown in the calendar. A week number is the week's sequential number in a year.



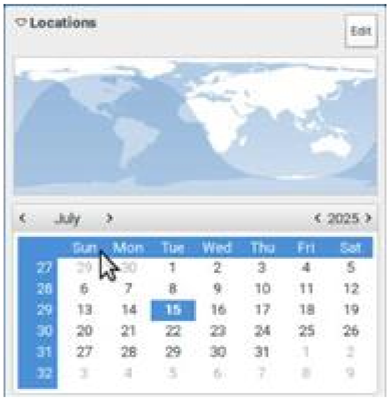
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	29	30	1	2	3	4	5
28	6	7	8	9	10	11	12
29	13	14	15	16	17	18	19
30	20	21	22	23	24	25	26
31	27	28	29	30	31	1	2
32	3	4	5	6	7	8	9

  - Weather and temperature, if selected, are shown in the following two positions:
    - The Main Toolbar



- The Locations section: When you hover your mouse pointer over the weather icon below the location name, more information is displayed, including the weather, temperature, wind speed and the time for sunrise/sunset.

Tip: If the system's time zone setting is different from the selected location's and you have the System Administration privilege, a "Set" button appears to the right of the location name when hovering the mouse pointer around it. You can click the button to set the location's time zone as the system's time zone.



	Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	29	30	1	2	3	4	5
28	6	7	8	9	10	11	12
29	13	14	15	16	17	18	19
30	20	21	22	23	24	25	26
31	27	28	29	30	31	1	2
32	3	4	5	6	7	8	9

► *Weather:*

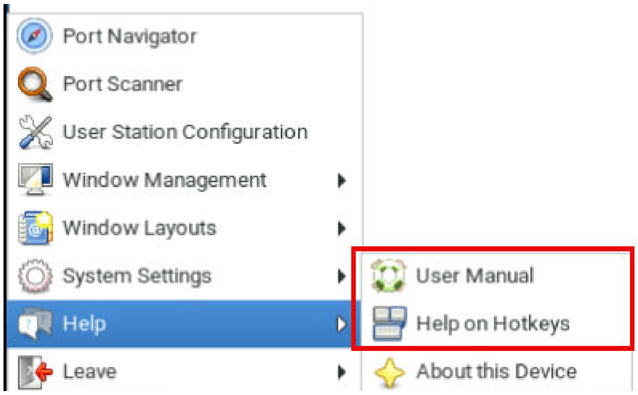
- Determine the temperature unit: C (degree Celsius), F (degree Fahrenheit) or K (degree Kelvin).
- Determine the wind speed unit: m/s, km/h, mph, knots, or Beaufort scale.

Online Help

You can access the online help for the Dominion User Station in the Main Menu.

► *Online help:*

- Choose Main Menu > Help > User Manual.
  You must be connected to the Internet to access Dominion User Station's online help.



Help on Hotkeys

You can also access this list of pre-programmed and user-configurable hot keys for the User Station in the Main Menu.

- Choose Main Menu > Help > Help on Hotkeys.

▶ *Hotkeys in the Dominion User Station*

Dominion User Station has a number of pre-defined and user configurable hotkeys implemented to open tools, move or resize windows, open target windows or perform some operations.

Most of the desktop hotkeys can be configured by the user (Preferences > Hotkeys and Gestures), including the possibility to disable them. The key combinations listed below are the factory defaults for these hotkeys. This guide does not mention operations whose hotkeys are disabled by default.

▶ *Dominion User Station Functions*

- Ctrl + Alt + N
  Launch the Dominion User Station Port Navigator
- Ctrl + Alt + C
  Launch the Dominion User Station Configuration
- Ctrl + Alt + L
  Lock the Dominion User Station Screen
- Ctrl + Alt + Del
  Shut down or restart the Dominion User Station

▶ *Window Management Functions*

The following hotkeys are useful to close the currently active window or switch between windows.

- Alt + F4
  Close the active window.
- Alt + Tab

Switch focus to the next window.

- Shift+Alt+Tab

  Switch focus to the previous window.

The next keys are used to move and resize the open windows and switch between windows. They are not configurable individually but can be enabled or disabled globally. Note that the keypad keys are functional independently of the status of Num Lock. Keypad 4, 6. 8, 2 act as Left, Right, Up and Down respectively.

- Shift+Win + [Left/Right/Up/Down]

  Switch focus to the window in the direction specified of the currently focused window.
- Ctrl+Alt+Shift+[Left/Right]

  Move the active window to the previous/next monitor.
- Ctrl+Alt+[Left/Right/Up/Down]

  Move the active window to the left/right/top/bottom edge of the current monitor.
- Ctrl+Alt+[Keypad-1/3/9/7]

  Move the active window to the corners of the current monitor.
- Ctrl+Shift+[[Left/Right/Up/Down]

  Move the active window to the nearest edge in the direction specified.
- Ctrl+Windows + [Left/Right/Up/Down]

  Grows the active window until it touches the nearest edge in the direction specified.

  Edges are the outer edges of the other windows, monitor edges in multi nonitor setups, or hte desktop boundaries. If the window edge is at the screen edge already, it is shrunk instead.
- Alt+Windows + [Left/Right/Up/Down]

  Shrinks the active window until it touches the nearest edge in the direction specified. Edges are the outer edges of the other windows, monitor edges in multi monitor setups, or thedesktop boundaries. If no edge is found, the window is halved in size.

► *Access Client Functions*

The following hotkeys are only available during a running target connection.

- Control Alt M

  Leave Single Cursor Mode (KVM Clients only). Only available if in single cursor mode. Single cursor mode not available if the hotkey is disabled.
- Ctrl + Alt+ F

  Enter or leave full screen mode on KVM and VNC Clients.
- Ctrl + Alt + Enter

  Enter or leave full screen mode on RDP clients.
- F11

  Enter or leave full screen mode in SSH, Serial, or ESXi clients.

► *Target Hotkeys*

You can configure target hotkeys for quick access to KVM ports or other targets. For KVM ports, open the Configuration, select a KX device, select a port, and click Edit Preferences. For other targets, select Targets, choose an Access Point to this target, then click Edit Preferences. Select the hotkey you want to use for this port and click OK.

Options include:

- Ctrl+Shift +<F key>
- Ctrl+Shift +<letter>
- Ctrl+Alt+<number>
- Ctrl+Alt+<letter>
- Shift + Alt + <F key>
- Shift + Alt + <letter>
- Ctrl+Shift+Alt+<F key>
- Ctrl + Shift +Alt + <letter>

Notes: A few hotkey combinations might be overridden by the user station system. Test all hotkey combinations to make sure they work properly.

Key combinations configured for User Station Functions or Access Client Functions cannot be used as Target Hotkeys.

Logout or Shutdown

Logout, restart and shutdown commands are available under Leave in the Main Menu.

- *Log Out*: Logs the user out of the User Station.
- Restart: Restart the User Station

  Shut Down: Powers off the User Station. You should always use the software command as the only method to power off your User Station. For detailed information, see Screen Unlocking (on page 266).

Warning: Do NOT turn the Dominion User Station off by holding down the Power button or unplugging the power cord because such operations may damage it. A short press of the Power button initiates a graceful shutdown that does not save open sessions.

Getting Started

This chapter introduces the basic installation and configuration.

In This Chapter

Installation and Configuration

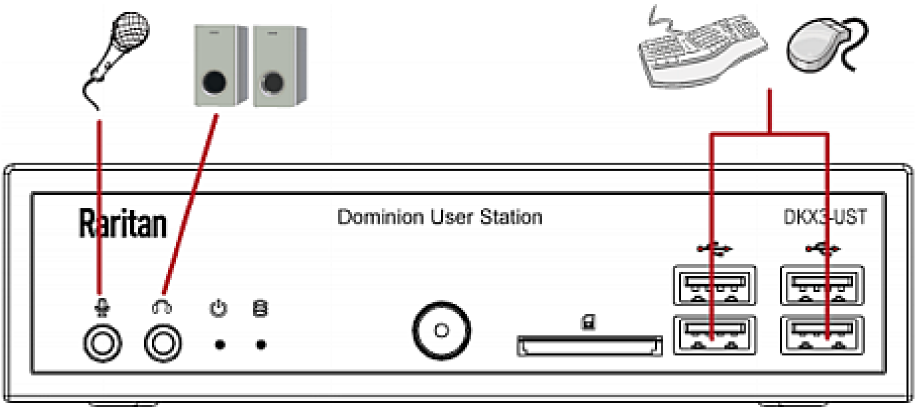
Connect the Equipment

Step 1: Connect the DKX3/DKX4-UST and DKX3-EUST

Only the basic hardware installation is described. For additional connection information, see Overview (on page 8).

► *To make a basic connection:*

1. Disconnect all devices from power.
2. Connect a USB keyboard and mouse to the front or rear USB ports.
3. Optional. Connect a microphone and speakers to the front panel.

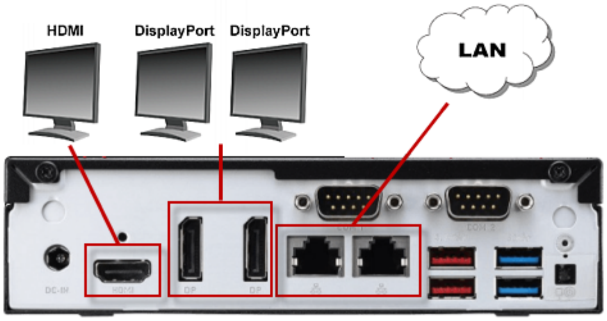


4. Connect the User Station to the network using either or both LAN ports on the rear panel.
5. Connect one or two or three monitors using either or both DisplayPort ports, or the HDMI port.
6. Power ON all devices.

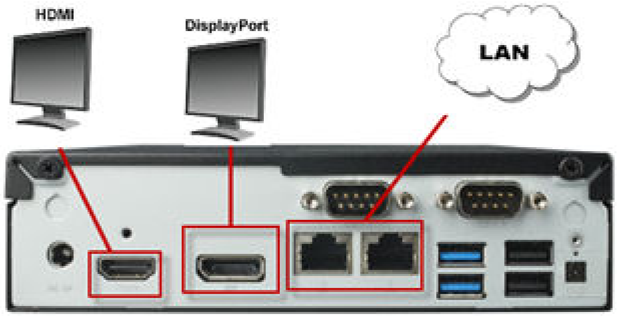
DisplayPort and HDMI transmit both video and audio signals. Your monitors must support the audio transmission if audio is intended.

Note: DKX3-UST supports 2 monitors, DKX4-UST and DKX3-EUST supports 3:

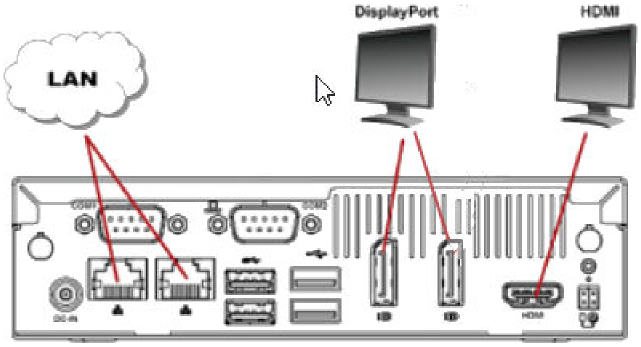
- ► *DKX4-UST:*



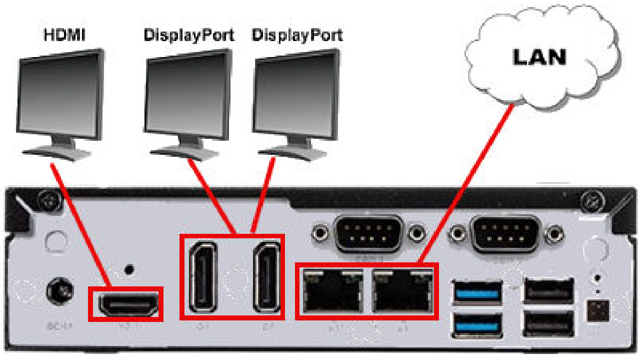
- ► *DKX3-UST Version 2:*



► *DKX3-UST Version 1:*



► *DKX3-EUST:*

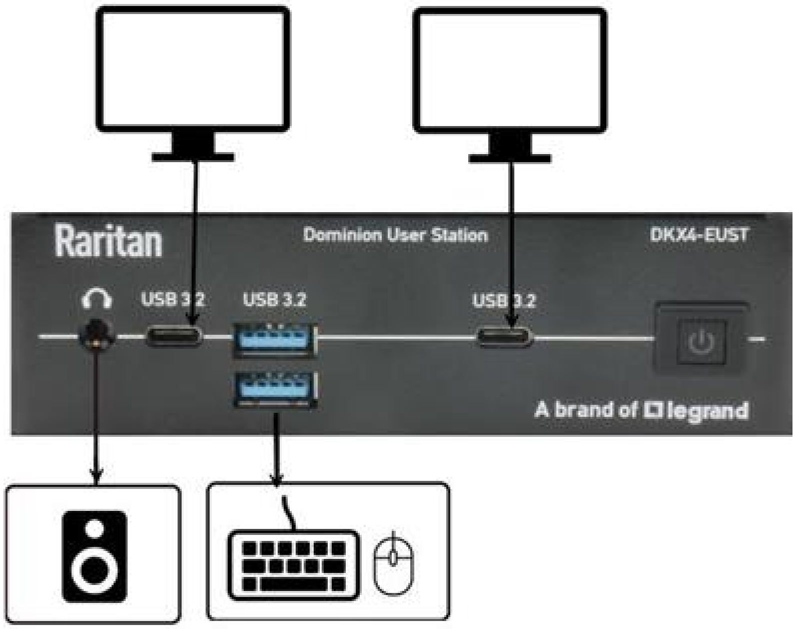


Step 1: Connect the DKX4-EUST

Only the basic hardware installation is described. For additional connection information, see Overview (on page 8).

► *To make a basic connection:*

1. Disconnect all devices from power.
2. Connect a USB keyboard and mouse to the front or rear USB ports.
3. Optional. Connect a speakers to the front panel.



4. Connect the User Station to the network using either or both LAN ports on the rear panel.
5. Connect monitor(s) to HDMI, DisplayPort and USB-C ports.
6. Power ON all devices.

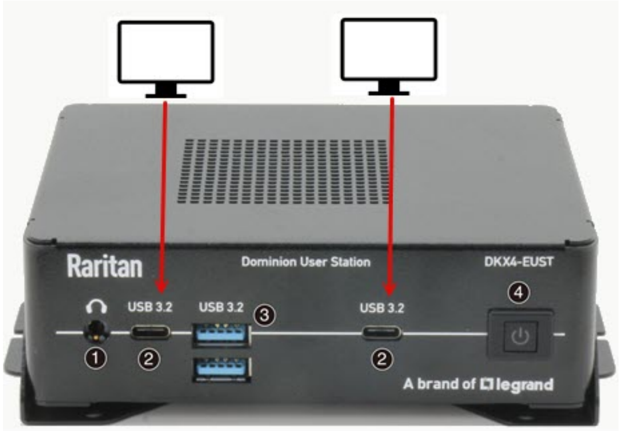
DisplayPort, HDMI and USB-C transmit both video and audio signals. Your monitors must support the audio transmission if audio is intended.

Note: Dominion Enhanced UserStation supports up to 4 monitors:

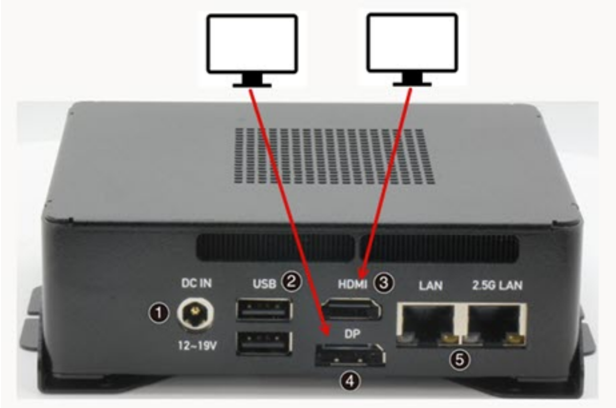
► *To make monitor connection:*

On a DKX4-EUST you can connect up to four monitors. Two in the front and two in the back.

Front:



Back:

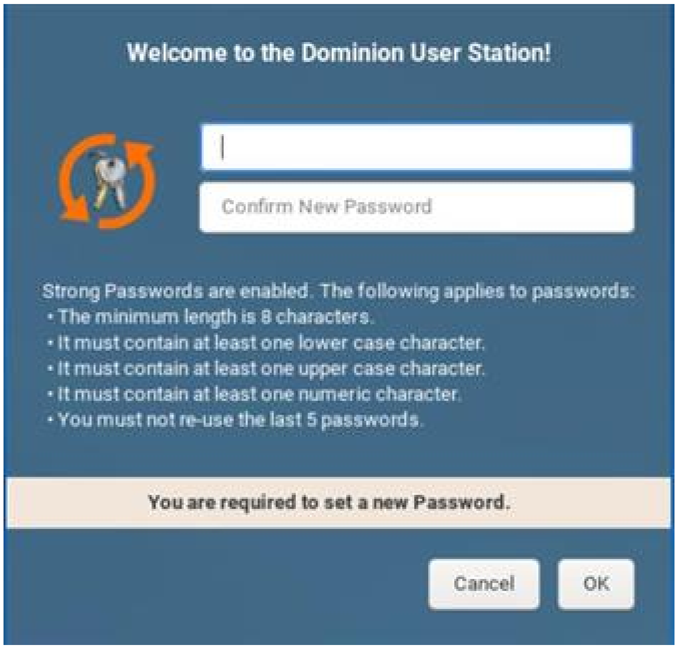


Step 2: Initial Log in to the Dominion User Station

Use the factory default user credentials for initial login. User credentials are case sensitive.

- User name: admin
- Password: raritan

Changing the default password to strong password is enforced at first login. For details on password changes, see Change Password (on page 157).



Welcome to the Dominion User Station!

Confirm New Password

Strong Passwords are enabled. The following applies to passwords:

- The minimum length is 8 characters.
- It must contain at least one lower case character.
- It must contain at least one upper case character.
- It must contain at least one numeric character.
- You must not re-use the last 5 passwords.

You are required to set a new Password.

Step 3: Add KX/SX Devices (without CC-SG integration)

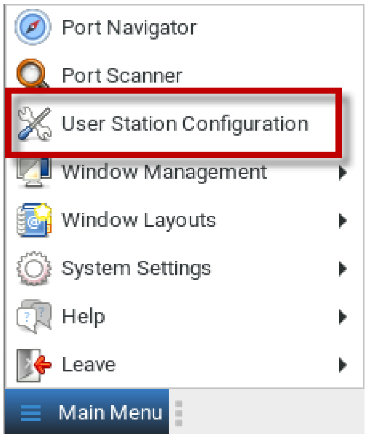
If you are not integrating your User Station with CC-SG, proceed with this step. If you want to integrate CC-SG, see CommandCenter Secure Gateway Integration (on page 183).

If the User Station is connected to a non-DHCP network, you must manually configure the network settings prior to adding KX and SX Devices. See Basic Network Settings (on page 75).

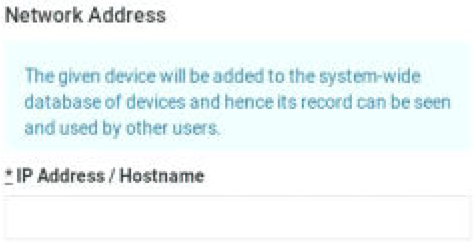
When you are not using CC-SG integration, KX and SX Devices are added in the User Station Configuration window.

► *To add KX/SX Devices:*

1. Launch the User Station Configuration window using either method below.
    - Press *Ctrl+Alt+C*.
    - Choose Main Menu > User Station Configuration. For the Main Menu's location, see Main Menu, Port Navigator, Toolbar (on page 15).



2. Click New.

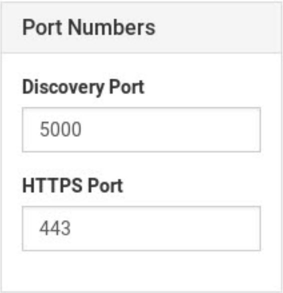


Network Address

The given device will be added to the system-wide database of devices and hence its record can be seen and used by other users.

* IP Address / Hostname

You must enter IP address or Hostname of the device.



Port Numbers

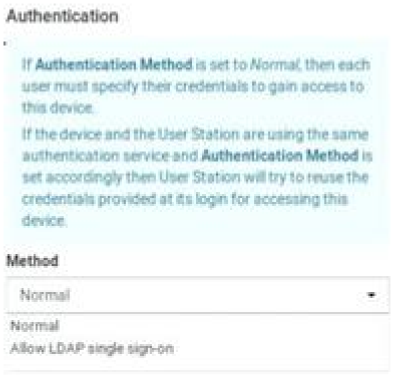
Discovery Port

5000

HTTPS Port

443

The default Discovery Port and HTTPS Port can be customized if needed.



Authentication

If **Authentication Method** is set to *Normal*, then each user must specify their credentials to gain access to this device.

If the device and the User Station are using the same authentication service and **Authentication Method** is set accordingly then User Station will try to reuse the credentials provided at its login for accessing this device.

Method

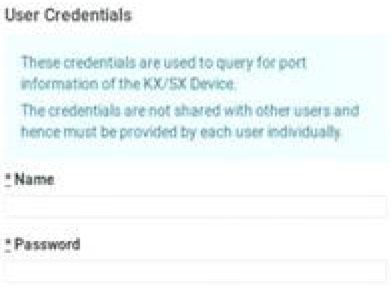
Normal ▾

Normal

Allow LDAP single sign-on

Select the authentication method.

- Normal: You must enter login credentials for the KVM/ Serial switch.
- Allow LDAP single sign-on: When users, KVM/Serial switches, and the Dominion User Station have the same LDAP environment, single sign-on can be used.



User Credentials

These credentials are used to query for port information of the KX/SX Device.

The credentials are not shared with other users and hence must be provided by each user individually.

* Name

* Password

User credentials on the KVM/Serial switch are required for querying this KVM/Serial switch's port information.

The user credentials may or may not be the same as your user credentials for the User Station. See Authentication of User Stations and KVM/Serial Switches (on page 263).

Note: If you enter incorrect user credentials for a KVM/Serial switch, you may be blocked if User Blocking has been enabled on that KVM/Serial switch and too many incorrect attempts are made. When this occurs, contact the KVM/Serial switch's system administrator for help.

1. Click Save.

Important: If "Allow LDAP Single Sign-on" is enabled, LDAP users can omit entering credentials in favor of their LDAP credentials being used. Otherwise, user credentials for a KVM/Serial switch are saved on a per-user basis. Other users must enter and save their own user credentials for the KVM/Serial switches you added. See Editing KVM and Serial Switches (on page 85).

Step 4: Access KVM/Serial Switches and Ports (without CC-SG integration)

You access the computer devices connected to a device's ports and your other targets through the Port Navigator window, which contains 3 panels:

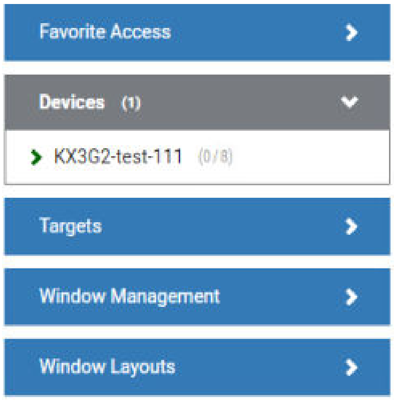
- Favorite Access shows the access you have configured as favorites. See Configuring KVM and Serial Ports (on page 89).
- Devices shows all added devices and their ports.
- Targets shows all added KVM, Serial, SSH, RDP and VNC Web ESXi targets.

This window is displayed by default. If not, launch it by pressing *Ctrl+Alt+N* or choosing Main Menu > Port Navigator.

Note: The User Station CANNOT access a KVM port that is connected to a tiered KVM switch or a blade chassis server.

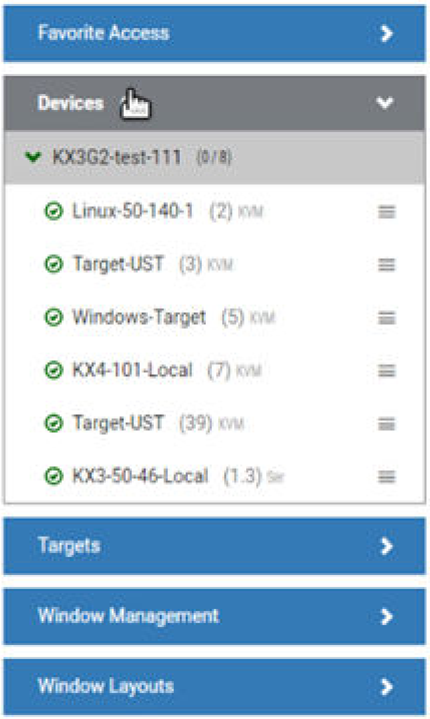
► *To access a KVM/Serial switch's ports:*

1. Click a KVM/Serial switch in the Devices panel.

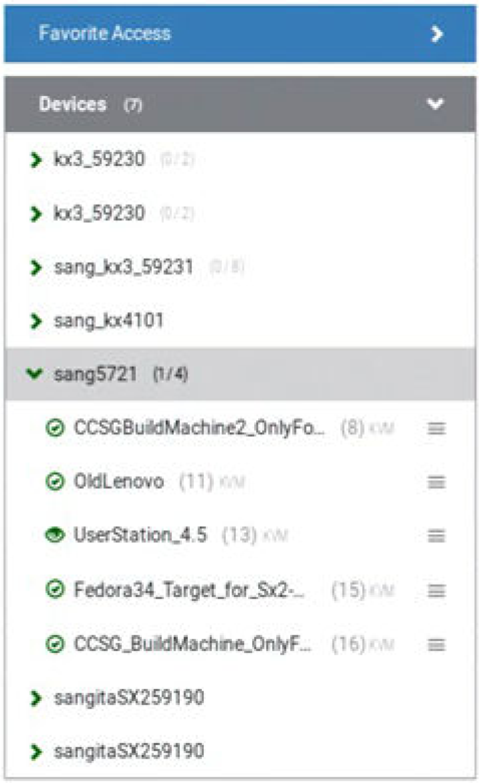


2. Per default, only a list of "up" ports is displayed under the selected KVM/Serial switch. For dual port video, only the primary port must be "up" to be displayed.
   - Numbers in parentheses are the physical port numbers on the KVM/Serial switch.
   - Dual port video shows the primary then secondary physical port numbers in parentheses.

   Note: To show KVM/Serial ports whose status is down, see Using Filters (on page 121).



- Click the desired KVM/Serial port's icon ≡ , and select *Open in new KVM/Serial client or* or *Open in current KVM client.* Or, click the port name: single-click opens it in the current KVM Client window, double-click opens it in a new KVM Client window, right-click shows the KVM Client options.
- Number of sessions connected are seen next to the device. For example: if total of available channels are 8 and 4 are in use, It will be seen as "<device name> (4/8)"



Favorite Access

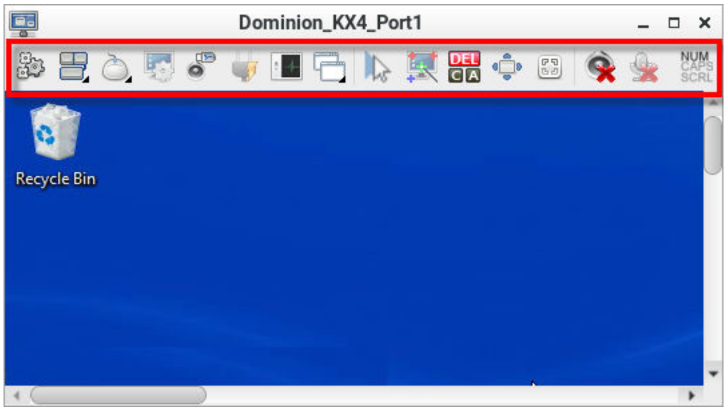
Devices (7)

- kx3_59230 (0/2)
- kx3_59230 (0/2)
- sang_kx3_59231 (0/8)
- sang_kx4101
- sang5721 (1/4)
  - CCSGBuildMachine2_OnlyFo... (8) KVM
  - OldLenovo (11) KVM
  - UserStation_4.5 (13) KVM
  - Fedora34_Target_for_Sx2-... (15) KVM
  - CCSG_BuildMachine_OnlyF... (16) KVM
- sangitaSX259190
- sangitaSX259190

Note: The behaviors of the left-mouse single and double clicks and middle button clicks can be customized. See Access Client Settings (on page 135).

Step 5: Use the KVM Client

The KVM Client window opens after accessing a port. The video of the target server that is connected to the port is displayed in the KVM Client. You can use the attached keyboard and mouse to control the target server.



The toolbar is split into two groups.

The left group comprises the following buttons that you can use to change settings and properties.

Button	Function
	Connection Properties: Manages streaming video performance over *your* connection to the target server. Show information like FPS and video resolution. The factory default settings are ideal for most connections so it is not recommended to change the settings unless required.
	Keyboard: Shows a list of available hot key macros and sends the selected macro to the target server.
	Mouse: Switches between single mouse and various dual mouse modes, or synchronizes two mouse pointers onscreen.
	Video Settings: Adjusts video sensing and color calibration settings.
	Connect Audio, Mass Storage and SmartCard Devices: Connects or disconnects a virtual media drive or a SmartCard reader from the target server, if the target supports virtual media. For example, you can mount a CD-ROM or USB flash drive onto the target server. In addition, you can configure the audio connection to the target server.
	Power Operations: Turns on, off or power cycles the target server, if a PDU is connected.
	External Device Settings: Access the settings for operating an external device..
	View: Shows several display options, such as Scale Video and Full-Screen Mode.

The right group comprises the following shortcut buttons for frequently-used functions. These functions are also available in the left group, but the shortcut buttons allow quick access with a click.

Button	Function
↖	Synchronize Mouse: Forces the target server's mouse pointer to align with the User Station's in the dual mouse modes.
	Auto-sense Video: Forces the video re-sensing to adjust the video display.
DEL C A	Send Ctrl+Alt+Del: Sends the hot key *Ctrl+Alt+Del* to the target server to ensure it is interpreted by that server.
	Full-Screen Mode: Displays the target server's video in full screen. Press *Ctrl+Alt+F* to quit the Full-Screen mode.
⛶	Fit window to Target: Resizes the KVM Client window to the target server's desktop video.
🔇	Mute audio Mute or unmute audio.
🎙	Mute microphone Mute or unmute microphone.
NUM CAPS SCRL	Num Caps Scroll: Displays the status of Num Lock, Caps Lock, and Scroll. Active functions are in bold text

For detailed information on the toolbar buttons, see Using the KVM Client.

Automatic Reconnection

If your connection to the KVM targets fails, an automatic reconnection will be attempted in most cases after a 30 second interval. This interval increases from 30 seconds to 1 minute, 2, 5, 10, 15 minutes if reconnect is not successful.

A message appears when the connection drops with information about reconnection timing and options to cancel or quit.

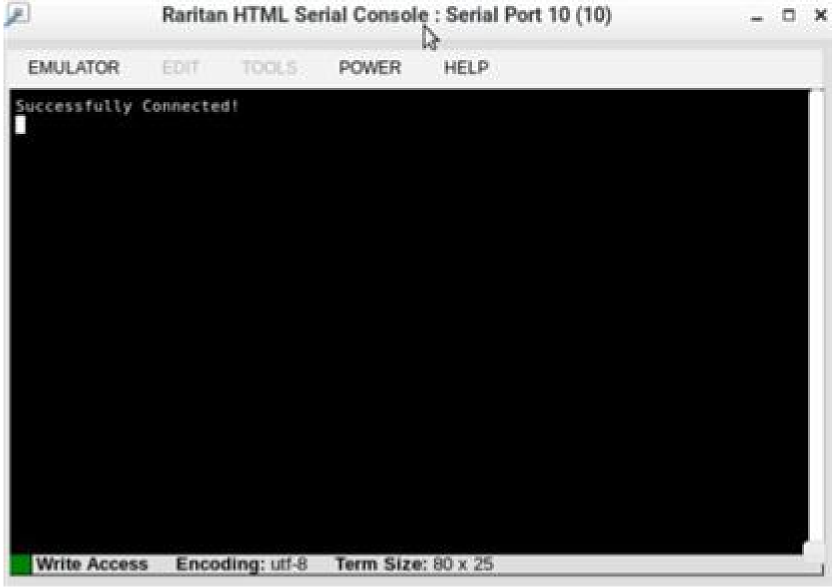
Automatic reconnection is not attempted when the connection failure is due to:

- Configuration error detected. Certificate must be uploaded.
- User authentication failed.
- User authorization failed.
- User has been actively disconnected by an administrator.
- KX device version not supported by the client.

Note: In FIPS mode, the User Station CANNOT connect to any KVM target on a KX3 or login to CC-SG if the security settings on the device are TLS 1.3 only and also fails to connect with RDP access clients.

Step 6: Use the Serial Client

The Serial Client window opens after accessing a port. The serial console output of the target server that is connected to the port is displayed in the Raritan HTML Serial Console (RHSC). You can use the attached keyboard and mouse to communicate with the target server.



```
Successfully Connected!
```

Write Access Encoding: utf-8 Term Size: 80 x 25

You can use tool bar menu to access sub menu options to perform certain tasks on the target server.

Menu Option	Sub Menu Options
Emulator	Emulator provides access to settings, Get History, Clear History, Get Write Access, Get Write Lock, Write Unlock, Send Break, Reset Port, Connected Users and Exit options.
Edit	The Edit menu is disabled.
Tools	The Tools menu is disabled.

Power Power provides access to Power Status, Power On, Power Off, and Power Cycle options.

Help Help provides access to About option.

For detailed information on the toolbar buttons, see Using the Serial Client (on page 127)

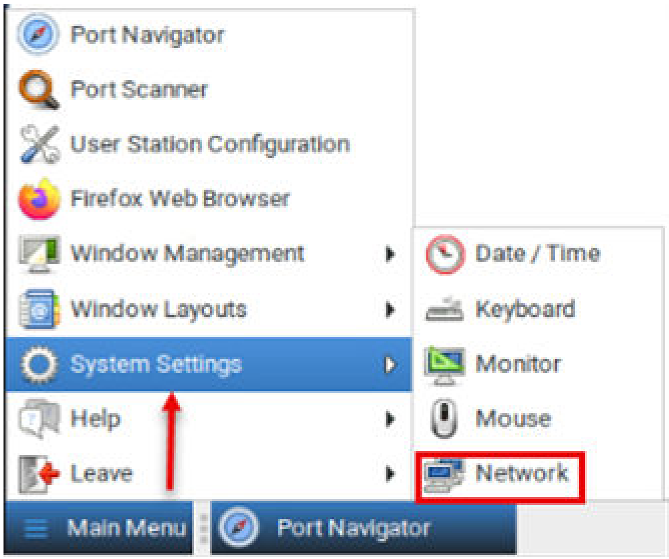
Basic Network Settings

The Dominion User Station default network configuration is set to Automatic (DHCP) for both IPv4 and IPv6 settings.

This section describes basic network configuration only. For details, see Network Connections - Ethernet (on page 32).

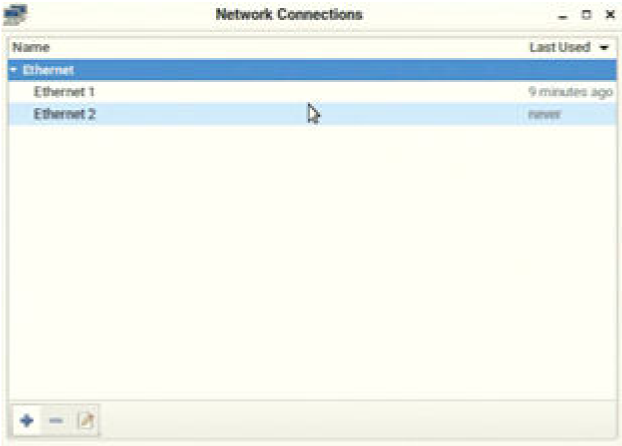
► *To configure basic network settings:*

1. Choose Main Menu > System Settings > Network.



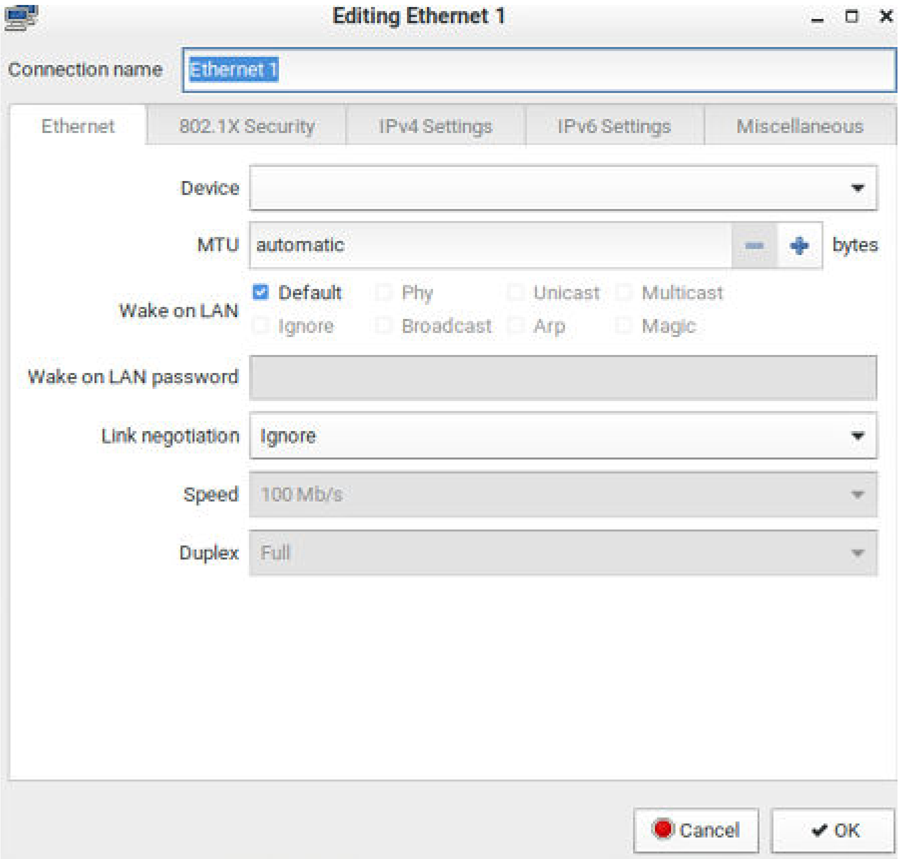
2. In the Network Connections dialog, two default network connections are available for two LAN ports. *Ethernet 1* is for LAN port 1, and *Ethernet 2* is for the other.

Select the desired one and click "Edit the selected connection" icon.



Name	Last Used
Ethernet	
Ethernet 1	9 minutes ago
Ethernet 2	never

3. Click the IPv4 Settings tab.



Connection name: Ethernet 1

Device:

MTU: automatic bytes

Wake on LAN: ☑ Default □ Phy □ Unicast □ Multicast □ Ignore □ Broadcast □ Arp □ Magic

Wake on LAN password:

Link negotiation: Ignore

Speed: 100 Mb/s

Duplex: Full

4. In the Method field, select one of the following options:

- *Automatic (DHCP)*: The DHCP server automatically assigns an IPv4 address. This is the default.
- *Automatic (DHCP) addresses only*: The DHCP server automatically assigns the IP address only. DNS comes from manual input.
- *Manual*: This option configures static addressing. Click Add to specify at least one IPv4 address, netmask and gateway.
- *Disabled*: IPv4 networking is disabled.

For details, see IPv4 Settings (on page 36).

5. If your network supports IPv6, click the IPv6 Settings tab, and repeat the above step for configuring IPv6 settings. Note that IPv6 provides the "Ignore" option instead of the "Disabled" option to disable the IPv6 networking. See IPv6 Settings (on page 38).
6. For additional settings, click the Ethernet tab. See Ethernet Settings (on page 35).
7. Click OK. The new network settings apply now.

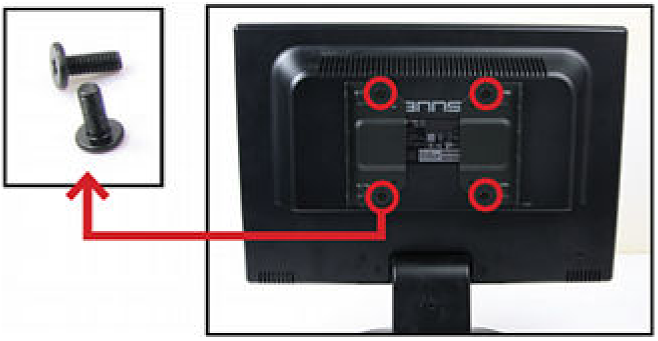
VESA Mount

You can mount the Dominion User Station onto the back of a monitor with 75 or 100 mm VESA standards.

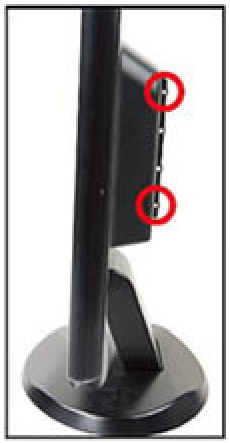
Mount DKX3/DKX4-UST and DKX3-EUST

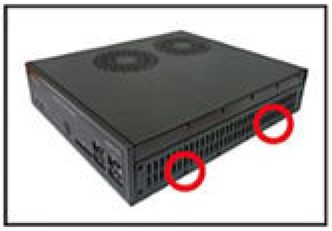
► *VESA mount procedure:*

1. Turn OFF and disconnect all devices from the power sources, including the monitor.
2. Attach the VESA mount securely to the back of your monitor using four appropriate screws.

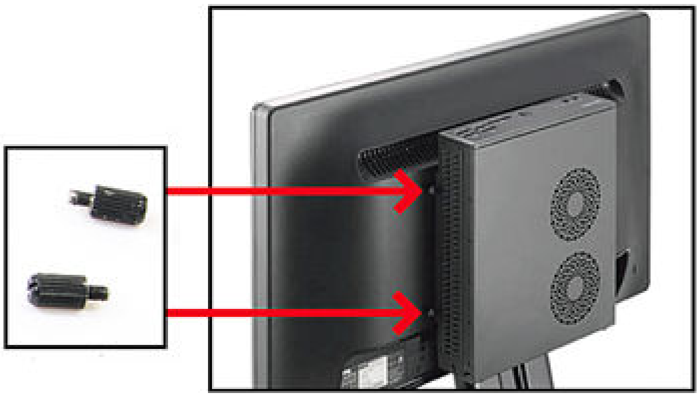


3. Align two screw holes on each side of the User Station with those on the VESA mount.



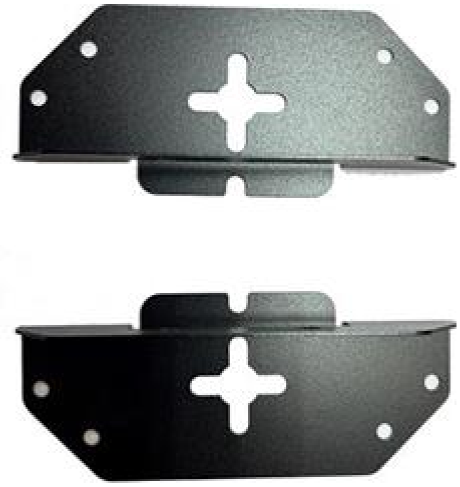


4. Tighten two sides securely using four appropriate screws.



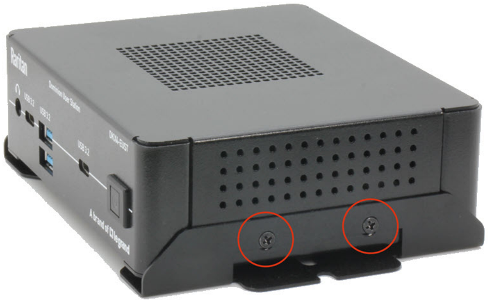
5. The Dominion User Station is now securely attached to the monitor.

Mount DKX4-EUST

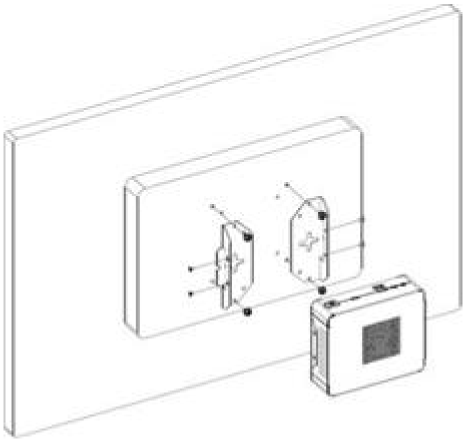


► *VESA mount procedure:*

1. Turn OFF and disconnect all devices from the power sources, including the monitor.
2. Attach the VESA mount securely to the back of your monitor using four appropriate screws.



3. Align two screw holes on each side of the User Station with those on the VESA mount.
4. Tighten two sides securely using four appropriate screws.
5. The Dominion User Station is now securely attached to the monitor.



Managing KVM and Serial Switches and Ports

KVM, Serial switches and their ports are managed in the User Station Configuration window.

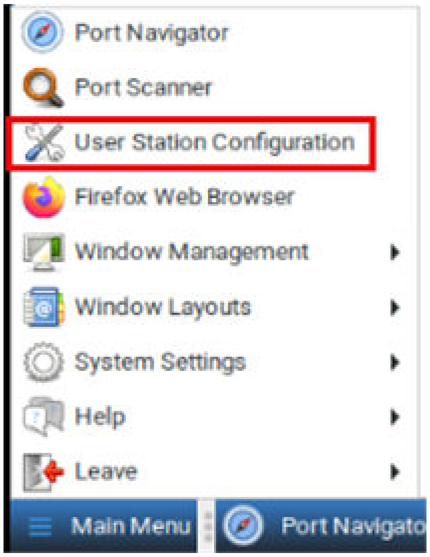
Note: If you are using CC-SG integration, you do not need to add KVM and Serial switches in this way. See CommandCenter Secure Gateway Integration (on page 183).

In This Chapter

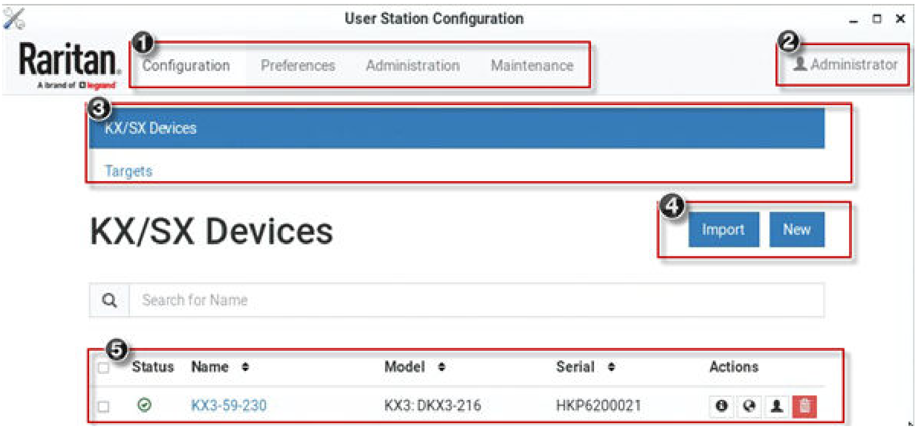
User Station Configuration

► *To launch the User Station Configuration window:*

- Press *Ctrl+Alt+C*.
- OR choose Main Menu > User Station Configuration.



The User Station Configuration window opens.



☐	Status	Name ⇕	Model ⇕	Serial ⇕	Actions
☐	✓	KX3-59-230	KX3: DKX3-216	HKP6200021	❶ ◒ 👤 🗑

1. Configuration tabs:
   - *Configuration*: Manage KX/SX Devices and Targets. See the other sections in this chapter.
   - *Preferences*: Set personal preferences, such as audio settings. See Setting User Preferences (on page 134).
   - *Administration*: Manage administration tasks. See Administration Features (on page 158).
   - *Maintenance*: Manage maintenance tasks. See Maintenance Features (on page 225).
2. Your user account:

Click to view your user account settings.

3. KX/SX Devices and Targets options:
   - *KX/SX Devices*: Add or Import KX/SX devices and manage them.
   - *Targets*: Add and manage Targets. See Managing Targets and Access Methods (on page 96).
4. Import button and New button:
   - By default, the KX/SX Devices option is selected, and you can use the Import and New buttons to add or import KVM/Serial switches. See Adding KVM and Serial Switches (on page 82) See Importing KVM and Serial Switches (on page 87).
   - When the Targets option is selected, you can use the New button to add targets and access. Import is not available.
5. A list of added KVM/Serial switches:
   - When the KX/SX Devices option is selected, view the list of KVM/Serial switches here, and click the desired KVM/Serial switch to show all of its KVM/Serial ports and details.
   - When the Targets option is selected, view the list of Targets here, and click a Target to show its access methods and details.

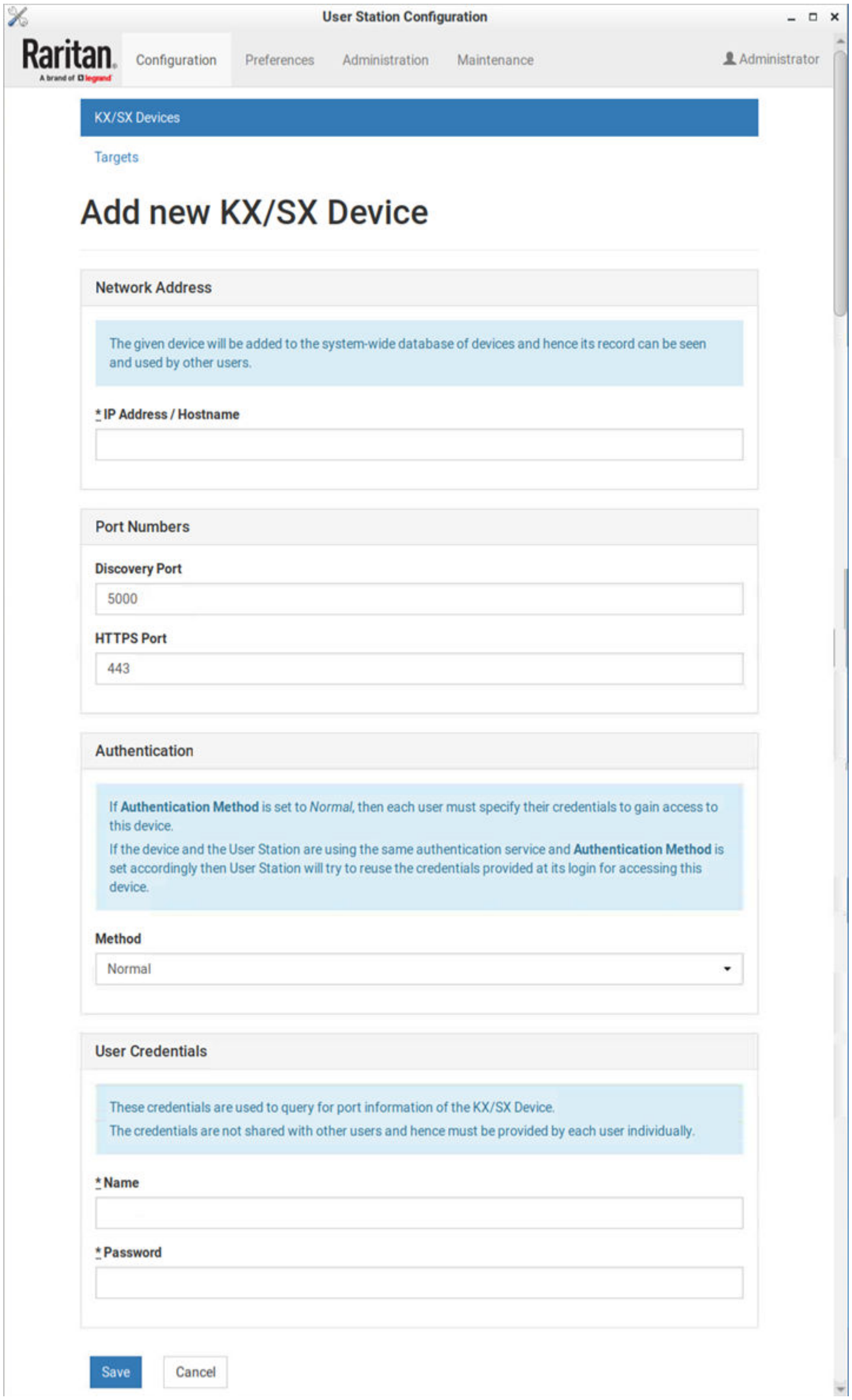
Adding KVM and Serial Switches

All users can see the KX/SX devices added to this User Station, but they can only access those switches if they have provided valid user credentials. To add multiple devices that share an IP address, such as in a port-forwarding configuration, you must use different discovery and https ports. If users, KX/SX devices, and the Dominion User Station exist in the same LDAP environment, you can add your KVM or Serial switches with single sign-on capability.

Note: To add a KX/SX device that is under CC-SG management, make sure "Allow direct access" is checked for the device in CC-SG, then add the KX/SX device to the Dominion User Station using an admin-level account that is different from the one used to authenticate the device on CC-SG. Or, you can use CC-SG integration. See CommandCenter Secure Gateway Integration (on page 183)

► *To add a KVM/Serial switch:*

1. Click New in the User Station Configuration window. See User Station Configuration (on page 81).
2. The following page opens, and the user must enter the required information. See Step 3: Add KX/SX Devices (without CC-SG integration) (on page 66).



Add new KX/SX Device

Network Address

The given device will be added to the system-wide database of devices and hence its record can be seen and used by other users.

* IP Address / Hostname

Port Numbers

Discovery Port: 5000

HTTPS Port: 443

Authentication

If **Authentication Method** is set to *Normal*, then each user must specify their credentials to gain access to this device.

If the device and the User Station are using the same authentication service and **Authentication Method** is set accordingly then User Station will try to reuse the credentials provided at its login for accessing this device.

Method: Normal

User Credentials

These credentials are used to query for port information of the KX/SX Device.

The credentials are not shared with other users and hence must be provided by each user individually.

* Name

* Password

- Click Save, and the new KVM/Serial switch's content is shown.

Important: If "Allow LDAP Single Sign-on" is enabled, LDAP users can omit entering credentials in favor of their LDAP credentials being used. Otherwise, user

credentials for a KVM/Serial switch are saved on a per-user basis. Other users must enter and save their own user credentials for the KVM/Serial switches you added. See Editing KVM and Serial Switches (on page 85).

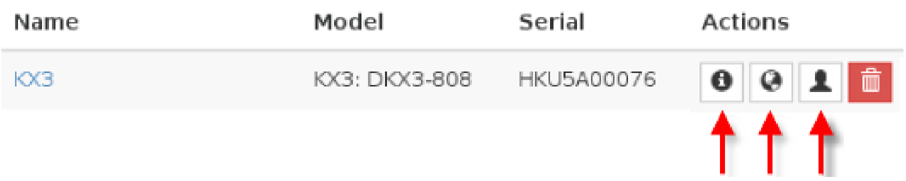
Editing KVM and Serial Switches

Added KVM/Serial switches are listed in the User Station Configuration window.

Each KVM/Serial switch has three icons in the Actions column. You must have Device Administration privileges to delete, edit or add KVM/Serial switches.

If you are not the one who added new KVM/Serial switches to the User Station, you must follow the procedure below to enter user credentials for newly-added KVM/Serial switches.

Note: For the difference between a KVM/Serial switch's and the User Station's user credentials, see Authentication of User Stations and KVM/Serial Switches (on page 263).



Name	Model	Serial	Actions
KX3	KX3: DKX3-808	HKU5A00076	ℹ 🌐 👤 🗑

► *To view the KVM/Serial switch's ports:*

- Click the desired KVM/Serial switch. The ports list opens. See Configuring KVM and Serial Ports (on page 89).

► *To change the KVM/Serial switch's IP address/host name or authentication method:*

1. Click the desired KVM/Serial switch's ℹ button.
2. Click Edit to open the Edit KX/SX Device page.
3. Modify the IP address or host name, discovery and HTTPs ports, or change the authentication method. See Adding KVM and Serial Switches (on page 82).
4. Click Save.

► *To open the KVM/Serial switch's administration page:*

1. Click the desired KVM switch's 🌐 button.
2. The administration page launches. Login to access.

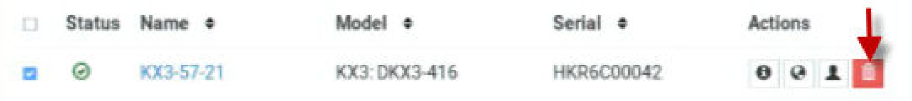
► *To enter new user credentials for a KVM switch:*

1. Click the 👤 button of the desired KVM switch.
2. Enter new user credentials.
3. Click Save.

Note: If you enter incorrect user credentials for a KVM/Serial switch, you may be blocked if User Blocking has been enabled on that KVM/Serial switch and too many incorrect attempts are made. When this occurs, contact the KVM/Serial switch's system administrator for help.

Deleting KVM and Serial Switches

The final button in the Actions column is used to delete this KVM/Serial switch.

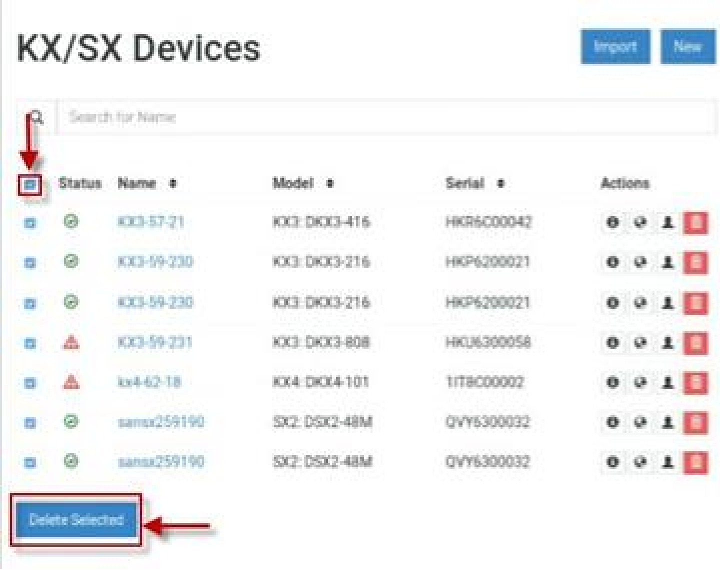


□	Status	Name ♦	Model ♦	Serial ♦	Actions
☑	✓	KX3-57-21	KX3: DKX3-416	HKR6C00042	ℹ 🌐 👤 🗑

► *To delete a KVM switch:*

1. Click the desired KVM/Serial switch's 🗑 button.
2. Click OK on the confirmation message.

► *To delete multiple KVM/Serial switches:*



☑	Status	Name	Model	Serial	Actions
☑	✓	KX3-57-21	KX3: DKX3-416	HKR6C00042	
☑	✓	KX3-59-230	KX3: DKX3-216	HKP6200021	
☑	✓	KX3-59-230	KX3: DKX3-216	HKP6200021	
☑	⚠	KX3-59-231	KX3: DKX3-808	HKU6300058	
☑	⚠	kx4-62-18	KX4: DKX4-101	1IT8C00002	
☑	✓	sansx259190	SX2: DSX2-48M	QVY6300032	
☑	✓	sansx259190	SX2: DSX2-48M	QVY6300032	

Importing KVM and Serial Switches

Bulk Import and Update allows you to add or update multiple KVM/Serial switches at once using a CSV file found in the root folder of a connected USB storage device.

When you import, Dominion User Station adds devices detected as new by their IP address/hostname. Dominion User Station uses the credentials given in the CSV file. If credentials are blank in the file, none are added. When Dominion User Station detects that a device identified in the CSV file already exists in the system, the import updates the credentials as given in the CSV. You can also optionally specify customized Discovery port and HTTPS port for each device.

► *CSV file format:*

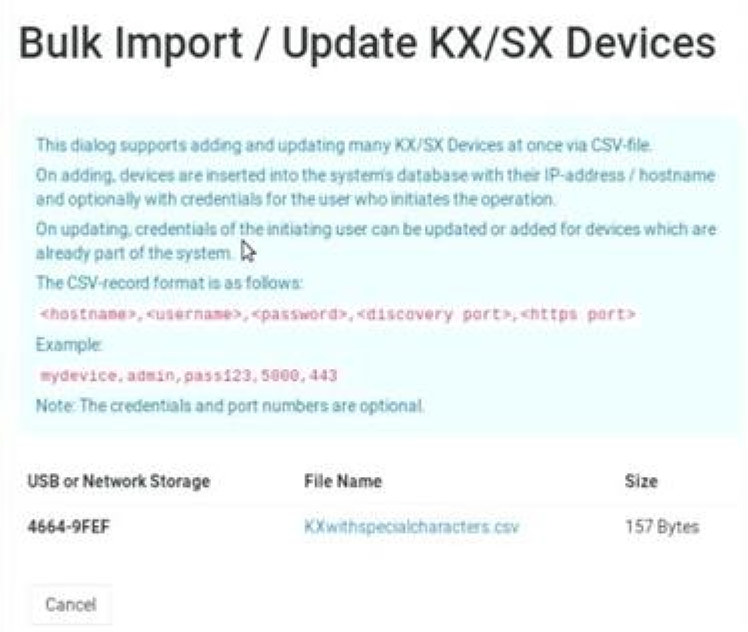
The CSV file contains 5 columns: "ip address or hostname","user name","password", "discovery port", "HTTPs port"

Note: User name and password are optional. If not imported, user must enter them later. Discovery port and HTTPS port are optional. If they are not specified,the default ports 5000 and 443 are used.

See Bulk Import Examples (on page 89) for more details and limitations.

► *To import KVM switches:*

1. Click Import in the User Station Configuration window. See User Station Configuration (on page 81). The Bulk Import/Update KX / SX Devices page opens.
2. The Storage list displays all CSV files found in the root folder of connected USB and mounted Network Storages.



Bulk Import / Update KX/SX Devices

This dialog supports adding and updating many KX/SX Devices at once via CSV-file.

On adding, devices are inserted into the system's database with their IP-address / hostname and optionally with credentials for the user who initiates the operation.

On updating, credentials of the initiating user can be updated or added for devices which are already part of the system.

The CSV-record format is as follows:

```
<hostname>,<username>,<password>,<discovery port>,<https port>
```

Example:

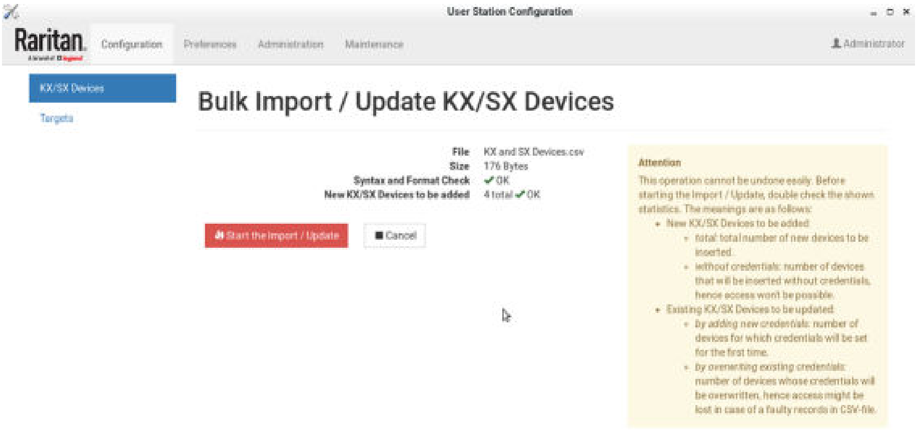
```
mydevice,admin,pass123,5000,443
```

Note: The credentials and port numbers are optional.

USB or Network Storage	File Name	Size
4664-9FEF	KXwithspecialcharacters.csv	157 Bytes

3. Click the file you want to import. The Bulk Import page opens to display the file details:
   - File name and size
   - Errors, if any, with line number, syntax, or format if appropriate
   - Total number of KX/SX Devices to be added
   - Number of KX/SX Devices to be added without credentials
   - Number of KX/SX Devices to be updated with new credentials
   - Number of KX/SX Devices to be updated by overwriting existing credentials

Note: If errors are listed, the import button is disabled. Correct the file and try again.



Bulk Import / Update KX/SX Devices

File: KX and SX Devices.csv
Size: 176 Bytes
Syntax and Format Check: ✓ OK
New KX/SX Devices to be added: 4 total ✓ OK

Attention

This operation cannot be undone easily. Before starting the Import / Update, double check the shown statistics. The meanings are as follows:

- New KX/SX Devices to be added
  - total: total number of new devices to be inserted.
  - without credentials: number of devices that will be inserted without credentials, hence access won't be possible.
- Existing KX/SX Devices to be updated
  - by adding new credentials: number of devices for which credentials will be set for the first time.
  - by overwriting existing credentials: number of devices whose credentials will be overwritten, hence access might be lost in case of a faulty records in CSV-file.

4. Click Start the Import/Update in the details dialog. Import progress shows in the dialog. When complete, a success message appears in the main page.

Bulk Import Examples

► *Import / update listed KX / SX switches:*

```
192.168.2.104,admin,raritan
192.168.2.103,thomas,thomas,5000,443
192.168.3.30,admin,raritan
192.168.5.52,user,password
```

► *Special characters and escaping*

Line 1 is an example of using comma in a value.

Line 2 is an example for escaping ", the resulting password string is "password"

```
192.168.2.104,admin,"rar,itan"
192.168.5.52,user,"""password"""
```

Note: If you create the CSV file using Microsoft Excel or similar tools, you do not need to escape special characters. These tools handle the special characters automatically when creating the CSV file. Check the resulting CSV file if you are not sure.

► *Commenting out*

Use the hashtag character (#) in the first position of a line to comment out the line. Hostnames are not allowed to contain #.

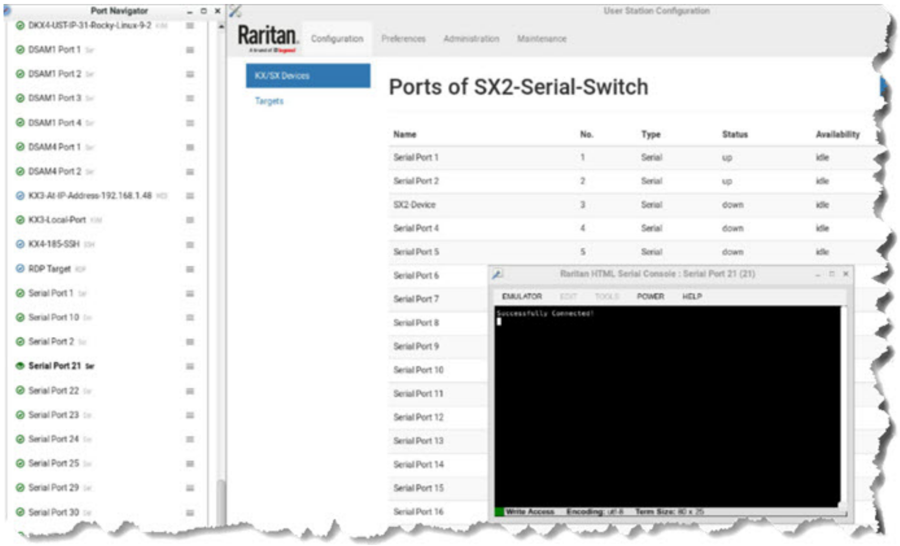
```
192.168.2.104,admin,raritan
#192.168.2.103,thomas,thomas
#192.168.3.30,admin,raritan
192.168.5.52,user,password
```

Configuring KVM and Serial Ports

A KVM/Serial switch's ports are shown after a KVM/Serial switch is selected.

► *To configure a KVM or Serial port:*

1. Click the desired KVM/Serial switch, and all of its KVM/Serial ports are listed on the screen. Serial switch ports are seen as serial type and can be connected and configured just like KVM ports.



DKX4-UST-IP-31-Rocky-Linux-9-2
DSAM1 Port 1
DSAM1 Port 2
DSAM1 Port 3
DSAM1 Port 4
DSAM4 Port 1
DSAM4 Port 2
KX3-At-IP-Address-192.168.1.48
KX3-Local-Port
KX4-185-SSH
RDP Target
Serial Port 1
Serial Port 10
Serial Port 2
Serial Port 21
Serial Port 22
Serial Port 23
Serial Port 24
Serial Port 25
Serial Port 29
Serial Port 30

Ports of SX2-Serial-Switch

Name	No.	Type	Status	Availability
Serial Port 1	1	Serial	up	idle
Serial Port 2	2	Serial	up	idle
SX2-Device	3	Serial	down	idle
Serial Port 4	4	Serial	down	idle
Serial Port 5	5	Serial	down	idle
Serial Port 6				
Serial Port 7				
Serial Port 8				
Serial Port 9				
Serial Port 10				
Serial Port 11				
Serial Port 12				
Serial Port 13				
Serial Port 14				
Serial Port 15				
Serial Port 16				

Raritan HTML Serial Console : Serial Port 21 (21)

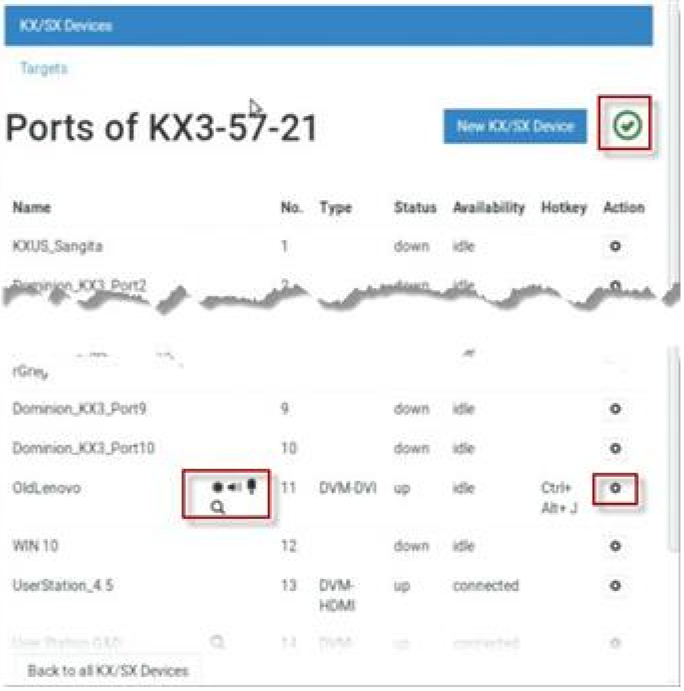
```
Successfully Connected!
█
```

Write Access   Encoding: utf-8   Term Size: 80 x 25

Note, to return to the devices view, click the Back to all KX/SX Devices link

General Settings Icons:

- ✱ The KVM or Serial port has been configured as a favorite port.
- 🔍 The KVM port is included in Port Scanner.
- 🔊 The KVM port is configured to automatically connect a speaker when the connection launches.
- 🎤 The KVM port is configured to automatically connect a microphone when the connection launches.
- The icon shown in the top-right corner of the Ports section indicates the KVM/Serial port information retrieval status. In this example, there is a green checkmark. See Port Data Retrieval Status (on page 93).



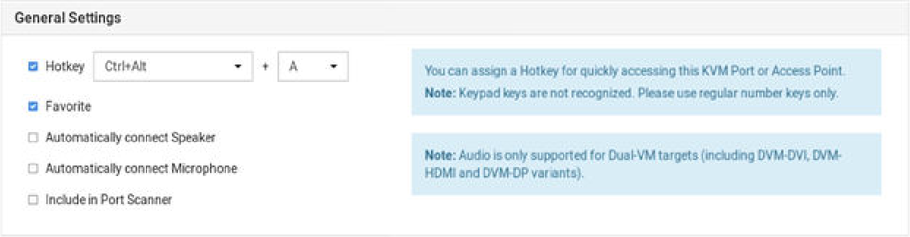
KX/SX Devices

Targets

Ports of KX3-57-21

Name	No.	Type	Status	Availability	Hotkey	Action
KXUS_Sangita	1		down	idle		⚙
Dominion_KX3_Port2	2		down	idle		⚙
rGne,						
Dominion_KX3_Port9	9		down	idle		⚙
Dominion_KX3_Port10	10		down	idle		⚙
OldLenovo	11	DVM-DVI	up	idle	Ctrl+ Alt+ J	⚙
WIN 10	12		down	idle		⚙
UserStation_4.5	13	DVM-HDMI	up	connected		⚙
User Station 0.0.0	14	DVM-	up	connected		⚙

1. Click ⚙ in the Action column of the port that you want to configure. A settings page opens.
2. Configure the General Settings:



General Settings

☑ Hotkey Ctrl+Alt + A

☑ Favorite

☐ Automatically connect Speaker

☐ Automatically connect Microphone

☐ Include in Port Scanner

You can assign a Hotkey for quickly accessing this KVM Port or Access Point.
Note: Keypad keys are not recognized. Please use regular number keys only.

Note: Audio is only supported for Dual-VM targets (including DVM-DVI, DVM-HDMI and DVM-DP variants).

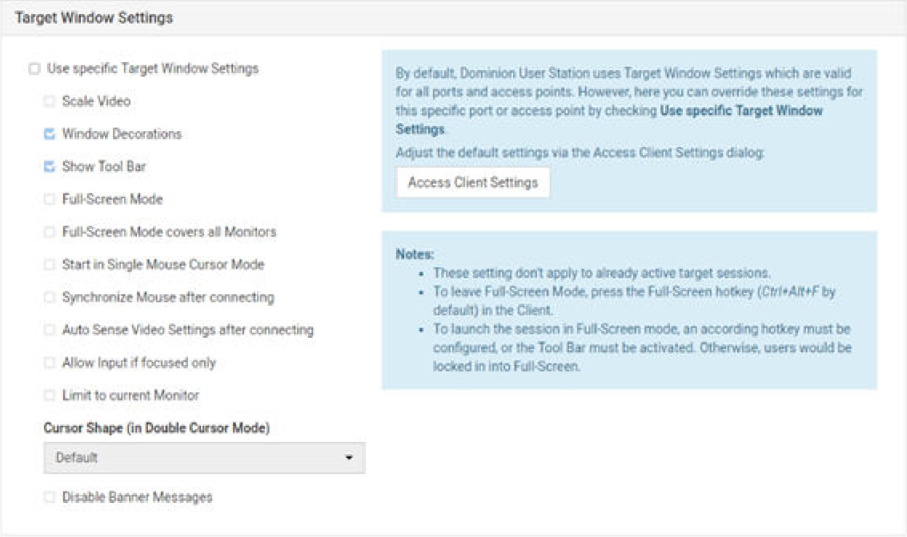
Checkbox	Function
Hotkey	Assign a hotkey combination for quickly accessing this KVM/Serial port. Available options include: • *Ctrl + Shift* + <character> • *Ctrl + Alt* + <character> • *Shift + Alt* + <character> • *Ctrl + Shift + Alt* + <character> <character> is an alphanumeric character or function key. Some hotkey combinations cannot be used for port access and thus are not available. See Unavailable Hotkeys for Port Access (on page 93).

Favorite	If this checkbox is selected, this KVM/Serial port is shown in the Favorite Access panel. See Port Navigator (on page 115).
Automatically connect Speaker	Speaker will automatically be connected to this KVM port at target launch.
Automatically connect Microphone	Microphone will automatically be connected to this KVM port at target launch.
Include in Port Scanner	Add the port to the port scanner. See Port Scanner (on page 123).

3. Configure the Target Window Settings if you want to override default settings.

- To view your default target window settings, click the Access Client Settings button. See Access Client Settings (on page 135) for details on each.
- If you want to override any of those settings for the port you are configuring, select the "Use port specific Access Client Settings" checkbox to enable the list.
- Select the checkbox for each setting that should override the default setting.

KVM Target:



Target Window Settings

☐ Use specific Target Window Settings

☐ Scale Video

☑ Window Decorations

☑ Show Tool Bar

☐ Full-Screen Mode

☐ Full-Screen Mode covers all Monitors

☐ Start in Single Mouse Cursor Mode

☐ Synchronize Mouse after connecting

☐ Auto Sense Video Settings after connecting

☐ Allow Input if focused only

☐ Limit to current Monitor

Cursor Shape (in Double Cursor Mode)

Default ▾

☐ Disable Banner Messages

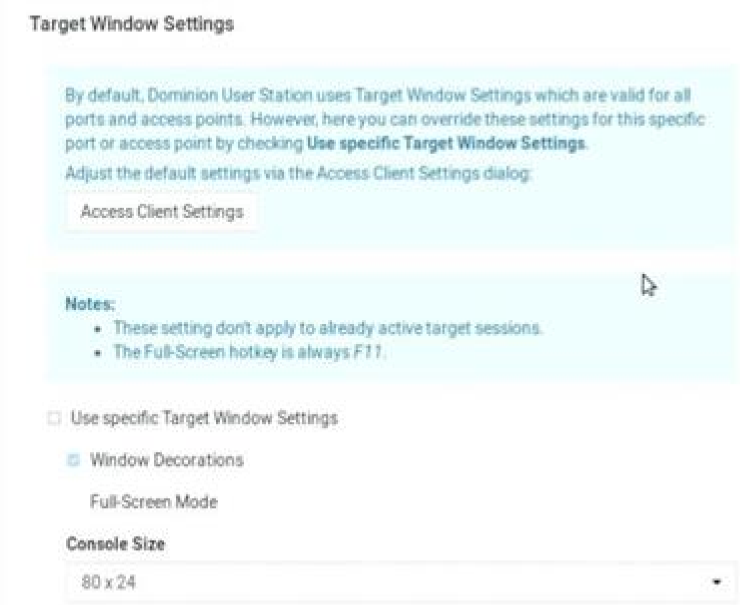
By default, Dominion User Station uses Target Window Settings which are valid for all ports and access points. However, here you can override these settings for this specific port or access point by checking **Use specific Target Window Settings**.

Adjust the default settings via the Access Client Settings dialog:

Notes:

- These setting don't apply to already active target sessions.
- To leave Full-Screen Mode, press the Full-Screen hotkey (*Ctrl+Alt+F* by default) in the Client.
- To launch the session in Full-Screen mode, an according hotkey must be configured, or the Tool Bar must be activated. Otherwise, users would be locked in into Full-Screen.

Serial Target:



Target Window Settings

By default, Dominion User Station uses Target Window Settings which are valid for all ports and access points. However, here you can override these settings for this specific port or access point by checking **Use specific Target Window Settings**.

Adjust the default settings via the Access Client Settings dialog:

Notes:

- These setting don't apply to already active target sessions.
- The Full-Screen hotkey is always *F11*.

□ Use specific Target Window Settings

☑ Window Decorations

Full-Screen Mode

Console Size

80 x 24

1. Click Save.

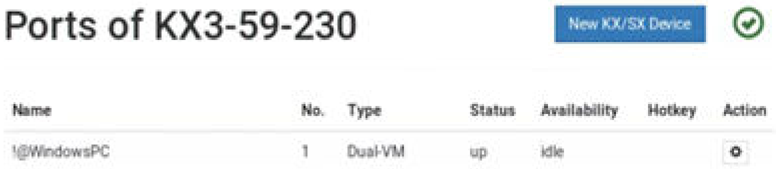
Unavailable Hotkeys for Port Access

The following hotkey combinations are not available for accessing KVM/Serial ports.

Unavailable hot keys	Notes
Ctrl + Shift + <number>	<number> = 0 to 9
Ctrl + Shift + Alt + <number>	
Shift + Alt + <number>	
Ctrl + Alt + <function_key>	<function_key> = F1 to F12
Ctrl + Alt + C Ctrl + Alt + F Ctrl + Alt + L Ctrl + Alt + M Ctrl + Alt + N	These hotkeys can be used if you first disable them as User Station hotkeys.

Port Data Retrieval Status

An icon is displayed in the top-right corner of the Ports section in the User Station Configuration window. This icon indicates the data retrieval status of the KVM/Serial ports on the selected KVM/Serial switch.



Ports of KX3-59-230

Name	No.	Type	Status	Availability	Hotkey	Action
\@WindowsPC	1	Dual-VM	up	idle		⚙

Click this icon to view additional information.

The icon changes depending on the current retrieval status of KVM port information.

Icon	Port data retrieval state
✓	Port information on the selected KVM/Serial switch is accessible.
⚠	Port information on the selected KVM/Serial switch is NOT accessible. Possible causes may include: • Incorrect user credentials are entered for the KVM/Serial switch. • The presented certificate of the device cannot be verified, when certificate checking is enabled • Network connectivity issues. For example, the selected KVM/Serial switch is not connected to the network.
🚫	Port information on the selected KVM/Serial switch is NOT accessible because NO user credentials have been entered for this KVM/Serial switch. See Editing KVM and Serial Switches (on page 85).

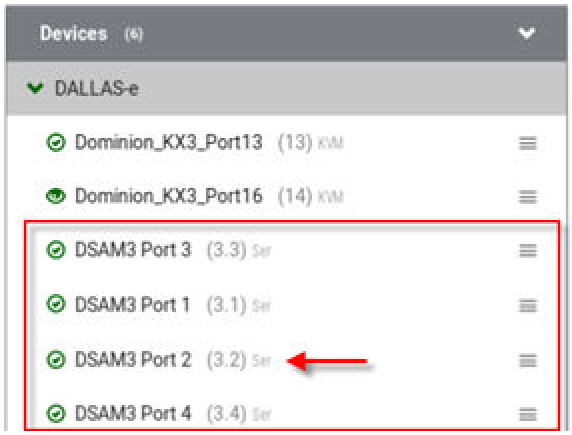
The port data retrieval status will affect the device and port status shown in the Port Navigator window. See Identifying States of KVM/Serial Switches and Ports (on page 118).

Dominion Serial Access Module (DSAM) Ports

Dominion User Station supports serial targets through direct serial connection of SX2 devices or via Dominion Serial Access Modules (DSAM) connected to the KX III or KX IV switch. DSAM ports appear on the User Station when the KX device is added, similar to KVM ports.

Your serial ports are labeled "Ser" to show the port type. The number label of a DSAM port is a combination of the DSAM-module-number and the serial port-number. For example, serial port 2 on DSAM-module 3 is shown as 3.2.

Serial ports appear in the Devices tab and the Targets tab. You can launch a serial session from either tab.



Devices (6)

DALLAS-e

Dominion_KX3_Port13 (13) KVM

Dominion_KX3_Port16 (14) KVM

DSAM3 Port 3 (3.3) Ser

DSAM3 Port 1 (3.1) Ser

DSAM3 Port 2 (3.2) Ser

DSAM3 Port 4 (3.4) Ser

Managing Targets and Access Methods

Targets and Access methods are managed in the User Station Configuration window. See User Station Configuration (on page 81).

The Targets and Access methods feature offers different ways to view, manage, and connect to targets, using KVM/Serial port access, RDP, SSH, and VNC. You can also add access to a Web applications or ESXi virtual machines. These methods provide access to any KVM/Serial, non-KVM serial targets such as server, network switch, HVAC or other devices connected to your network.

Dominion User Station Multi KVM access (M-KVM) method makes it possible to configure two or more Dominion KX4-101 KVM ports into a virtual Multi Monitor KVM target.

When a KVM/Serial switch is added, Dominion User Station automatically detects ports and creates a Target with a KVM/Serial access method for each port. The Targets section of the User Station Configuration and the Device section of Ports Navigator populates with this information and available to access. KVM/Serial access cannot be added manually, it is always based on access to the KVM/Serial switches .

The Dominion User Station provides full capability of RDP software which captures the mouse and keyboard inputs from the local computer and sends them to the remote target. The RDP client has a "grab keyboard" feature which is available by default but you can turn it off. This feature allows you to grab all keyboard inputs including the power button and other keyboard shortcuts from the local Operating System, which are processed by the target and not by the Dominion User Station. RDP gives uninterrupted access to the video and audio of target applications as well.

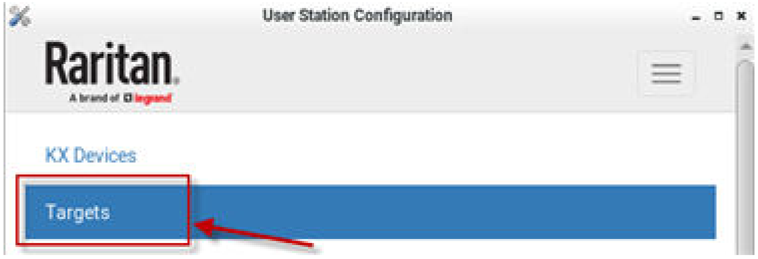
Note: If you're working in CC-SG mode, your user experience is different. See Navigator with CC-SG Integration (on page 185).

In This Chapter

Adding Targets and Access Methods

► *To add targets and access methods:*

1. In Main Menu, open the User Station Configuration window, then click Targets.

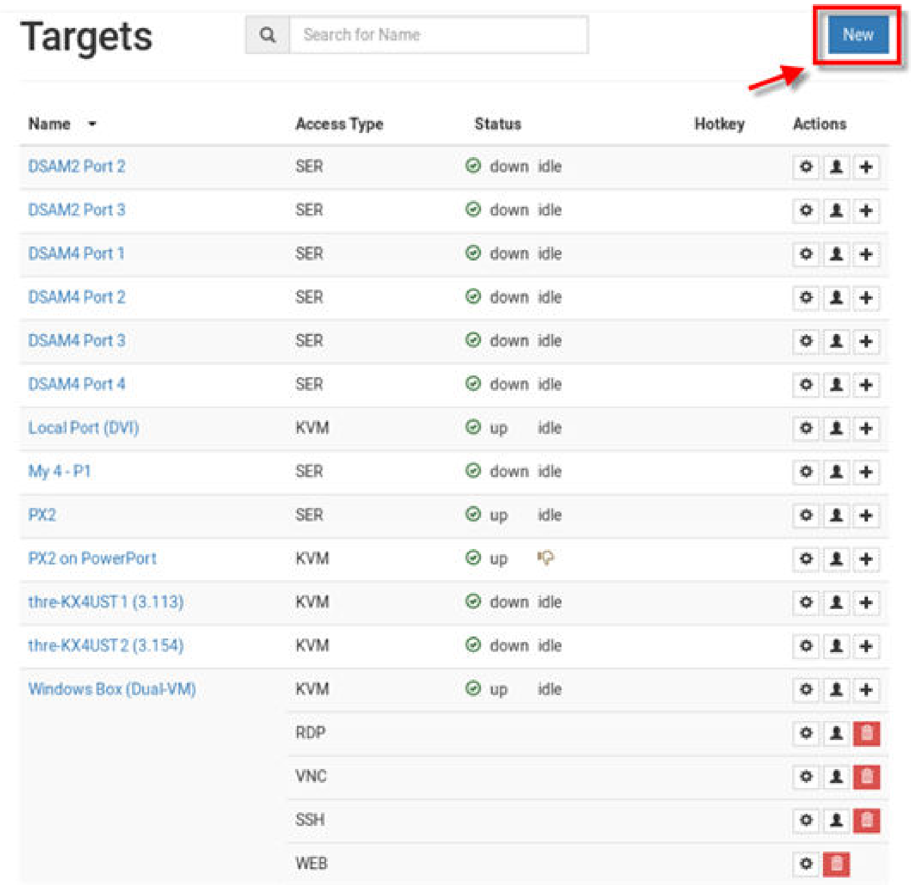


User Station Configuration

KX Devices

Targets

2. The Targets list appears. Click New.



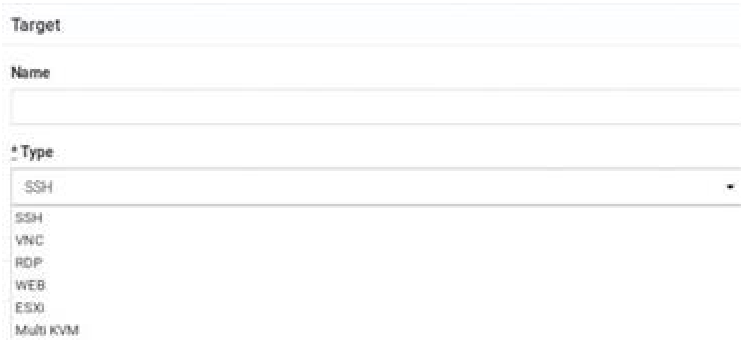
Targets

Search for Name

New

Name	Access Type	Status	Hotkey	Actions
DSAM2 Port 2	SER	✓ down idle		⚙ 👤 +
DSAM2 Port 3	SER	✓ down idle		⚙ 👤 +
DSAM4 Port 1	SER	✓ down idle		⚙ 👤 +
DSAM4 Port 2	SER	✓ down idle		⚙ 👤 +
DSAM4 Port 3	SER	✓ down idle		⚙ 👤 +
DSAM4 Port 4	SER	✓ down idle		⚙ 👤 +
Local Port (DVI)	KVM	✓ up idle		⚙ 👤 +
My 4 - P1	SER	✓ down idle		⚙ 👤 +
PX2	SER	✓ up idle		⚙ 👤 +
PX2 on PowerPort	KVM	✓ up		⚙ 👤 +
thre-KX4UST 1 (3.113)	KVM	✓ down idle		⚙ 👤 +
thre-KX4UST 2 (3.154)	KVM	✓ down idle		⚙ 👤 +
Windows Box (Dual-VM)	KVM	✓ up idle		⚙ 👤 +
	RDP			⚙ 👤 🗑
	VNC			⚙ 👤 🗑
	SSH			⚙ 👤 🗑
	WEB			⚙ 🗑

3. In the Add Access page, you will name the Target, and add the first access method.
    - Name: Enter a name for the target.
    - Type: Select the type of access method.
        - SSH
        - VNC
        - RDP
        - WEB
        - ESXi
        - Multi KVM

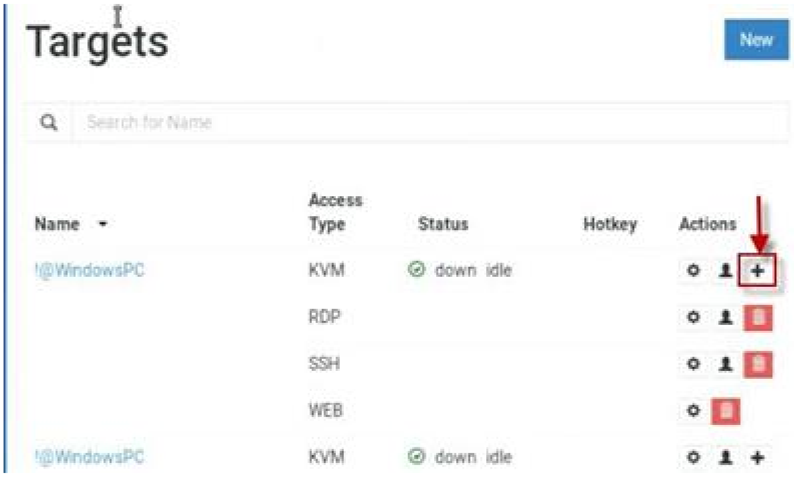


4. Next steps vary based on Access Type.
   - SSH, VNC, and RDP Access (on page 100)
   - WEB Access (on page 101)
   - ESXi Access (on page 102)
   - Multi KVM Access with Dominion KX4-101 devices (on page 104)

► *To add targets and access methods to an existing target:*

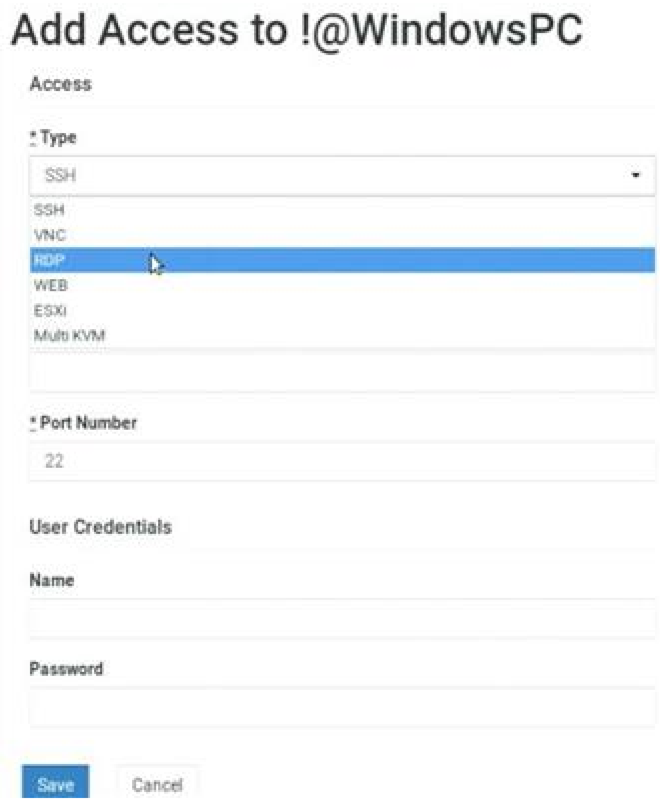
1. In Main Menu, open the User Station Configuration window, then click Targets.

2. The Targets list appears. Click ✚ button in front of the target.



Name	Access Type	Status	Hotkey	Actions
!@WindowsPC	KVM	✓ down idle		⚙ 👤 +
	RDP			⚙ 👤 🗑
	SSH			⚙ 👤 🗑
	WEB			⚙ 🗑
!@WindowsPC	KVM	✓ down idle		⚙ 👤 +

3. Fill out access details and click Save.



Add Access to !@WindowsPC

Access

* Type

SSH

* Port Number

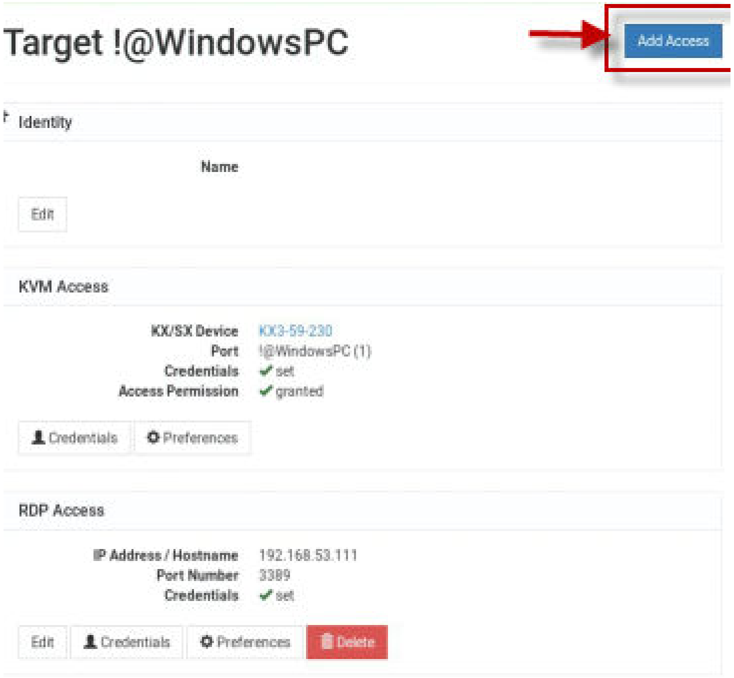
22

User Credentials

Name

Password

4. Click Add Access to add multiple access methods to the target.



Target !@WindowsPC

Identity

Name

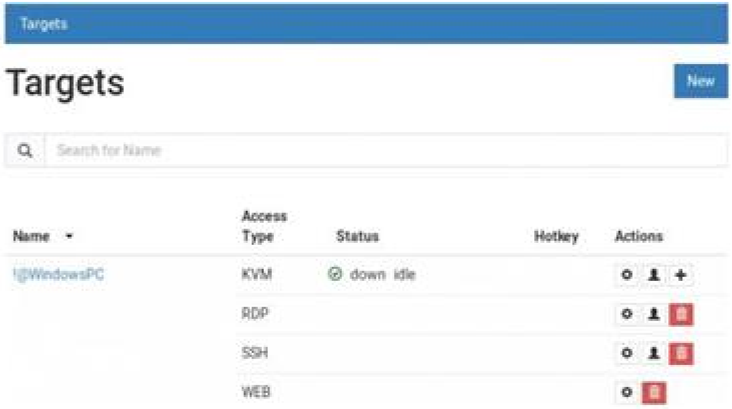
KVM Access

KX/SX Device	KX3-59-230
Port	!@WindowsPC (1)
Credentials	✓ set
Access Permission	✓ granted

RDP Access

IP Address / Hostname	192.168.53.111
Port Number	3389
Credentials	✓ set

5. All Access Types list appears.

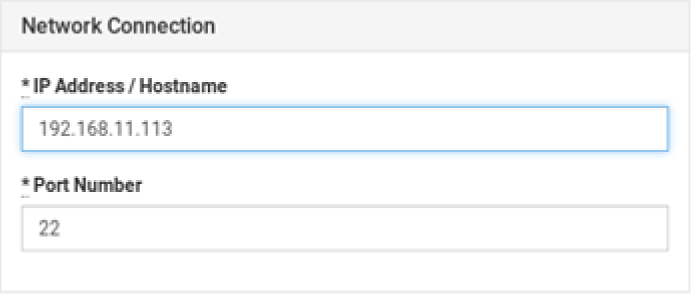


Targets

Name	Access Type	Status	Hotkey	Actions
!@WindowsPC	KVM	down idle		
	RDP			
	SSH			
	WEB			

SSH, VNC, and RDP Access

1. Add a target, then add the access method: Adding Targets and Access Methods (on page 96).
2. When Type is selected as: SSH, VNC, or RDP, the similar information is required.
   - IP Address/Hostname: Enter the IP or hostname for the target.
   - Port Number: The default port number for the access type is populated automatically, but can be changed.


Network Connection

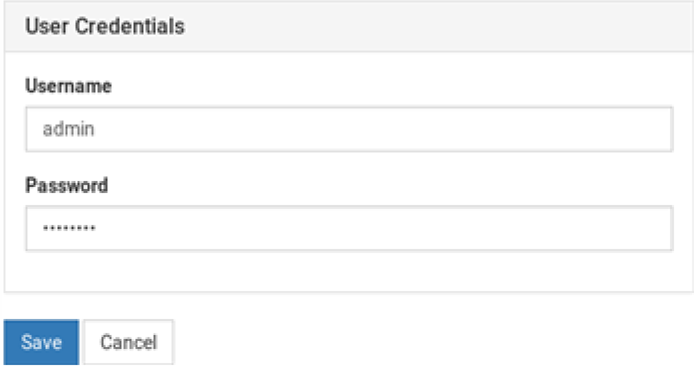
* IP Address / Hostname

192.168.11.113

* Port Number

22

- User Credentials: Enter the user name and password as required for the access type. *VNC requires password only.


User Credentials

Username

admin

Password

••••••••

3. Click Save. SSH/VNC/RDP access is added to the target and a list of all current access methods with options for editing displayed.

WEB Access

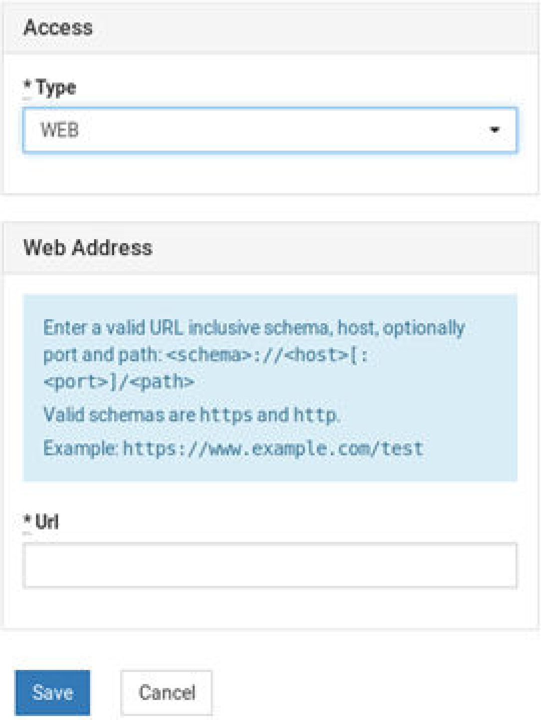
The WEB access method allows you to launch a web application in the Dominion User Station's own web client. This can be used to launch the Remote Control feature to control another User Station, or to access the web user interface of another KVM device.

See Remote Control via Web Browser (on page 212). The web client offers simple navigation only, and does not support Java, plugins, file upload/download, audio/video, webcams/microphones, opening new windows or tabs, or other advanced features. Single sign-on is not supported, so you must enter credentials each time you launch the WEB interface.

To launch WEB access, you must have the WEB Access privilege. To configure WEB access, you must have Device Administration or System Administration privilege.

1. Add a target, then add the access method: Adding Targets and Access Methods (on page 96).
2. Select WEB as the Access Type.
3. Enter the URL following this format: <schema>://<host>[: <port>]/<path>

For example: https://www.example.com/test


Access

* Type: WEB

Web Address

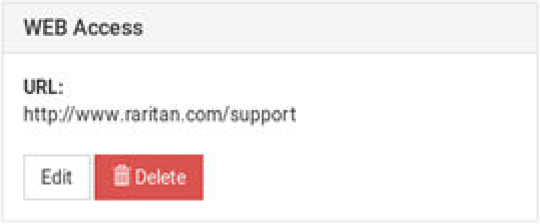
Enter a valid URL inclusive schema, host, optionally port and path: `<schema>://<host>[:<port>]/<path>`

Valid schemas are `https` and `http`.

Example: `https://www.example.com/test`

* Url

4. Click Save. WEB access is added to the target and a list of all current access methods with options for editing displays.


WEB Access

URL:
http://www.raritan.com/support

ESXi Access

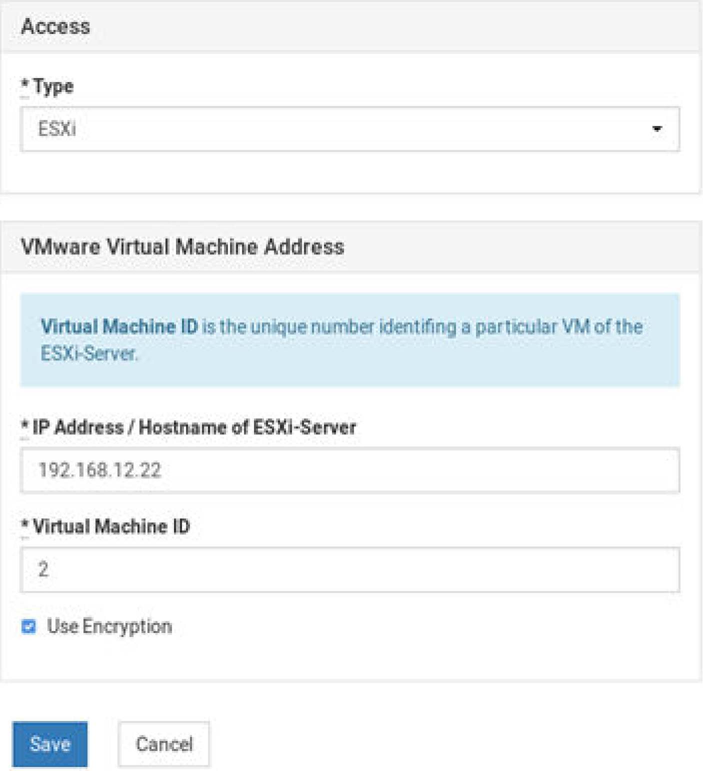
The ESXi access method allows you to access and control VMware ESXi virtual machines from the User Station Navigator using the VMware “ESXi Embedded Host Client.” The ESXi server must support the ESXi Embedded Host Client and must be version 6.0 or higher. Upon launching, the Remote Console of the virtual machine is shown. Single sign-on is not supported, so you must enter credentials each time you launch the interface.

To launch ESXi Access, you must have the ESXi Access privilege. To configure ESXi access, you must have Device Administration or System Administration privilege.

Note: These instructions apply to standalone mode. If you're working in CC-SG mode, your user experience is different. See Navigator with CC-SG Integration (on page 185).

Standalone ESXi connections not currently supported to ESXi version 6.5 or later.

1. Add a target, then add the access method: Adding Targets and Access Methods (on page 96)
2. Select ESXi as the Access Type.



Access

* Type

ESXi

VMware Virtual Machine Address

Virtual Machine ID is the unique number identifing a particular VM of the ESXi-Server.

* IP Address / Hostname of ESXi-Server

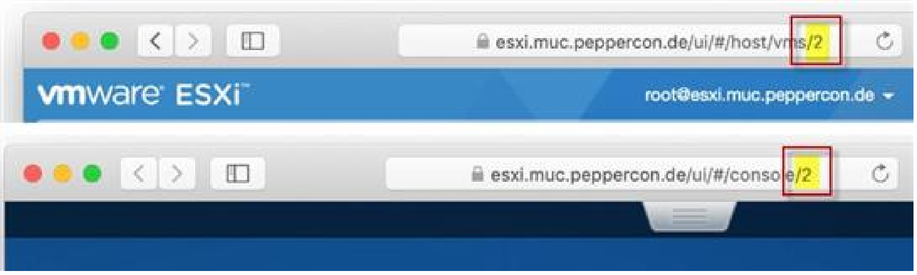
192.168.12.22

* Virtual Machine ID

2

☑ Use Encryption

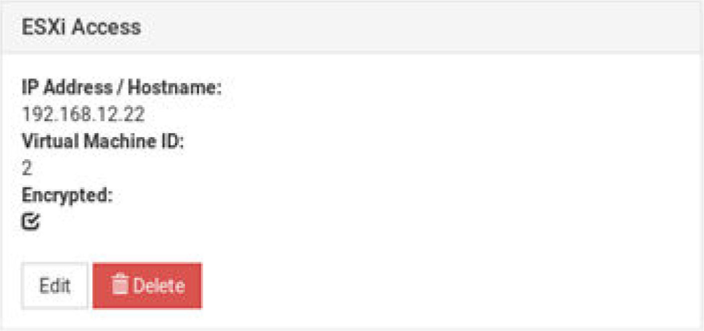
3. Enter the IP Address or Hostname of the ESXi Server.
4. Enter the Virtual Machine ID. The ID can be found in the address bar of a browser where the URL to the virtual machine is displayed. The ID is the last component in the URL. See example images in host view and remote console view.



esxi.muc.peppercon.de/ui/#/host/vms/2

esxi.muc.peppercon.de/ui/#/console/2

5. Select Use Encryption if you want to HTTPS as protocol for accessing the ESXi Remote Console.
6. Click Save. ESXi access is added to the target and a list of all access methods is displayed.



ESXi Access

IP Address / Hostname:
192.168.12.22

Virtual Machine ID:
2

Encrypted:
☑

Multi KVM Access with Dominion KX4-101 devices

You can configure two or more KVM ports as a virtual multi-monitor KVM target. The Dominion User Station supports up to six displays connected to the same target, with each display having its own dedicated KX4-101. Each KX4-101 is added to the Dominion User Station and then a new M-KVM target is created from the KVM ports of the KX4-101s. These independent ports are treated as a multi-monitor port group.

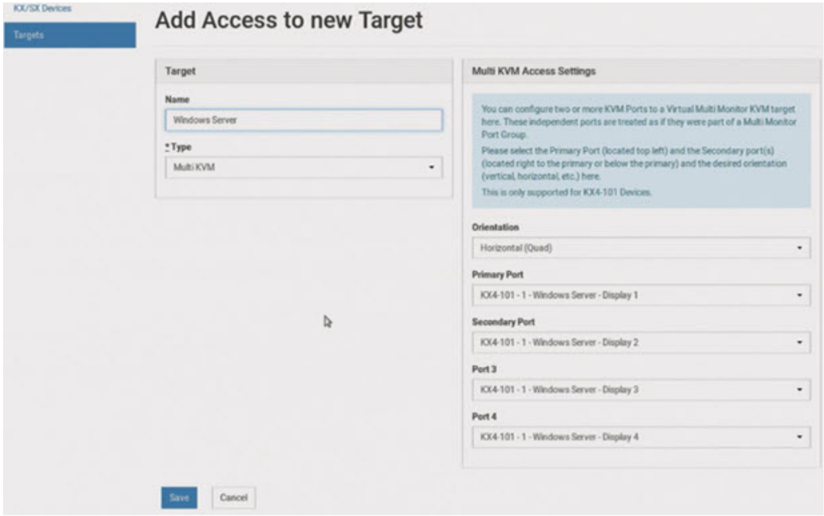
Important: Only Dominion KX4-101 ports connected to the same target PC are supported. The screen configuration on the target PC must match the configuration selected in the Dominion User Station.

To configure the Multi KVM access method, select the KVM ports that you want to group virtually, and set one of the supported orientations. Once Multi KVM access is created, these multi-monitor access points will be marked as "M-KVM" in the Navigator. The KVM ports included will still also be listed as separate ports in the Navigator. It is possible to connect to the single ports independently, but not recommended as functionality of mouse control is limited to the primary port. The Multi KVM targets cannot be added to the Port Scanner, but you can still add the single ports.

NOTE: It is important that the orientation, number of ports, and KVM port selection on the Dominion User Station match the display configuration. The following example image shows the Dominion User Station and target operation system. Display configuration for a Windows Server with 4 displays positioned horizontally. Use the Identify button on the Windows operating system to confirm that the display positioning on the target and Dominion User Station match.

Supported Orientations:

- Horizontal Dual
- Vertical Dual
- Horizontal Triple
- Vertical Triple
- Horizontal Quad
- Vertical Quad
- Quad 2x2
- Horizontal 5 Ports
- Vertical 5 Ports
- Horizontal 6 Ports
- Vertical 6 Ports
- 2x3 - 6 Ports
- 3x2 - 6 Ports



Add Access to new Target

Target

Name: Windows Server

* Type: Multi KVM

Multi KVM Access Settings

You can configure two or more KVM Ports to a Virtual Multi Monitor KVM target here. These independent ports are treated as if they were part of a Multi Monitor Port Group.

Please select the Primary Port (located top left) and the Secondary port(s) (located right to the primary or below the primary) and the desired orientation (vertical, horizontal, etc.) here.

This is only supported for KX4-101 Devices.

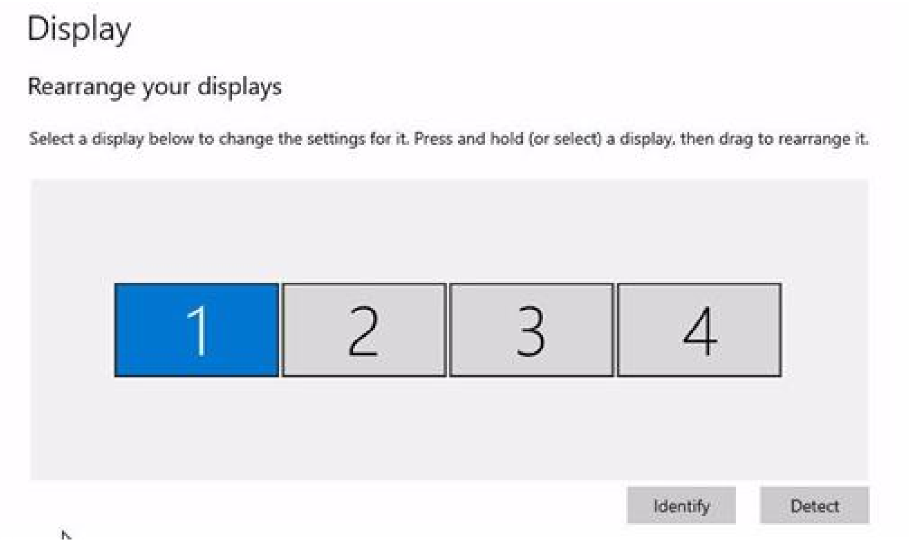
Orientation: Horizontal (Quad)

Primary Port: KX4-101 - 1 - Windows Server - Display 1

Secondary Port: KX4-101 - 1 - Windows Server - Display 2

Port 3: KX4-101 - 1 - Windows Server - Display 3

Port 4: KX4-101 - 1 - Windows Server - Display 4



Display

Rearrange your displays

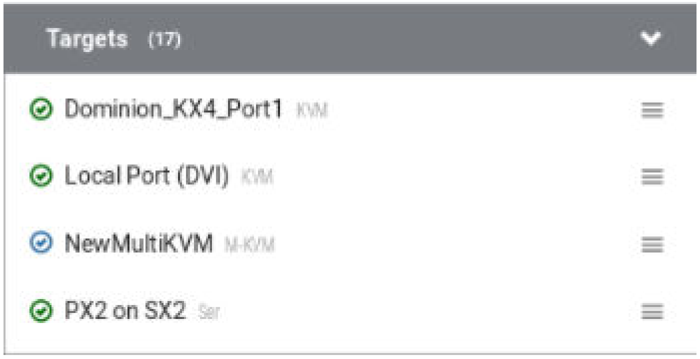
Select a display below to change the settings for it. Press and hold (or select) a display, then drag to rearrange it.

► *To configure Multi KVM Access:*

1. Add KX4-101s for target, then add the access method: Adding Targets and Access Methods (on page 96).
2. Select Multi KVM as th Access Type.
3. Select the orientation for the port group.
4. In the Primary Port and Secondary Port fields, you must select the KVM ports as follows:

- Primary Port: The KVM port located in the top left of the orientation of ports.
- Secondary Port: The KVM port located directly to the right of the primary, or directly below the primary.
- Then, for configurations with more than 2 ports, select Ports 3, 4, 5, and 6. Fields open as needed for each orientation.

5. Click Save. The new M-KVM target/access is added to the Targets list.

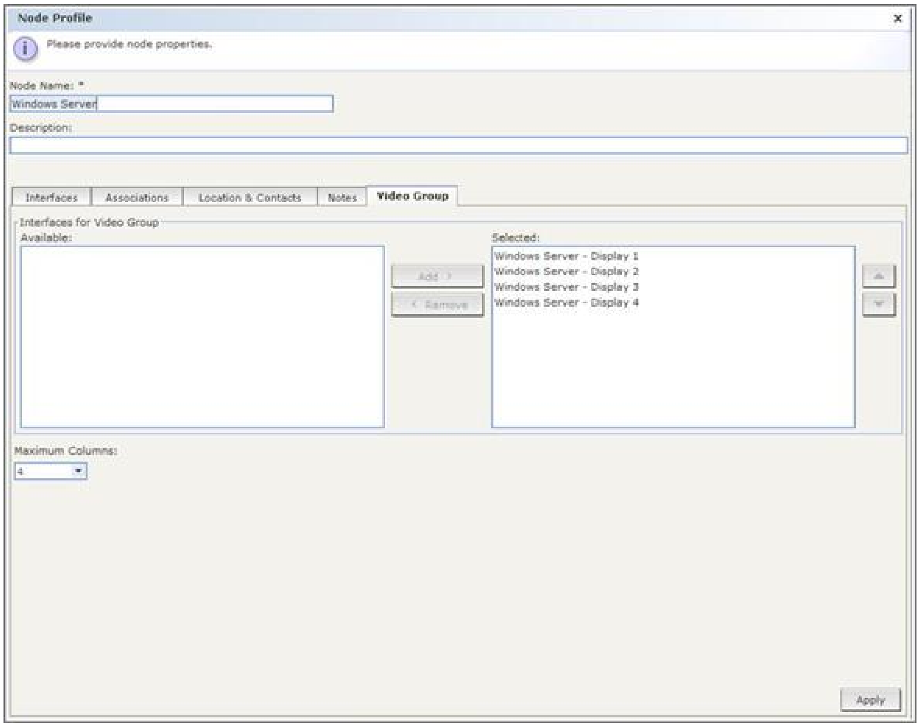


Targets (17)

- Dominion_KX4_Port1 KVM
- Local Port (DVI) KVM
- NewMultiKVM M-KVM
- PX2 on SX2 Ser

Adding Multi KVM to a Node Profile of CCSG

If the Dominion User Station is configured for CC-SG login, then the KX4-101s ports should be added to the same node and positioned to match the display configuration on the target server. Refer to the CC-SG Administrators Guide for detailed information.



Node Profile

Please provide node properties.

Node Name: * Windows Server

Description:

Interfaces | Associations | Location & Contacts | Notes | Video Group

Interfaces for Video Group

Available:

Selected:

Windows Server - Display 1
Windows Server - Display 2
Windows Server - Display 3
Windows Server - Display 4

Maximum Columns: 4

Note: Set the appropriate mouse mode to get best mouse response. Mouse Mode Support for Dual Video Port Groups and M-KVM Targets (on page 265)

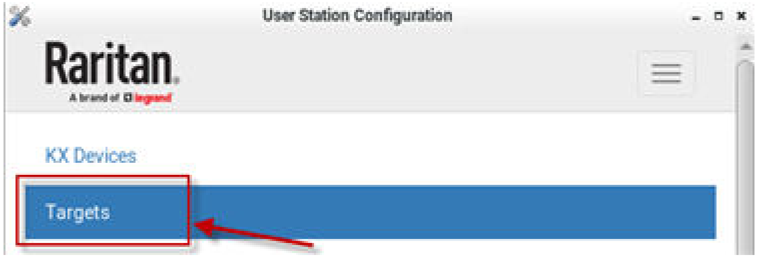
Editing and Deleting Targets and Access Methods

Targets and Access methods are listed in the User Station Configuration window.

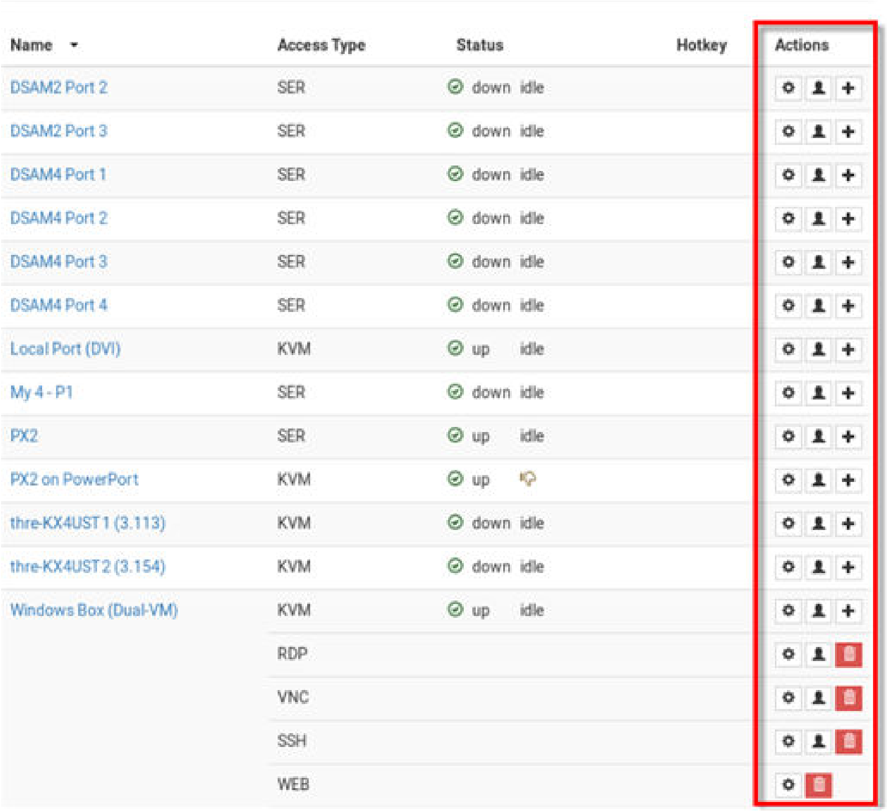
You cannot delete KVM/Serial access, but all other access methods can be deleted. A Target must have at least one access method, or the target is deleted.

► *To edit targets and access methods:*

1. In Main Menu, open the User Station Configuration window, then click Targets.



2. The Targets list appears. Use the Actions icons to edit as needed.



Name ▾	Access Type	Status	Hotkey	Actions
DSAM2 Port 2	SER	✓ down idle		⚙ 👤 +
DSAM2 Port 3	SER	✓ down idle		⚙ 👤 +
DSAM4 Port 1	SER	✓ down idle		⚙ 👤 +
DSAM4 Port 2	SER	✓ down idle		⚙ 👤 +
DSAM4 Port 3	SER	✓ down idle		⚙ 👤 +
DSAM4 Port 4	SER	✓ down idle		⚙ 👤 +
Local Port (DVI)	KVM	✓ up idle		⚙ 👤 +
My 4 - P1	SER	✓ down idle		⚙ 👤 +
PX2	SER	✓ up idle		⚙ 👤 +
PX2 on PowerPort	KVM	✓ up		⚙ 👤 +
thre-KX4UST 1 (3.113)	KVM	✓ down idle		⚙ 👤 +
thre-KX4UST 2 (3.154)	KVM	✓ down idle		⚙ 👤 +
Windows Box (Dual-VM)	KVM	✓ up idle		⚙ 👤 +
	RDP			⚙ 👤 🗑
	VNC			⚙ 👤 🗑
	SSH			⚙ 👤 🗑
	WEB			⚙ 🗑

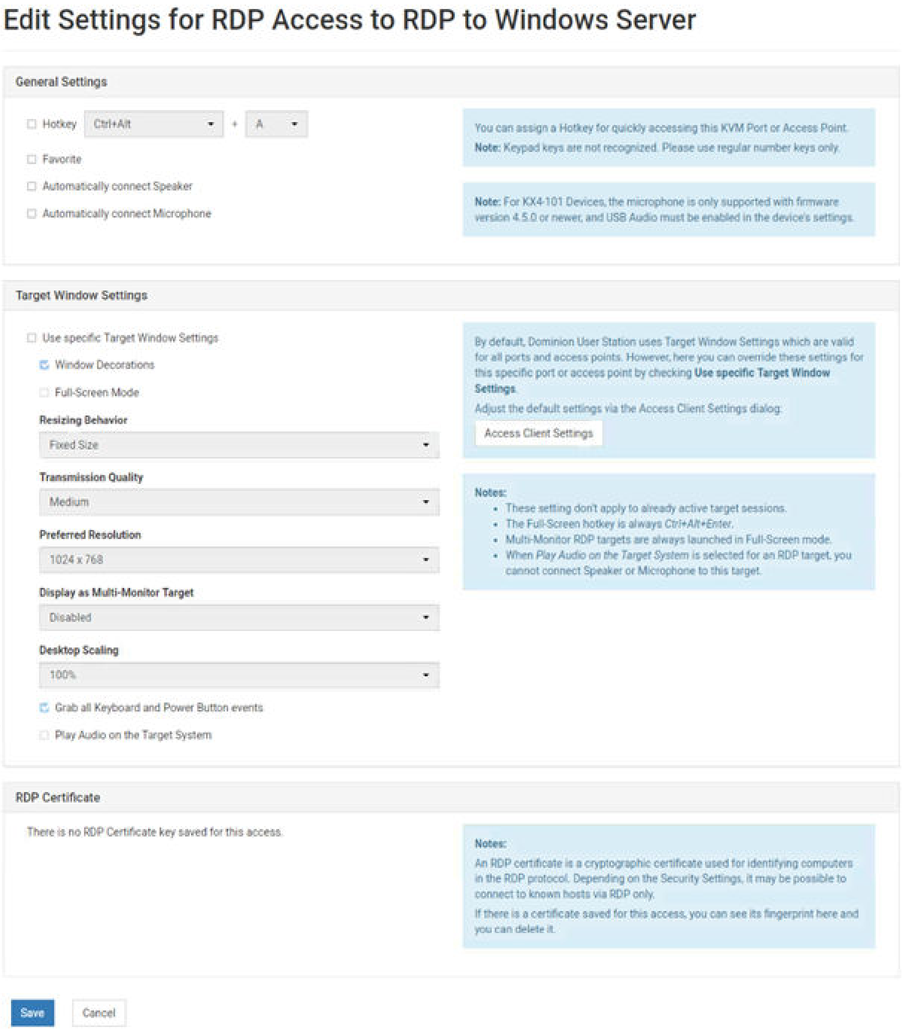
⚙	Edit settings for a port or access point. See Configuring KVM and Serial Ports (on page 89) for details on KVM port settings. See Configuring Access Settings (on page 108) for all other types.
👤	Edit user credentials for any access method.
🗑	Delete an access method. You cannot delete KVM or SER access. Deleting the last access method deletes the target.
+	Add an access method to the target.

Configuring Access Settings

For each access type, you can configure General and Target Window Settings. Most settings are shared among all types of targets, but there are some unique settings in each category. Unique settings for each access type are outlined in the examples below.

By default, Dominion User Station uses Target Window Settings that are valid for all ports and access points. You can override these settings for a specific port/access point by selecting the "Use Specific Target Window Settings". For details on all settings, and to set defaults, see Access Client Settings (on page 135)

► *RDP Access Settings:*



Edit Settings for RDP Access to RDP to Windows Server

General Settings

□ Hotkey Ctrl+Alt + A

□ Favorite

□ Automatically connect Speaker

□ Automatically connect Microphone

You can assign a Hotkey for quickly accessing this KVM Port or Access Point.

Note: Keypad keys are not recognized. Please use regular number keys only.

Note: For KX4-101 Devices, the microphone is only supported with firmware version 4.5.0 or newer, and USB Audio must be enabled in the device's settings.

Target Window Settings

□ Use specific Target Window Settings

☑ Window Decorations

□ Full-Screen Mode

Resizing Behavior

Fixed Size

Transmission Quality

Medium

Preferred Resolution

1024 x 768

Display as Multi-Monitor Target

Disabled

Desktop Scaling

100%

☑ Grab all Keyboard and Power Button events

□ Play Audio on the Target System

By default, Dominion User Station uses Target Window Settings which are valid for all ports and access points. However, here you can override these settings for this specific port or access point by checking **Use specific Target Window Settings**.

Adjust the default settings via the Access Client Settings dialog:

Notes:

- These setting don't apply to already active target sessions.
- The Full-Screen hotkey is always *Ctrl+Alt+Enter*.
- Multi-Monitor RDP targets are always launched in Full-Screen mode.
- When *Play Audio on the Target System* is selected for an RDP target, you cannot connect Speaker or Microphone to this target.

RDP Certificate

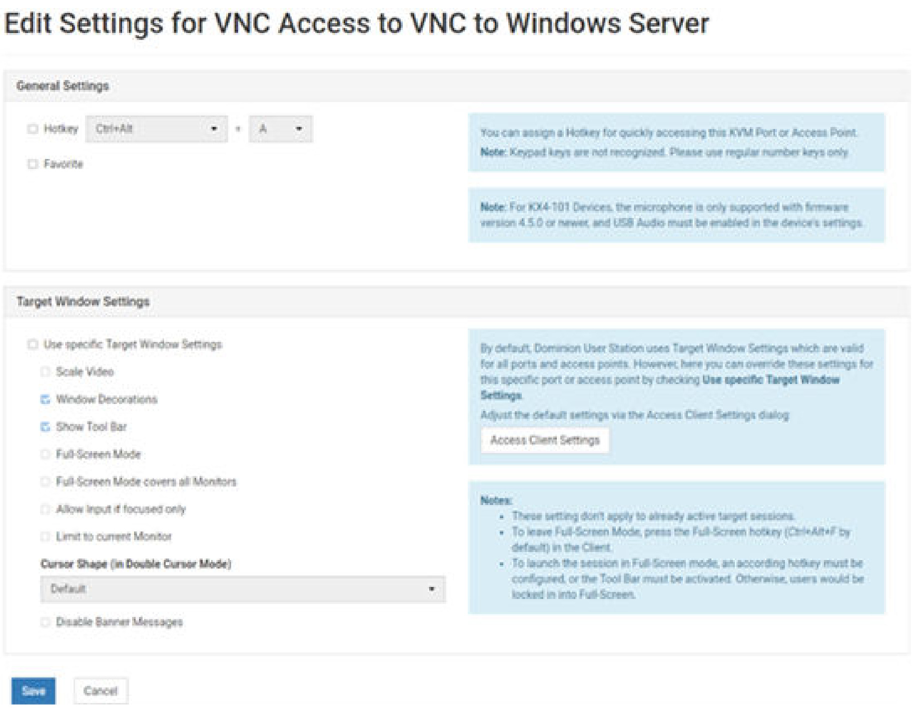
There is no RDP Certificate key saved for this access.

Notes:

An RDP certificate is a cryptographic certificate used for identifying computers in the RDP protocol. Depending on the Security Settings, it may be possible to connect to known hosts via RDP only.

If there is a certificate saved for this access, you can see its fingerprint here and you can delete it.

► *VNC Access Settings:*



Edit Settings for VNC Access to VNC to Windows Server

General Settings

□ Hotkey Ctrl+Alt + A

□ Favorite

You can assign a Hotkey for quickly accessing this KVM Port or Access Point.

Note: Keypad keys are not recognized. Please use regular number keys only.

Note: For KX4-101 Devices, the microphone is only supported with firmware version 4.5.0 or newer, and USB Audio must be enabled in the device's settings.

Target Window Settings

□ Use specific Target Window Settings

□ Scale Video

☑ Window Decorations

☑ Show Tool Bar

□ Full-Screen Mode

□ Full-Screen Mode covers all Monitors

□ Allow Input if focused only

□ Limit to current Monitor

Cursor Shape (in Double Cursor Mode)

Default

□ Disable Banner Messages

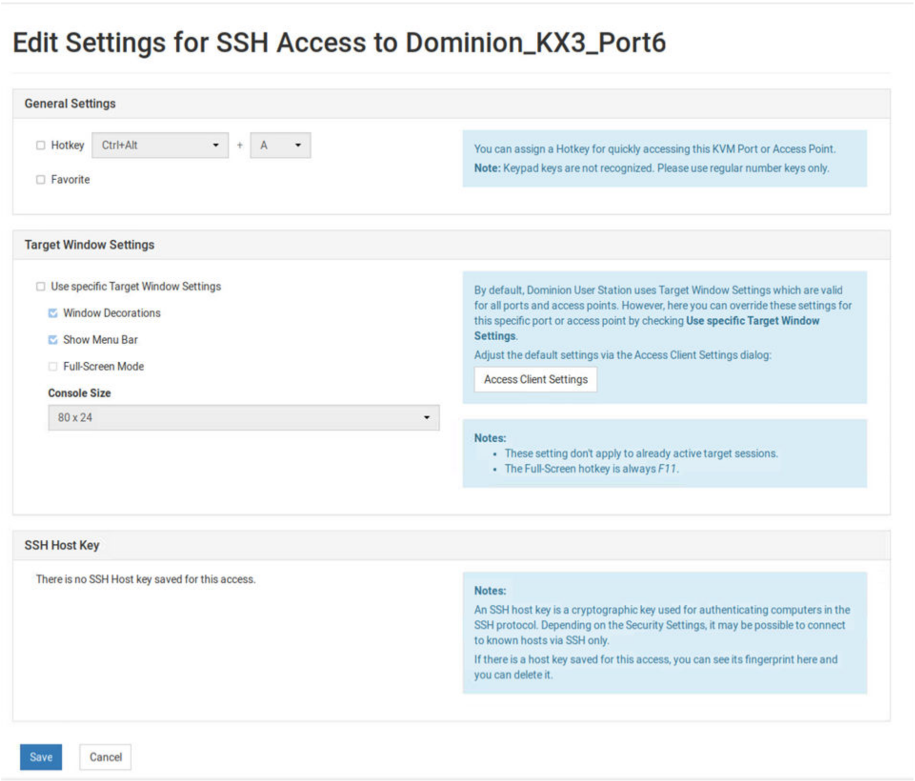
By default, Dominion User Station uses Target Window Settings which are valid for all ports and access points. However, here you can override these settings for this specific port or access point by checking **Use specific Target Window Settings**.

Adjust the default settings via the Access Client Settings dialog

Notes:

- These setting don't apply to already active target sessions.
- To leave Full-Screen Mode, press the Full-Screen hotkey (Ctrl+Alt+F by default) in the Client.
- To launch the session in Full-Screen mode, an according hotkey must be configured, or the Tool Bar must be activated. Otherwise, users would be locked in into Full-Screen.

► *SSH Access Settings:*



Edit Settings for SSH Access to Dominion_KX3_Port6

General Settings

□ Hotkey Ctrl+Alt + A

□ Favorite

You can assign a Hotkey for quickly accessing this KVM Port or Access Point.

Note: Keypad keys are not recognized. Please use regular number keys only.

Target Window Settings

□ Use specific Target Window Settings

☑ Window Decorations

☑ Show Menu Bar

□ Full-Screen Mode

Console Size

80 x 24

By default, Dominion User Station uses Target Window Settings which are valid for all ports and access points. However, here you can override these settings for this specific port or access point by checking **Use specific Target Window Settings**.

Adjust the default settings via the Access Client Settings dialog:

Notes:

- These setting don't apply to already active target sessions.
- The Full-Screen hotkey is always *F11*.

SSH Host Key

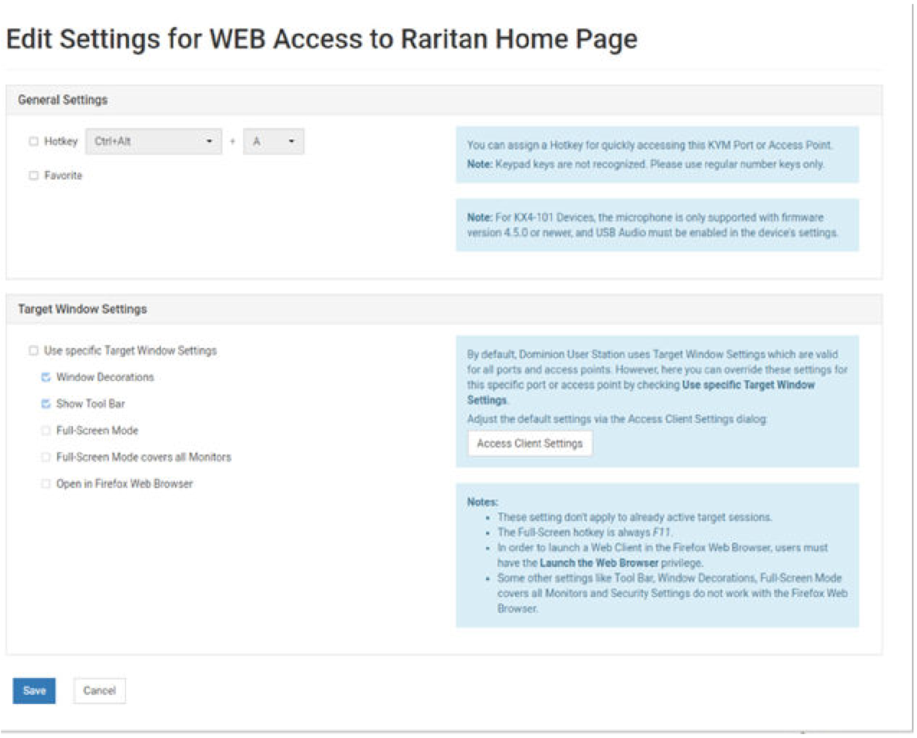
There is no SSH Host key saved for this access.

Notes:

An SSH host key is a cryptographic key used for authenticating computers in the SSH protocol. Depending on the Security Settings, it may be possible to connect to known hosts via SSH only.

If there is a host key saved for this access, you can see its fingerprint here and you can delete it.

► *WEB Access Settings:*



Edit Settings for WEB Access to Raritan Home Page

General Settings

□ Hotkey Ctrl+Alt + A

□ Favorite

You can assign a Hotkey for quickly accessing this KVM Port or Access Point.

Note: Keypad keys are not recognized. Please use regular number keys only.

Note: For KX4-101 Devices, the microphone is only supported with firmware version 4.5.0 or newer, and USB Audio must be enabled in the device's settings.

Target Window Settings

□ Use specific Target Window Settings

☑ Window Decorations

☑ Show Tool Bar

□ Full-Screen Mode

□ Full-Screen Mode covers all Monitors

□ Open in Firefox Web Browser

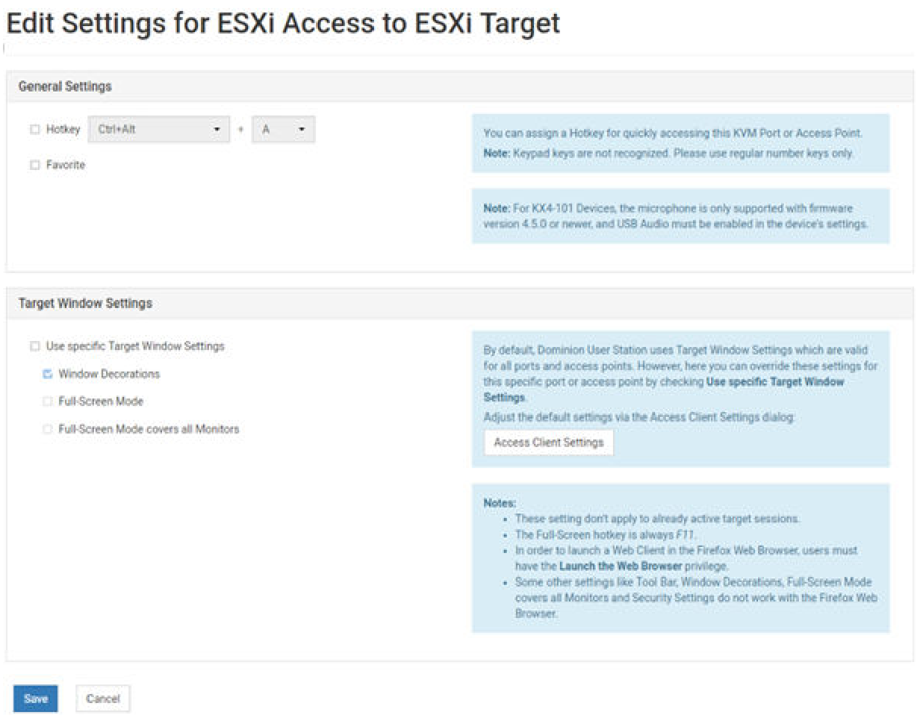
By default, Dominion User Station uses Target Window Settings which are valid for all ports and access points. However, here you can override these settings for this specific port or access point by checking **Use specific Target Window Settings**.

Adjust the default settings via the Access Client Settings dialog:

Notes:

- These setting don't apply to already active target sessions.
- The Full-Screen hotkey is always *F11*.
- In order to launch a Web Client in the Firefox Web Browser, users must have the **Launch the Web Browser** privilege.
- Some other settings like Tool Bar, Window Decorations, Full-Screen Mode covers all Monitors and Security Settings do not work with the Firefox Web Browser.

► *ESXi Access Settings:*



Edit Settings for ESXi Access to ESXi Target

General Settings

□ Hotkey Ctrl+Alt + A

□ Favorite

You can assign a Hotkey for quickly accessing this KVM Port or Access Point.

Note: Keypad keys are not recognized. Please use regular number keys only.

Note: For KX4-101 Devices, the microphone is only supported with firmware version 4.5.0 or newer, and USB Audio must be enabled in the device's settings.

Target Window Settings

□ Use specific Target Window Settings

☑ Window Decorations

□ Full-Screen Mode

□ Full-Screen Mode covers all Monitors

By default, Dominion User Station uses Target Window Settings which are valid for all ports and access points. However, here you can override these settings for this specific port or access point by checking **Use specific Target Window Settings**.

Adjust the default settings via the Access Client Settings dialog:

Notes:

- These setting don't apply to already active target sessions.
- The Full-Screen hotkey is always *F11*.
- In order to launch a Web Client in the Firefox Web Browser, users must have the **Launch the Web Browser** privilege.
- Some other settings like Tool Bar, Window Decorations, Full-Screen Mode covers all Monitors and Security Settings do not work with the Firefox Web Browser.

Known Limitations on Targets

There are some known limitations on how Target access sessions function compared to typical KVM Client sessions.

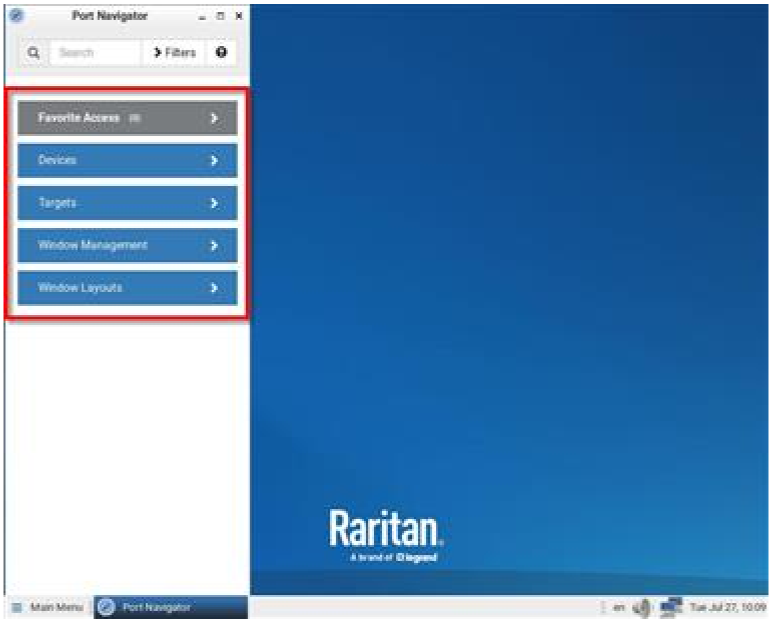
- When opening a session, "Open in new / Open in current" is available for KVM and VNC, RDP and SSH only support "Open in new".
- VNC: Only RFB protocol versions 3.3 to 3.8 are supported. Proprietary extensions and versions are not supported, for example:
  - RealVNC protocol version 4.x and 5.x
  - TightVNC tight authentication
  - UltraVNC authentication
  - Connections over TLS, which is proprietary for some VNC servers
- If RDP connections to Windows targets fail, check these settings. Open the Edit Group Policy tool from Control Panel or use the Windows Search dialog (Windows Key + R, then type in gpedit.msc). Browse to: Local Computer Policy>Computer Configuration>Administrative Templates>Windows Components>Remote Desktop Services>Remote Desktop Session Host>Remote Session Environment. Disable "Use the hardware default graphics adapter for all Remote Desktop Services sessions."
- The Dominion User Station embedded browser does not support:

- Java applets or Flash
- Pop-ups
- Auto-Fill
- Remember passwords
- Long-term cookies

Note: For enhanced web support, use Firefox Web Browser.

- The RDP client does not support virtual media, SmartCard authentication, and other USB devices.
- When RDP target is in focus the Dominion User Station can not be powered off from short press of power button. You need to either minimize the RDP client or move it in background to power off the Dominion User Station. However, if option "Grab all Keyboard and Power Button events" in Access Client settings is unchecked, this changes this behavior.

Navigation and Access



The Port Navigator contains three panels for accessing your ports and other targets:

- *Favorite Access*
- *Devices*
- *Targets*

And two panels for managing client windows:

- *Window Management*
- *Window Layouts*

The Navigator remembers the last-opened panel and returns to it when Navigator is opened again.

Note: When you are logged in as a CC-SG user, your user experience is different. See Navigator with CC-SG Integration (on page 185).

► *To access a KVM/Serial port in the Devices panel:*

1. Open the Devices panel. Once opened, the panel color turns gray.
2. Click a KVM/Serial switch.
3. Click a KVM or Serial port.

Note: The User Station CANNOT access a KVM port that is connected to a tiered KVM switch or a blade chassis server.

► *To access using the Targets panel:*

1. Open the Targets panel.
2. Click a target to access it by the default access method. See Port Navigator (on page 115) for details on multiple access methods and so on.

► *To use Window Management:*

1. Open the Window Management panel.
2. Click an option for arranging your open client windows. See Window Management (on page 20) for more details.

► *To use Window Layouts:*

1. Open the Window Layouts panel.
2. Click a window layout to open it. You must setup and save layouts before you can select them here. See Window Layouts (on page 151) for more details and configuration.

In This Chapter

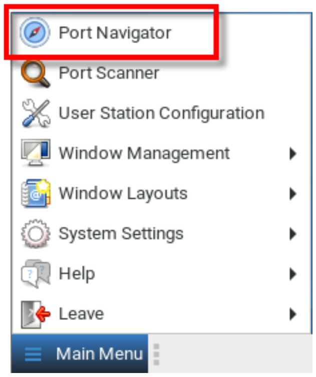
Port Navigator

The Port Navigator window is displayed by default.

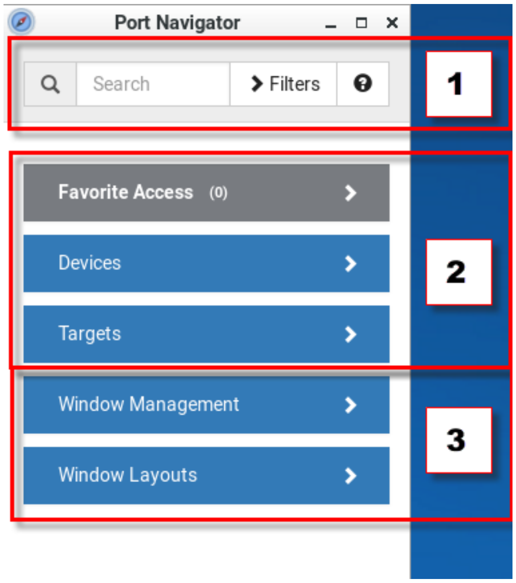
Note: When you are logged in as a CC-SG user, your user experience is different. See Navigator with CC-SG Integration (on page 185).

► *To launch Port Navigator:*

- Press *Ctrl+Alt+N*.
- OR choose Main Menu > Port Navigator.



The Port Navigator window opens.



- Search, Filters, and Help:

  Search:

  Searches for ports, switches, or targets and access points containing the search word(s). See Using Search (on page 120).

Additional Filters:

Determines which items are displayed in this window based on connectivity and availability. See Using Filters (on page 121).

Help ❓ :

Shows the colors and icons denoting KVM/Serial switch and port states. See Identifying States of KVM/Serial Switches and Ports (on page 118).

- Favorite Access, Devices, and Targets:

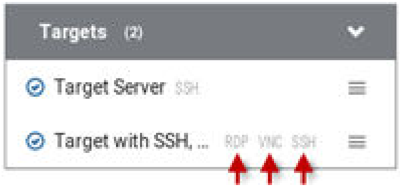
  Favorite Access panel:

  Shows a list of favorite targets you have configured. See Configuring KVM and Serial Ports (on page 89).

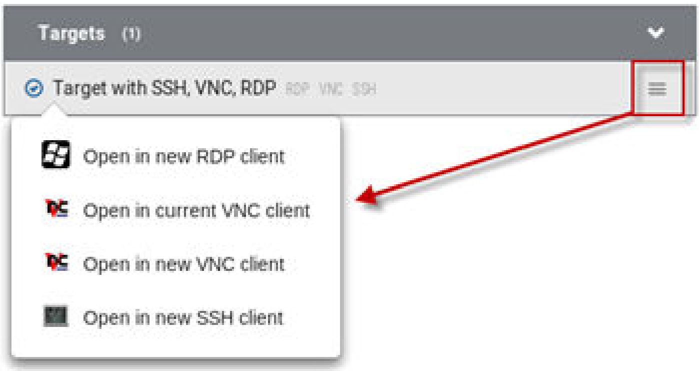
Devices panel:

- Shows a list of all KVM/Serial switches and ports, plus DSAM serial ports.
- Left-click on port opens the KVM or Serial client.
- Right-click on port opens the context menu.
- The default is to show switches whose status is Normal or Unknown. See Using Filters (on page 121).

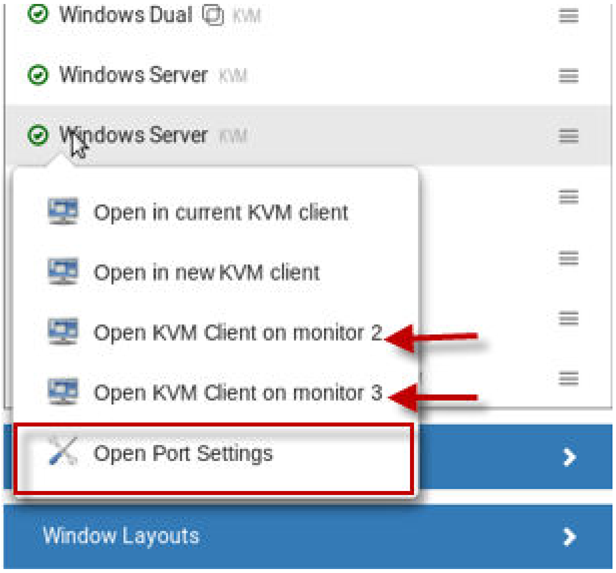
  Targets panel:
- Shows a list of all Targets. Targets with KVM/Serial access also show port status.
- Left-click on the Target opens the appropriate client. If there is more than one Access Point defined, the following hierarchy applies for which type of Access to use:
  - M-KVM
  - KVM
  - SER
  - RDP
  - VNC
  - SSH
  - WEB
  - ESXi
- Next to the Target name, all configured access methods are listed. Click the access method directly to open the appropriate client. If there are multiple Access Points of the same type defined then the most recently added Access Point is opened.



- Right-click on the Target, or click the hamburger menu to list all access methods defined for the Target.



- If a second or third monitor is available for KVM or VNC targets, you can choose to open the target in the second or third monitor. Also on the right-click menu, choose Open Port Settings to jump to configuration.

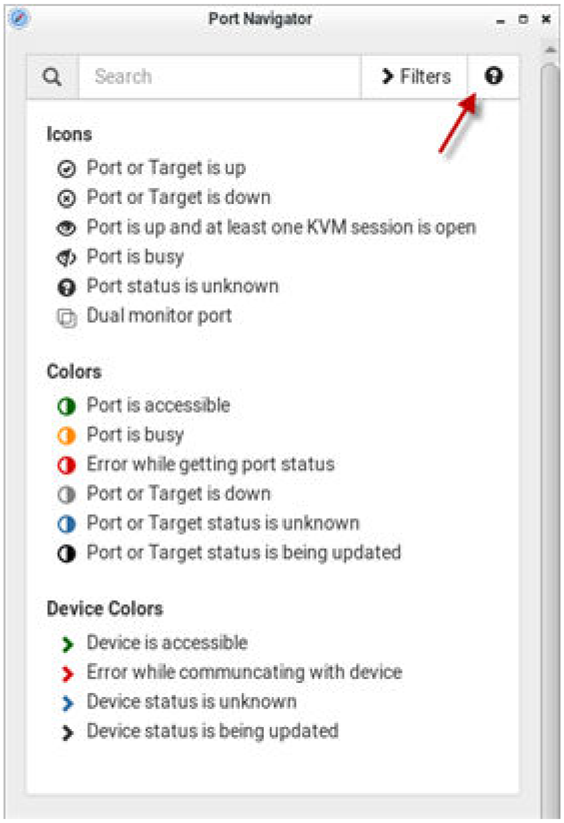


- The default is to show items whose status is Up. See Using Filters (on page 121).
- For dual port video, the name of the dual port video group is displayed instead of the port names. Dual port video groups whose primary port is Up will show in the list.
- Window Management and Window Layouts:
- Window Management: Manage open sessions with window management tools. See Window Management (on page 20).
- Window Layouts: Access saved layouts. See Window Layouts (on page 151).

Identifying States of KVM/Serial Switches and Ports

In the Port Navigator window, different icons and colors are applied to indicate current states of the added KVM/Serial switches and ports.

Icon and color information is available by clicking the question mark icon ❓.



Port Navigator

Search > Filters

Icons

- Port or Target is up
- Port or Target is down
- Port is up and at least one KVM session is open
- Port is busy
- Port status is unknown
- Dual monitor port

Colors

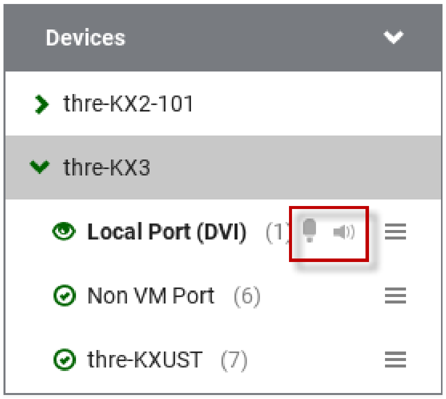
- 🟢 Port is accessible
- 🟠 Port is busy
- 🔴 Error while getting port status
- ⚪ Port or Target is down
- 🔵 Port or Target status is unknown
- ⚫ Port or Target status is being updated

Device Colors

- > Device is accessible
- > Error while communcating with device
- > Device status is unknown
- > Device status is being updated

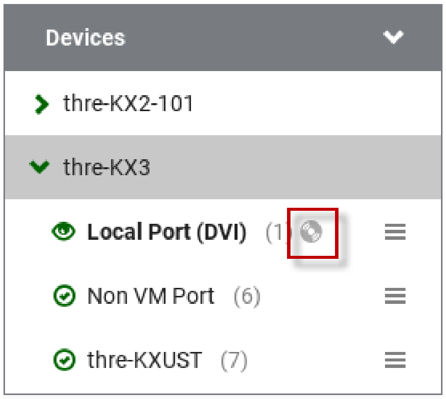
Identifying External Media

When external media are connected to a port via virtual media, the media icons display after the port name/number.



Devices

- > thre-KX2-101
- ⌄ thre-KX3
  - Local Port (DVI) (1)
  - Non VM Port (6)
  - thre-KXUST (7)



Devices

- > thre-KX2-101
- ⌄ thre-KX3
  - Local Port (DVI) (1)
  - Non VM Port (6)
  - thre-KXUST (7)

Icon	Port state

🖴	Mass Storage
💿	ISO/CD device
🎤	Microphone
🔊	Speaker
💳	SmartCard Reader

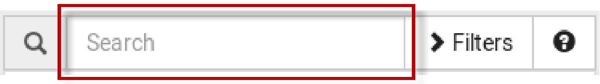
Dual Video Port Status

The primary port must have Status=Up to make a connection to both ports. The secondary port cannot be connected to directly, so its status is not reflected in the Navigator.

If the secondary port has Status=Down, there is still a dual monitor connection to both ports. There is either a "No Video" message or an error message such as "Cannot switch to port" on the secondary client. In this case, User Station acts differently from KX3, because User Station allows the user to connect to any target, independent of the status, using Filters. See Using Filters (on page 121).

Using Search

The search box allows you to search for the KVM/Serial ports or switches that match the user's search words.



► *To search for KVM/Serial ports or switches:*

1. Open the panel where you want to perform the search function.
   - To search for a KVM/Serial switch, click the Devices panel.
     - To search KVM/Serial ports of a specific KVM/Serial switch in addition to KVM/Serial switches, you can click the desired KVM/Serial switch to have its KVM/Serial ports displayed prior to using the Search function.

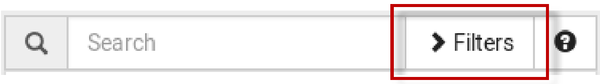
Note: The User Station will NOT search the KVM/Serial ports of those unselected KVM/Serial switches in the Devices panel.

- To search for a KVM/Serial port only, click the Targets panel.
- To search for a "favorite" KVM/Serial port, click the Favorite Access panel.

2. Type the search word(s) in the Search box. Words are not case sensitive.
3. The currently opened panel immediately shows the search result.

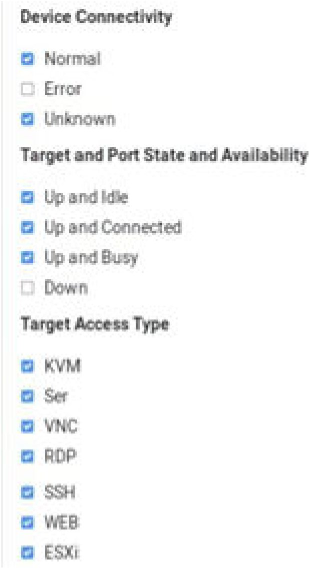
Using Filters

By default, the Port Navigator window only shows devices that can be communicated with properly, and the ports and targets that are up. You can change the display criteria by using filters.



► *To change the filter:*

1. Click Filters, and the following checkboxes will appear.



Device Connectivity

☑ Normal
□ Error
☑ Unknown

Target and Port State and Availability

☑ Up and Idle
☑ Up and Connected
☑ Up and Busy
□ Down

Target Access Type

☑ KVM
☑ Ser
☑ VNC
☑ RDP
☑ SSH
☑ WEB
☑ ESXi

2. Select or deselect any checkboxes to determine what is shown.

Checkbox	KVM/Serial switch's state
Normal	The KVM/Serial switch can communicate with the User Station, and the device state is normal.
Error	The KVM/Serial switch cannot communicate with the User Station.

Unknown	The KVM/Serial switch can communicate with the User Station but cannot determine its device state.

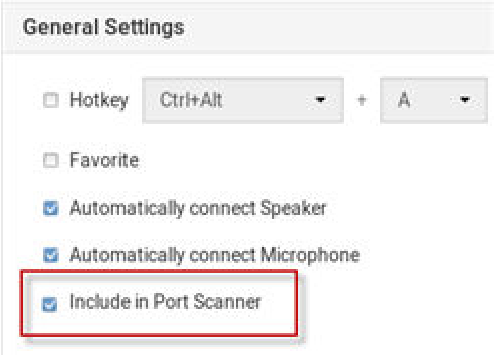
Checkbox	KVM/Serial ports or target state and availability
Up and Idle	The port is up, accessible and no KVM/Serial sessions are active.
Up and Connected	The port or target is up, and at least one KVM/ Serial session is active.
Up and Busy	The port or target is up, but busy because an exclusive KVM/Serial session is active.
Down	The port is down.

1. For Target Access Type, select the access types you want to include.
2. When completed, click Filters again to hide the options.

Port Scanner

The Port Scanner displays an assortment of ports that you select, by scanning through each connection for a specified period of time. You can launch a KVM connection to any port shown in the scanner. The Port Scanner can also save target snapshots to an external USB device, when enabled. This is useful for forensic or surveillance purposes. See Port Scanner Settings (on page 153) for details on configuration and user privilege.

- Launch the Port Scanner from the Main Menu. See: Port Scanner (Launch) (on page 18)
- Ports are included by selecting the setting "Include in Port Scanner" when configuring the port. Go to User Station Configuration > Port Configuration settings. See Configuring KVM and Serial Ports (on page 89) for detailed instructions.



General Settings

□ Hotkey Ctrl+Alt + A

□ Favorite

☑ Automatically connect Speaker

☑ Automatically connect Microphone

☑ Include in Port Scanner

- The scanner allows you to pause and restart the scanning, open KVM sessions, show and hide thumbnails of each port, and set the scan options. See Operating the Port Scanner (on page 123).
- Audit log entries are created for each individual scanned port when you scan KX2-101/KX4-101 ports. When scanning KX3 ports, an audit log entry is created at the start and end of the scan session.
- The Port Scanner functions in both CC-SG mode and non-CC-SG mode.
- Window Management functions do not apply to the Port Scanner window.

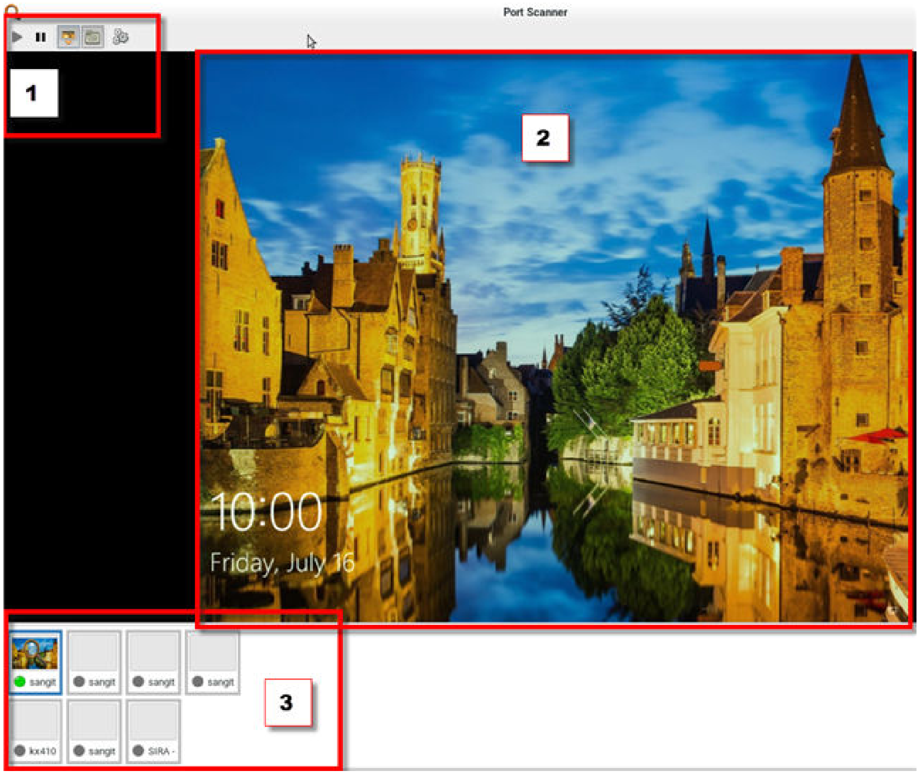
In This Chapter

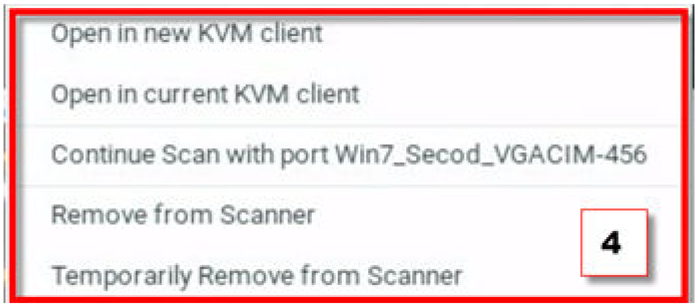
Operating the Port Scanner

1. The main toolbar at the top of the Port Scanner has 4 buttons:

▶ Resume the scanner.

⏸	Pause the scanner.
📷	Show or hide the thumbnails.
🖼	Show or hide Live Preview image.
⚙	Configure the scanner options. See Scanner Options (on page 125).




Open in new KVM client
Open in current KVM client
Continue Scan with port Win7_Secod_VGACIM-456
Remove from Scanner
Temporarily Remove from Scanner
4

2. The thumbnail preview shows all included ports. Choose vertical or horizontal placement in the scanner options.
3. The currently displayed port is highlighted in the thumbnails preview. Click the thumbnail once to view the port in the scanner. Double-click the thumbnail to open a KVM session to the port. Note that the default action of a double-click can be configured in Launch Settings. See Access Client Settings (on page 135)
4. Right-click a thumbnail to open a pop-up menu with more options:

- Open in new KVM client: launch a KVM session to the port in a new window.
- Open in current KVM client: launch a KVM session to the port in the currrent window.
- Continue Scan with port "port name": Start scanning the selected port.
- Remove from scanner: Turns off the "Include in Port Scanner" setting for the port.
- Temporarily Remove from Scanner: The port is removed from this scanner session, but it is included the next time the scanner is started.

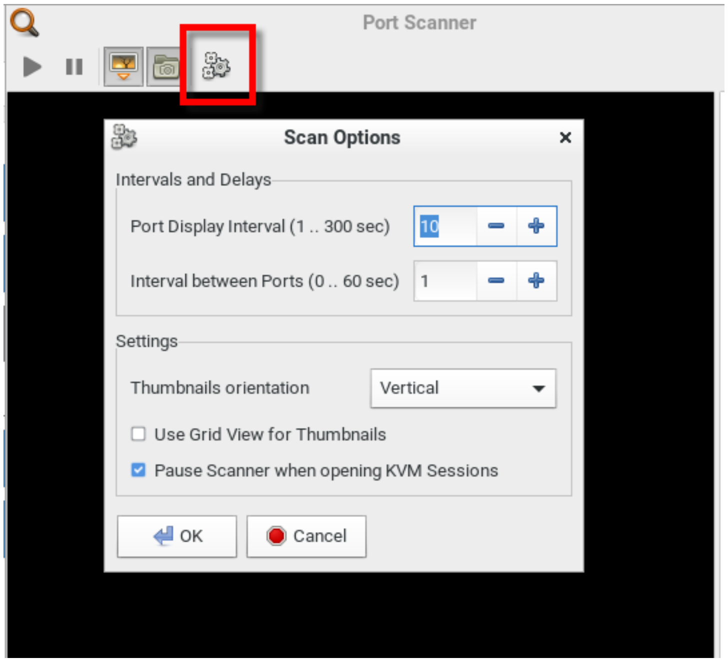
Scanner Options

The port scanner can be configured to set intervals and delays, thumbnail orientation, and pause behavior.

See Port Scanner Settings (on page 153) to configure recording scanner snapshots.

► *To set scanner options:*

1. In the Main Menu, click Port Scanner to open the port scanning window.
2. Click the Scan Settings icon to open the options.
3. Configure intervals and delays:
   a. Port Display Interval: Select the number of seconds to display each port before switching to next
   b. Interval between Ports: Select the number of seconds to pause after Port Display Interval ends.
4. Configure settings:
   a. Thumbnails orientation: Select Vertical or Horizontal to position thumbnails in relation to scan window.
   b. Use Grid View for Thumbnails: Select this checkbox to enable grid view. See Port Scanner Grid View (on page 126).
   c. Pause Scanner when opening KVM Sessions : Select this checkbox if the scanning should stop when you open a port into a full KVM session.
5. Click OK.



Scan Options

Intervals and Delays

Port Display Interval (1 .. 300 sec): 10

Interval between Ports (0 .. 60 sec): 1

Settings

Thumbnails orientation: Vertical

☐ Use Grid View for Thumbnails

☑ Pause Scanner when opening KVM Sessions

Port Scanner Grid View

The User Station port scanner offers a "grid" or "matrix" view option of ports from different Dominion devices. The grid view shows multiple thumbnails in a row/column view, all at the same time, and without scrolling. The number of ports is unlimited, varies as needed, and all ports are visible in the grid view. The grid view works for both CC-SG and non-CC-SG.

The port scanner grid view can show ports from more than one KX. Thumbnails can be arranged in a view, as a grid, without scroll bars. The thumbnails are automatically resized and arranged so that all ports in the port scanner are visible.

Note: The thumbnail views in the grid view are periodically updated. Due to technical limitations in the processor and video resources, the grid view does not allow live-updates.

▶ *How the Grid View Works*

The thumbnails section can optionally be a grid view, showing all the thumbnails at once without scrollbars.

The size and position of the thumbnails automatically adapt to the size of the thumbnails section, or the best fit.

The thumbnails section fills the entire space; if preferred, the live preview section can be hidden.

Using the Serial Client

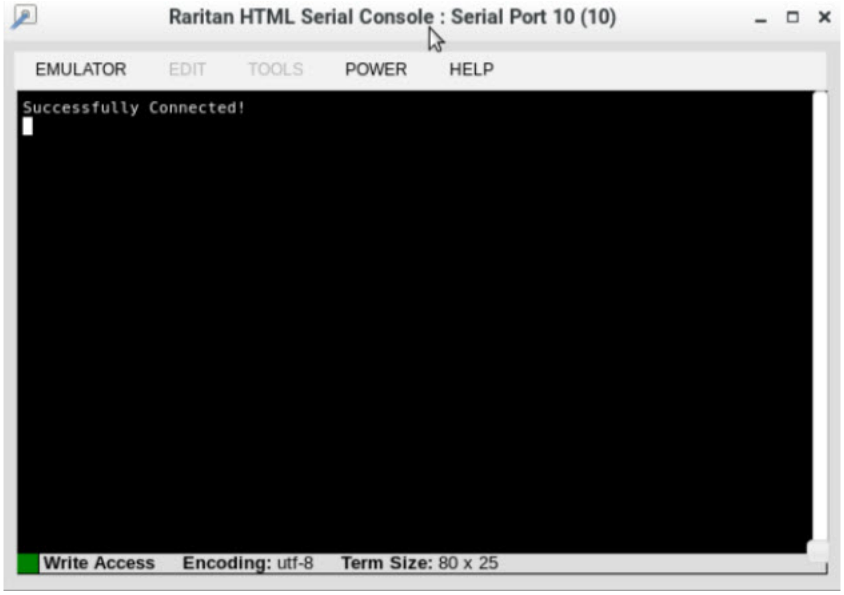
A Serial Client window opens after connecting to a device with a serial target connected. The Raritan HTML Serial client provides tools for viewing and managing serial targets.

In This Chapter

Emulator

► *Access Emulator Options*

- Select the Emulator drop-down menu to display a list of options.

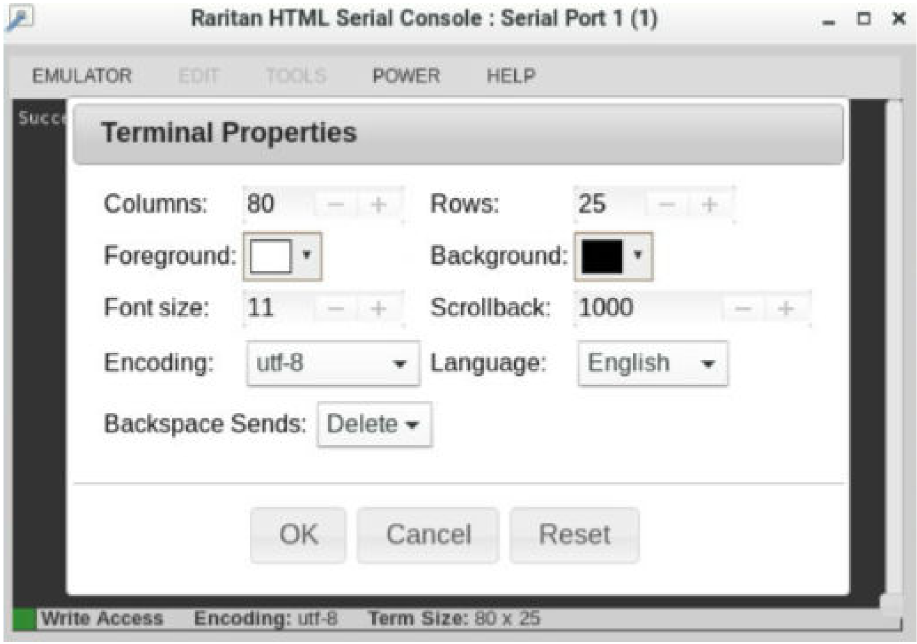


```
Successfully Connected!
```

Write Access   Encoding: utf-8   Term Size: 80 x 25

► *Settings*

- Select Settings from the Emulator drop down menu. The Terminal Properties dialog displays the default settings.



Columns: 80
Rows: 25
Foreground: □
Background: ■
Font size: 11
Scrollback: 1000
Encoding: utf-8
Language: English
Backspace Sends: Delete

Write Access Encoding: utf-8 Term Size: 80 x 25

  - Set the terminal size by selecting the number of Columns and Rows. Default is 80 by 25.
  - Set the Foreground and Background colors. Default is white on black.
  - Set the Font size. Default is 11.
  - Set the Scrollback number to indicate the number of lines available for scrolling.
- Choose one of the following from the Encoding drop-down menu:
  - UTF-8
  - 8-bit ascii
  - ISO-8859-1
  - ISO-8859-15
  - Shift-JIS
  - EUC-JP
  - EUC-KR
- Choose one of the following from the Language drop-down menu:
  - English
  - Bulgarian
  - Japanese
  - Korean
  - Chinese
- The Backspace Sends default is ASCII DEL, or you can choose Control-H from the Backspace Sends drop-down menu.
- Click OK to save. If you changed the Language setting, the RHSC changes to that language when the Display Settings window is closed.

► *Get History*

History information can be useful when debugging, troubleshooting, or administering a target device. The Get History feature:

- Allows you to view the recent history of console sessions by displaying the console messages to and from the target device.
- Displays up to 512KB of recent console message history. This allows a user to see target device events over time.

When the size limit is reached, the text wraps, overwriting the oldest data with the newest.

Notes: History data is displayed only to the user who requested the history.

To view the Session History, choose Emulator > Get History.

► *Clear History*

- To clear the history, choose Emulator > Clear History.

► *Get Write Access*

Only users with permissions to the port get Write Access. The user with Write Access can send commands to the target device. Write Access can be transferred among users working in the HSC via the Get Write Access command.

To enable Write Access, choose Emulator > Click Get Write Access.

- You now have Write Access to the target device.
- When another user assumes Write Access from you:
  - The RHSC displays a red block icon before Write Access in the status bar.
  - A message appears to the user who currently has Write Access, alerting that user that another user has taken over access to the console.

► *Get Write Lock*

Write lock prevents other users from taking the write access while you are using it.

- To get write lock, choose Emulator > Get Write Lock.
- If Get Write Lock is not available, a request rejected message appears.

► *Write Unlock*

To get Write Unlock, choose Emulator > Write Unlock.

► *Send Break*

Some target systems such as Sun Solaris servers require the transmission of a null character (Break) to generate the OK prompt. This is equivalent to issuing a STOP-A from the Sun keyboard.

Only users with Write Access privileges can send a break.

To send an intentional "break" to a Sun Solaris server:

- Verify that you have Write Access. If not, follow the instructions in the previous section to obtain write access.
- Choose Emulator > Send Break. A Send Break Ack (Acknowledgement) message appears.
- Click OK.

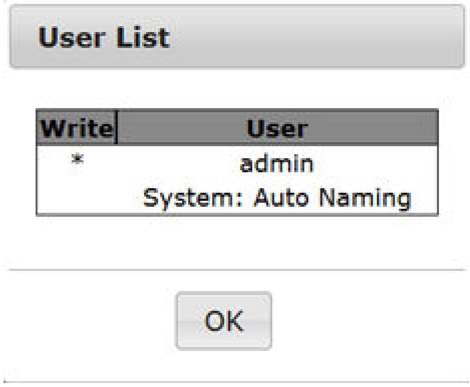
► *Reset Port*

Reset Port resets the physical serial port on the SX2 and re-initializes it to the configured values regarding bps/bits, and so on.

► *Connected Users*

The Connected Users command allows you to view a list of other users who are currently connected on the same port.

- Choose Emulator > Connected Users.



Write	User
*	admin
	System: Auto Naming

- A star appears in the Write column for the User who has Write Access to the console.

► *Exit*

1. Choose Emulator > Exit to close the RHSC.

Edit

Note: Edit menu is not enabled on serial client.

Tools

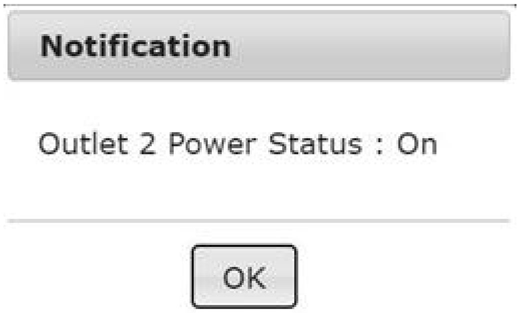
Note: Tools menu is not enabled on serial client.

Power

Note: You must have permission to manage the target's power, and the target must have configured power associations. If you only have Access permission and not Power Control, power actions will be denied.

► *To view power status:*

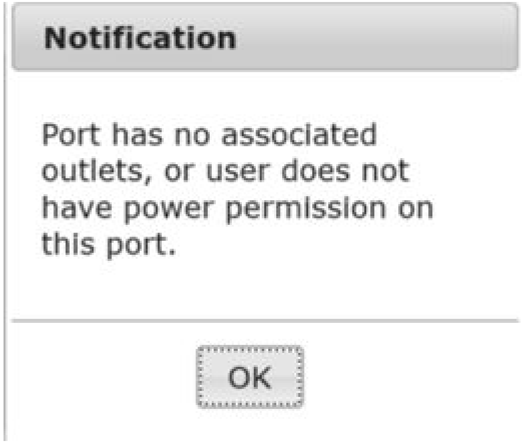
- Choose Power > Power Status to view the status of the outlet the target is plugged into.
    - The Notification dialog shows the status of the outlet as ON or OFF.



Notification

Outlet 2 Power Status : On

- Status may also show no associated outlet, or no power permission to the port.

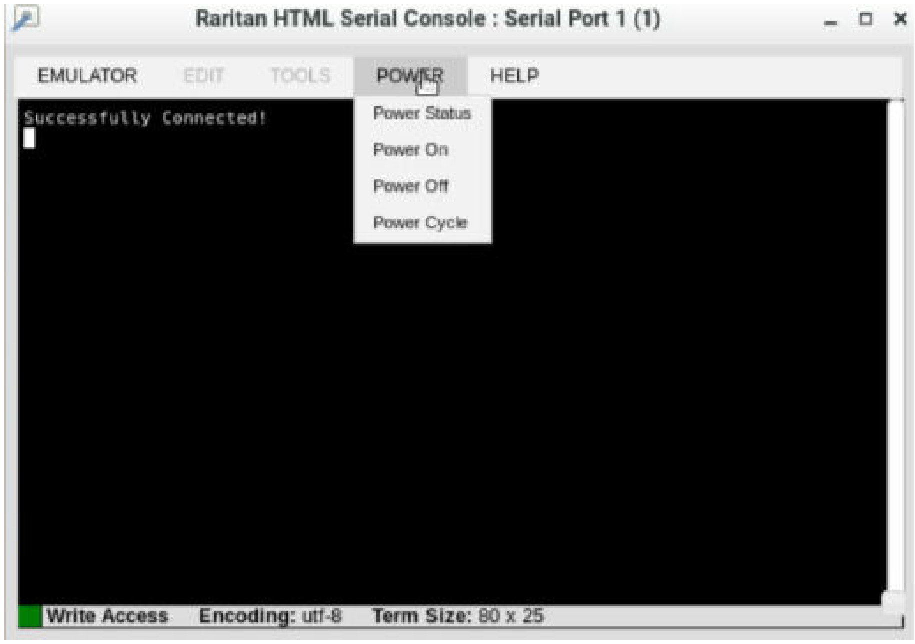


Notification

Port has no associated outlets, or user does not have power permission on this port.

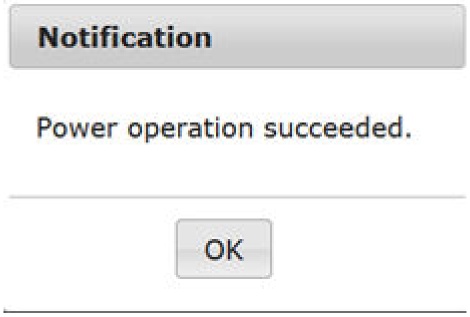
► *To perform power operations:*

- Choose an option from the Power menu to control the serial target's power.
  - Power On
  - Power Off
  - Power Cycle



```
Successfully Connected!
```

- Click OK in the success message.

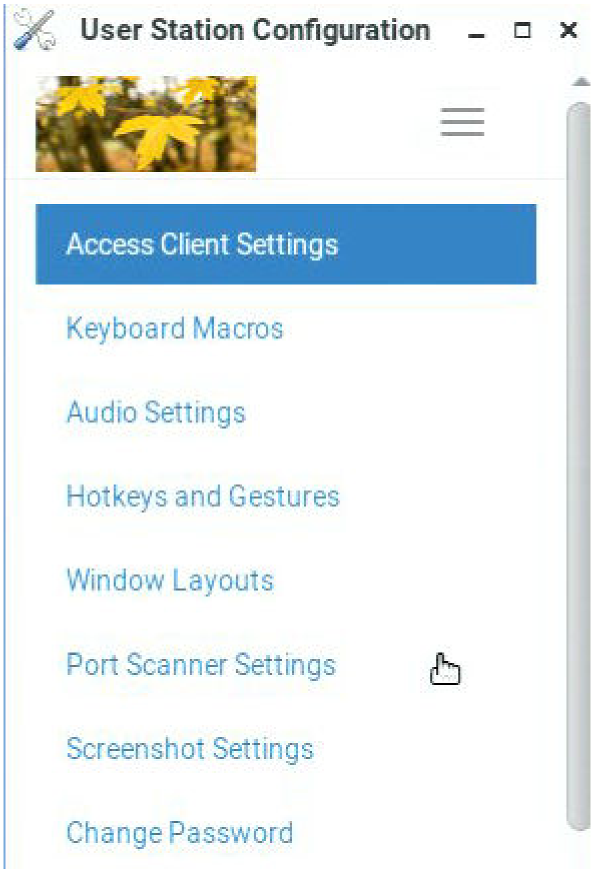


Notification

Power operation succeeded.

Setting User Preferences

In the User Station Configuration window, click Preferences to customize the following user settings.


User Station Configuration

Access Client Settings

Keyboard Macros

Audio Settings

Hotkeys and Gestures

Window Layouts

Port Scanner Settings

Screenshot Settings

Change Password

In This Chapter

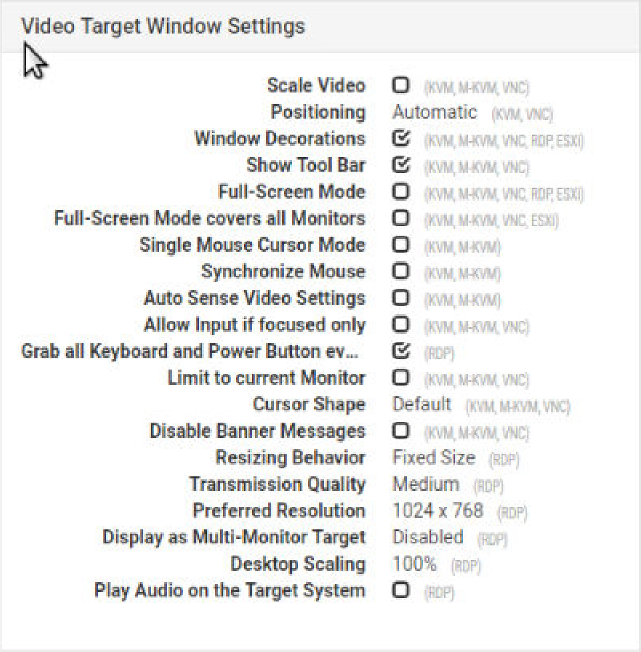
Access Client Settings

You can configure settings for all access types, as well as general launch and connection settings. Users with the System Admin privilege can configure the default Access Client Settings for all new users.

- Video Target Window Settings
- Console Target Window Settings
- Web Target Window Settings
- Launch Settings
- Connection Settings

► *To set your Access Client preferences:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Preferences > Access Client Settings. The Access Client Settings page opens, showing the current preferences.
   - ☑ indicates the setting is enabled.
   - □ indicates the setting is disabled.



Video Target Window Settings

Scale Video	☐ (KVM, M-KVM, VNC)
Positioning	Automatic (KVM, VNC)
Window Decorations	☑ (KVM, M-KVM, VNC, RDP, ESXi)
Show Tool Bar	☑ (KVM, M-KVM, VNC)
Full-Screen Mode	☐ (KVM, M-KVM, VNC, RDP, ESXi)
Full-Screen Mode covers all Monitors	☐ (KVM, M-KVM, VNC, ESXi)
Single Mouse Cursor Mode	☐ (KVM, M-KVM)
Synchronize Mouse	☐ (KVM, M-KVM)
Auto Sense Video Settings	☐ (KVM, M-KVM)
Allow Input if focused only	☐ (KVM, M-KVM, VNC)
Grab all Keyboard and Power Button ev...	☑ (RDP)
Limit to current Monitor	☐ (KVM, M-KVM, VNC)
Cursor Shape	Default (KVM, M-KVM, VNC)
Disable Banner Messages	☐ (KVM, M-KVM, VNC)
Resizing Behavior	Fixed Size (RDP)
Transmission Quality	Medium (RDP)
Preferred Resolution	1024 x 768 (RDP)
Display as Multi-Monitor Target	Disabled (RDP)
Desktop Scaling	100% (RDP)
Play Audio on the Target System	☐ (RDP)

3. Click Edit to make changes.

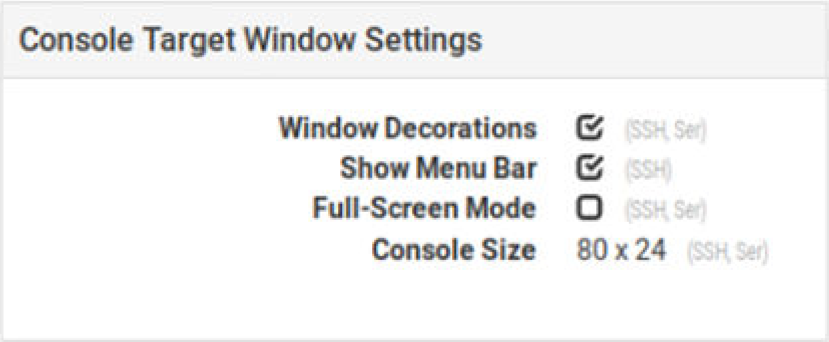
- Video Target Window Settings: These selections determine the initial settings applied to the video targets with the Access Client.

Scale Video	Enable or disable the Scale Video function. For details on Scale Video, see Scale Video.
Positioning	Determines where the Access Client shows up on the screen: • Automatic: The positioning of the Client is not restricted. For example, the first Client that appears may align with the top-left corner of the screen, but the second Client may align with the bottom-right corner of the screen. • Left Upper Corner • Right Upper Corner Note: For dual or multi-KVM targets, if more than two windows are involved, all windows will be launched in the Left Upper Corner.
Window Decorations	Show or hide the window decorations. For details on window decorations, see Show Window Decorations.
Show Tool Bar	Show or hide the client tool bar.

Full-Screen Mode	Enable or disable full-screen mode for KVM, M-KVM, VNC, RDP and ESXi sessions.
Full-Screen Mode covers all Monitors	Full-Screen Mode covers all Monitors with description. • Applicable to KVM, M-KVM and VNC targets. • OSD message are displayed across all the monitors. • Dual Monitor and M-KVM targets are opened with primary displayed across all monitors and secondary displayed in background. Limitations: • NO access other targets via Alt/Tab or UST menus via Ctrl+Alt+N, Ctrl+Alt+C or Ctrl+Alt+Del if target is opened in fullscreen mode covering all monitors.
Single Mouse Cursor Mode	Enable or disable starting in single mouse mode. Note: When this setting is enabled, you must click into the KVM window to locate the mouse when you begin the session. For details on this mouse mode, see Single Mouse Cursor. For details on how this works with dual monitor targets, see Single Mouse Mode for Dual Monitor Targets (on page 141).
Synchronize mouse	Enable or disable synchronize mouse after connecting. If enabled the mouse is automatically synced on connecting to KVM and M-KVM targets if the mouse mode is set to Intelligent or Standard Note: When entering Single Mouse Mode via the menu button, there is an option to "Synchronize Mouse after leaving Single Cursor mode", applicable to KVM and M-KVM targets using Intelligent or Standard mouse mode.
Auto Sense Video Settings	Enable or disable auto sense video settings. If enabled, the KVM target performs an auto sense automatically once the KVM client connects.
Allow Input if focused only	Enable or disable allow input if focused only. If enabled, mouse input only allowed on KVM, M-KVM and VNC targets when the client window is in focus.
Grab all Keyboard and Power Button events	Select to grab all keyboard input (including the power button and other keyboard shortcuts) from the local OS.

Limit to current Monitor	Select to limit the KVM, M-KVM and VNC targets to the current monitor.
Cursor Shape (in Double Cursor Mode)	Select customized cursor shape. • Default, Dot, Crosshair, Transparent • Use the Transparent option to hide the mouse cursor.
Disable Banner Messages	Select to remove banner messages from KVM, M-KVM and VNC sessions.
Resizing Behavior	Select resize preference for RDP sessions: • Fixed size, Dynamic Resolution Change, Scale
Transmission Quality	Select preferred transmission quality for RDP sessions: • Best Quality (Slowest), Medium, Fastest (Lowest Quality)
Preferred Resolution	Select preferred resolution for RDP sessions.
Display as Multi-Monitor Target	Select multi-monitor preferences for RDP sessions: • Disabled, Use 2 monitors, Use 3 monitors, Use 4 monitors and Use all monitors
Desktop Scaling	• Select a desktop scaling percentage for RDP sessions.
Play Audio on the Target System	Select to play audio on RDP targets using locally connected speaker and microphone.

- Console Target Window Settings: These options apply to SSH and Serial access.



Console Target Window Settings

Window Decorations ☑ (SSH, Ser)

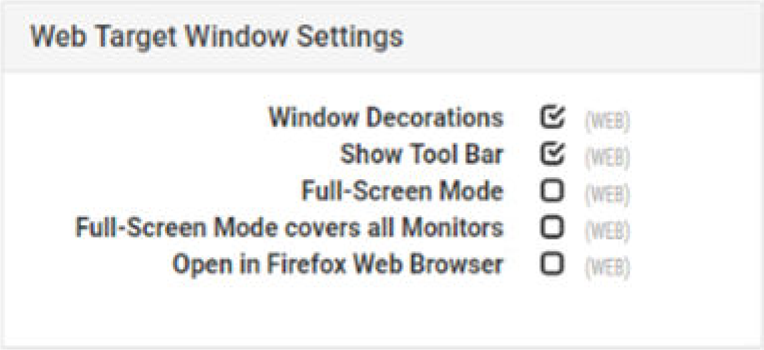
Show Menu Bar ☑ (SSH)

Full-Screen Mode □ (SSH, Ser)

Console Size 80 x 24 (SSH, Ser)

Window Decorations	Show or hide the window decorations. For details on window decorations, see Show Window Decorations.
Show Menu Bar	Show or hide the menu bar.
Start in Full-Screen Mode	Enable or disable full-screen mode for console sessions. For SSH and Serial, the hot key for full screen is F11.
Console Size	Select the preferred console size. Serial Client size may not be accurate.

- Web Target Window Settings:



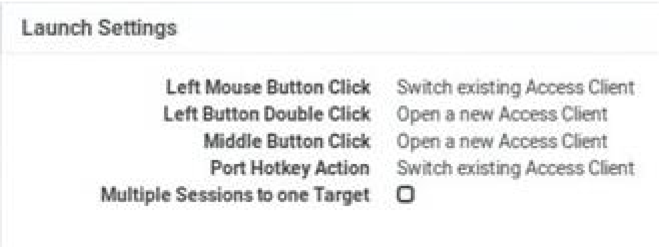
Web Target Window Settings

Window Decorations ☑ (WEB)
Show Tool Bar ☑ (WEB)
Full-Screen Mode □ (WEB)
Full-Screen Mode covers all Monitors □ (WEB)
Open in Firefox Web Browser □ (WEB)

Window Decorations	Show or hide the window decorations. For details on window decorations, see Show Window Decorations.
Show Tool Bar	Show or hide the tool bar.
Start in Full-Screen Mode	Enable or disable Full-Screen Mode for web sessions. For web sessions, the full screen hot key is F11.

Full-Screen Mode covers all Monitors	Enable or disable Full-Screen Mode covers all monitors for web sessions. Limitations: • Full Screen Mode covers all monitors" does not apply to Web Targets if "Open in Firefox Web Browser" is selected for targets. • NO access other targets via Alt/Tab or UST menus via Ctrl+Alt+N, Ctrl+Alt+C or Ctrl+Alt+Del if target is opened in fullscreen mode covering all monitors.
Open in Firefox Web Browser	Enable or disable to launch web targets in firefox web browser. Note: User must have Launch the Web Browser privilege to configure.

- Launch Settings: These options configure the mouse button click behavior at the Port Navigator, the default action for the Port Hotkeys, and the launching of multiple KVM sessions to one target (when PC share is enabled). Options apply to KVM and VNC Access Clients only.



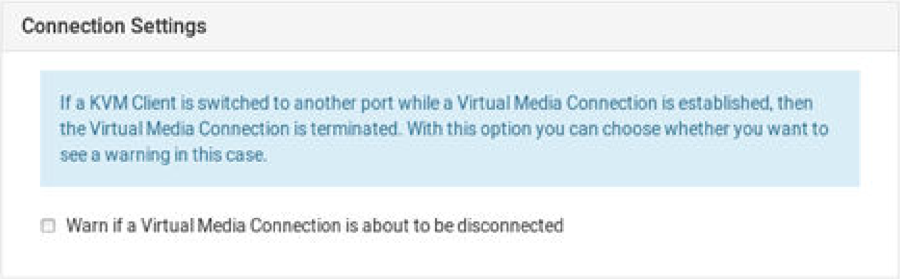
Launch Settings

Left Mouse Button Click: Switch existing Access Client
Left Button Double Click: Open a new Access Client
Middle Button Click: Open a new Access Client
Port Hotkey Action: Switch existing Access Client
Multiple Sessions to one Target: □

Switch existing Access Client	Switches the last active Access Client to the selected port or access point, if possible. Otherwise a new Access Client is opened.
Open a new Access Client	Always launches a new Access Client.
Open a new Access Client on secondary monitor	Always launches a new Access Client on the secondary monitor, if available.
Multiple Sessions to One Target: Enabled	Opens a second window to the target if: (1) Open a New Access Client is selected and (2) PC Share is enabled for device.

Disabled	Disables the left button double click or middle button click

- Connection Settings: Selecting the "Warn if a Virtual Media Connection is about to be disconnected" checkbox will cause a warning message to display if this event occurs.



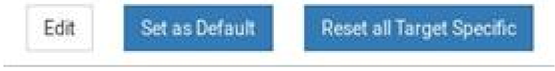
Connection Settings

If a KVM Client is switched to another port while a Virtual Media Connection is established, then the Virtual Media Connection is terminated. With this option you can choose whether you want to see a warning in this case.

□ Warn if a Virtual Media Connection is about to be disconnected

1. Click Save. Note additional options when settings have been configured:

- To save these settings as the default for all new users and existing users who have not changed their settings, click Set as Default. System Administration privilege required.
- To delete all target/port-specific access client settings for the current user, click Reset all Target Specific.



Single Mouse Mode for Dual Monitor Targets

When Start in Single Mouse Cursor Mode is enabled for a dual monitor target:

- The top-left display KVM client is brought to front (instead of the primary) because this one controls the mouse.

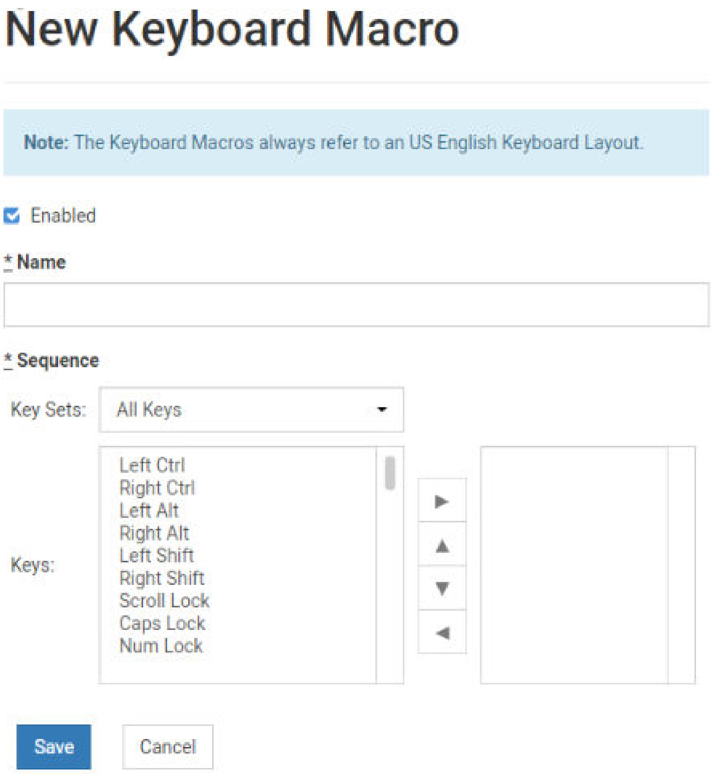
Managing Keyboard Macros

Keyboard macros can be created to use instead of physical keystroke combinations, so that the actions intended for the target server are sent to and interpreted only by the target server. Otherwise, they might be interpreted by the User Station itself.

Keyboard macros are stored on the User Station, and only the user who created them can see and use these macros.

► *To create a keyboard/hotkey macro:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Preferences > Keyboard Macros > New Keyboard Macro. The New Keyboard Macro page opens.



New Keyboard Macro

Note: The Keyboard Macros always refer to an US English Keyboard Layout.

☑ Enabled

* **Name**

* **Sequence**

Key Sets: All Keys

Keys:

3. Enter information for the new keyboard macro. The fields marked with the symbol * are mandatory.

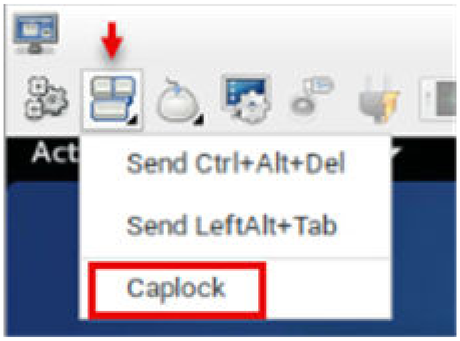
Field/ option	Description
Enabled	Select this checkbox so that the new macro can appear in the KVM Client of this User Station. See Executing Macros (on page 143).
Name	Type a name for the new macro.
Key Sets	Select the key set containing the desired keys. See Available Key Sets. All keys that the selected key set contains are listed in the Keys box.
Keys	Select each desired key from the list and click ▶ to add it to the right box. Double-click also adds. - Select the keys in the order by which they are to be pressed. - A `Release` key command is automatically added for each key added to the right box. See Keyboard Macro Example (on page 144).

4. If needed, make changes to the keys shown in the right box.
   - To resort the key commands, select a key command and click ▲ or ▼ to move it up or down.
   - To remove a key command, select it and click ◄.
5. Click Save, and the new macro's content is shown.
6. Click one of these buttons according to your needs.
   - Back: Return to the Keyboard Macro page.
   - Edit: Modify this macro.
   - Delete: Remove this macro.

Executing Macros

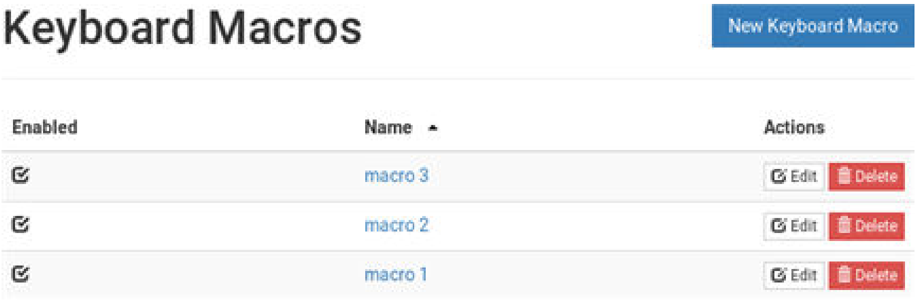
Manually-created keyboard macros, if they are enabled, appear following the pre-programmed keyboard macros in the keyboard pull-down list of the KVM Client. See Using the KVM Client.

Click ⌨ to show the keyboard macro list, and select the desired macro to send it to the target server.



Editing or Deleting Macros

To view all manually-created keyboard macros in the User Station Configuration window, click Preferences > Keyboard Macros.



Keyboard Macros

New Keyboard Macro

Enabled	Name ▲	Actions
☑	macro 3	Edit Delete
☑	macro 2	Edit Delete
☑	macro 1	Edit Delete

- Click the Name column header to sort the list.
- An enabled macro shows ☑ in the Enabled column.
- A disabled macro shows ○.

▶ *To edit a keyboard macro:*

1. Click the desired macro's Edit button.
2. Make necessary changes to the information shown. See Managing Keyboard Macros (on page 141).

▶ *To delete a keyboard macro:*

1. Click the desired macro's Delete button.
2. Click OK on the confirmation message.

Keyboard Macro Example

For example, you can create a keyboard macro to close a window by selecting `Left Alt+F4`.

The macro's content looks like the following.

```
Press Left Alt

Press F4

Release F4

Release Left Alt
```

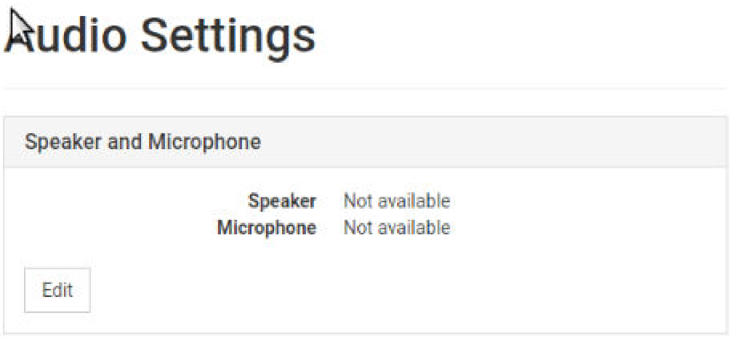
Audio Settings

The default audio playback/capture devices used by the User Station are the front-panel analog speakers and microphone.

You can change this by setting other audio devices you prefer as the audio playback and/or capture devices. Note that the audio configuration changes made by any user apply on a User Station basis so the changes impact all users of this User Station.

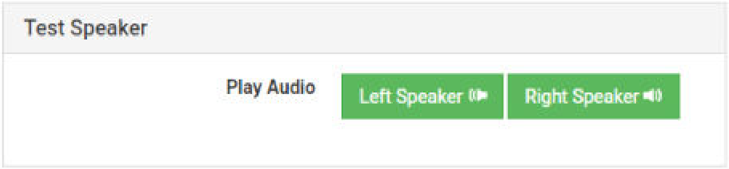
▶ *To determine the audio appliances used by the User Station:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Preferences > Audio Settings. The Audio Settings page opens, indicating the current audio playback and capture devices being used.



Speaker Not available
Microphone Not available

3. Click Edit, if intending to make changes.
4. In the Speaker section, select the audio playback device you prefer.
   - The audio playback devices which are not available are marked with 🔇 .
5. In the Microphone section, select the audio capture device you prefer.
6. Click Save.
7. (Optional) To test whether the currently selected speaker works, click the Test Speaker buttons.



Hotkeys and Gestures

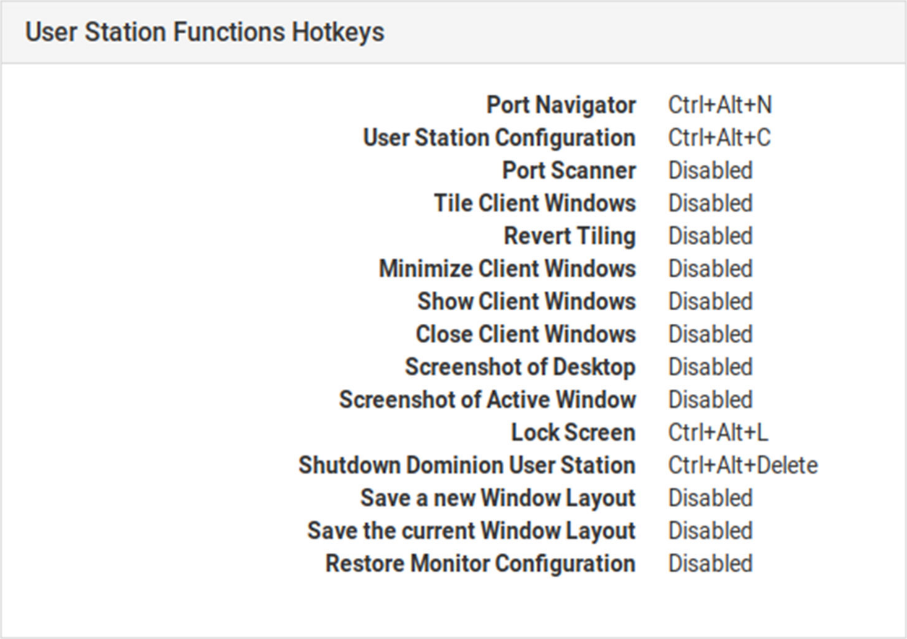
You can enable, disable and customize hotkeys and gestures to control the User Station, manage windows, or control KVM Client functions. These hotkeys and gestures are executed on the User Station rather than being transmitted to any target servers you are operating. You can apply current user's settings to all new users or to the users who have not set their hot key preferences by clicking on "Set as Defaults".

Note: Many functions are programmed and enabled by default.

For a complete list of pre-programmed hotkeys of the User Station, go to Main Menu > Help > Help on Hotkeys, and see Help on Hotkeys (on page 58).

There are several categories of hotkeys and gestures:

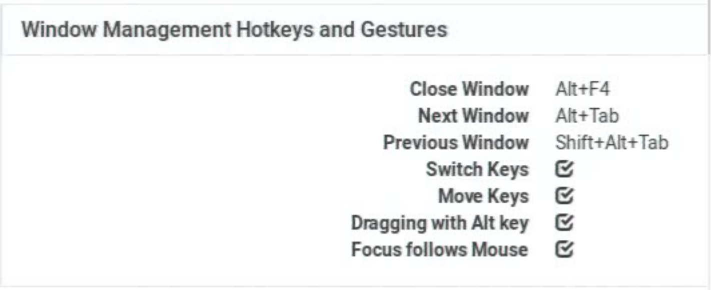
- User Station Functions Hotkeys: Configure hotkeys that are always processed locally by the User Station desktop. They are not sent to a target server if you use them from within a KVM session. If you want to use any of these key combinations, such as Alt+Tab or Ctrl+Alt+Delete, in KVM sessions, you should make sure that key combination is not assigned in this category, or disable that function it is assigned to.



User Station Functions Hotkeys

Port Navigator	Ctrl+Alt+N
User Station Configuration	Ctrl+Alt+C
Port Scanner	Disabled
Tile Client Windows	Disabled
Revert Tiling	Disabled
Minimize Client Windows	Disabled
Show Client Windows	Disabled
Close Client Windows	Disabled
Screenshot of Desktop	Disabled
Screenshot of Active Window	Disabled
Lock Screen	Ctrl+Alt+L
Shutdown Dominion User Station	Ctrl+Alt+Delete
Save a new Window Layout	Disabled
Save the current Window Layout	Disabled
Restore Monitor Configuration	Disabled

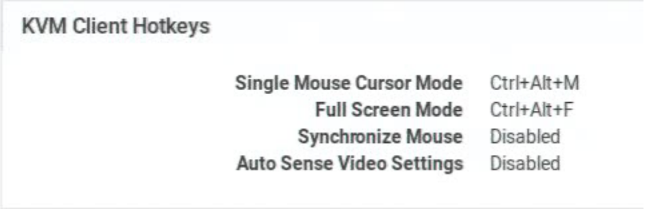
- Window Management Hotkeys and Gestures: Configure hotkeys to close windows, switch between windows, or move them around on your desktop.
  - When Switch Keys is enabled, you can use Shift + Windows + Arrow to switch between open windows.
  - Move Keys are key combinations that move the foreground window around on the desktop. You can disable this function. See Move Keys (on page 149).
  - When Dragging with Alt Key is enabled, you can drag windows around on the Dominion User Station desktop using the mouse. Disable this feature if you want Alt Drag to apply to the target server.
  - Focus follows Mouse when enabled allows seamless mouse response on the hovered window session.



Window Management Hotkeys and Gestures

Close Window	Alt+F4
Next Window	Alt+Tab
Previous Window	Shift+Alt+Tab
Switch Keys	☑
Move Keys	☑
Dragging with Alt key	☑
Focus follows Mouse	☑

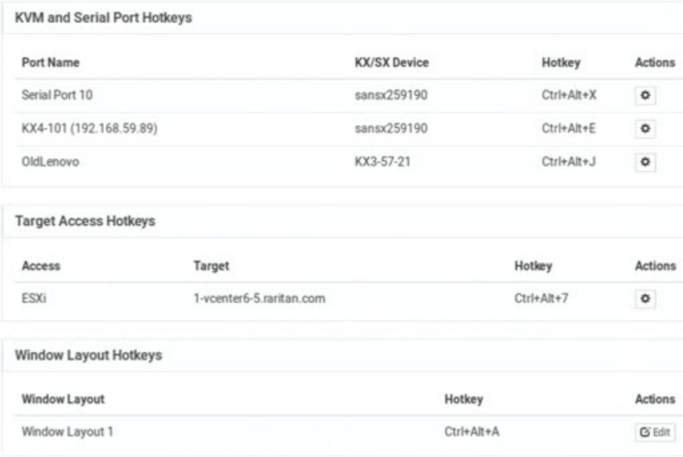
- KVM Client Hotkeys: Configure hotkeys for functions within the KVM Client. Note that if you disable the hotkey for single mouse mode, this function is disabled.



KVM Client Hotkeys

Single Mouse Cursor Mode	Ctrl+Alt+M
Full Screen Mode	Ctrl+Alt+F
Synchronize Mouse	Disabled
Auto Sense Video Settings	Disabled

- KVM and Serial Port Hotkeys: Hotkeys that have been configured for KVM and Serial ports launches appear here.
- Target Access Hotkeys: Hotkeys that have been configured for SSH, VNC, Web, ESXi, RDP and M-KVM target launches appear here.
- Window Layout Hotkeys: Configure hotkeys to manage your window layouts. See Window Layouts (on page 151).



KVM and Serial Port Hotkeys

Port Name	KX/SX Device	Hotkey	Actions
Serial Port 10	sansx259190	Ctrl+Alt+X	⚙
KX4-101 (192.168.59.89)	sansx259190	Ctrl+Alt+E	⚙
OldLenovo	KX3-57-21	Ctrl+Alt+J	⚙

Target Access Hotkeys

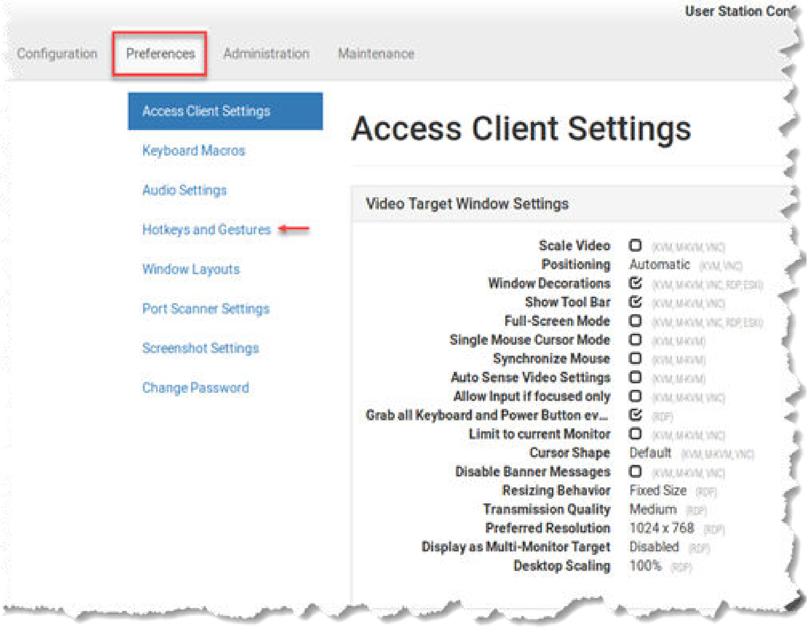
Access	Target	Hotkey	Actions
ESXi	1-vcenter6-5.raritan.com	Ctrl+Alt+7	⚙

Window Layout Hotkeys

Window Layout	Hotkey	Actions
Window Layout 1	Ctrl+Alt+A	Edit

► *To configure hotkeys and gestures:*

1. Launch the User Station Configuration window.
2. Click Preferences > Hotkeys and Gestures. The Hotkeys and Gestures page opens, showing the current settings for all categories.



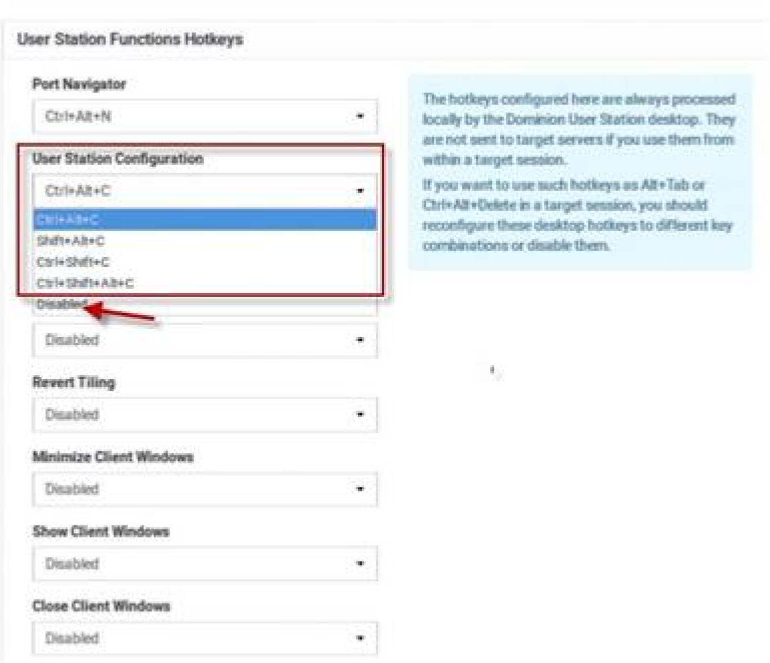
User Station Con

Access Client Settings

Video Target Window Settings

Scale Video	□	(KVM, MKVM, VNC)
Positioning	Automatic	(KVM, VNC)
Window Decorations	☑	(KVM, MKVM, VNC, RDP, ESXi)
Show Tool Bar	☑	(KVM, MKVM, VNC)
Full-Screen Mode	□	(KVM, MKVM, VNC, RDP, ESXi)
Single Mouse Cursor Mode	□	(KVM, MKVM)
Synchronize Mouse	□	(KVM, MKVM)
Auto Sense Video Settings	□	(KVM, MKVM)
Allow Input if focused only	□	(KVM, MKVM, VNC)
Grab all Keyboard and Power Button ev...	☑	(RDP)
Limit to current Monitor	□	(KVM, MKVM, VNC)
Cursor Shape	Default	(KVM, MKVM, VNC)
Disable Banner Messages	□	(KVM, MKVM, VNC)
Resizing Behavior	Fixed Size	(RDP)
Transmission Quality	Medium	(RDP)
Preferred Resolution	1024 x 768	(RDP)
Display as Multi-Monitor Target	Disabled	(RDP)
Desktop Scaling	100%	(RDP)

3. Scroll down and click Edit to make changes:
   - To enable, select a key combination for the function from its drop-down list.
   - To disable, select Disabled from its drop-down list.
4. Click Save.



User Station Functions Hotkeys

Port Navigator: Ctrl+Alt+N

User Station Configuration: Ctrl+Alt+C

Disabled

Revert Tiling: Disabled

Minimize Client Windows: Disabled

Show Client Windows: Disabled

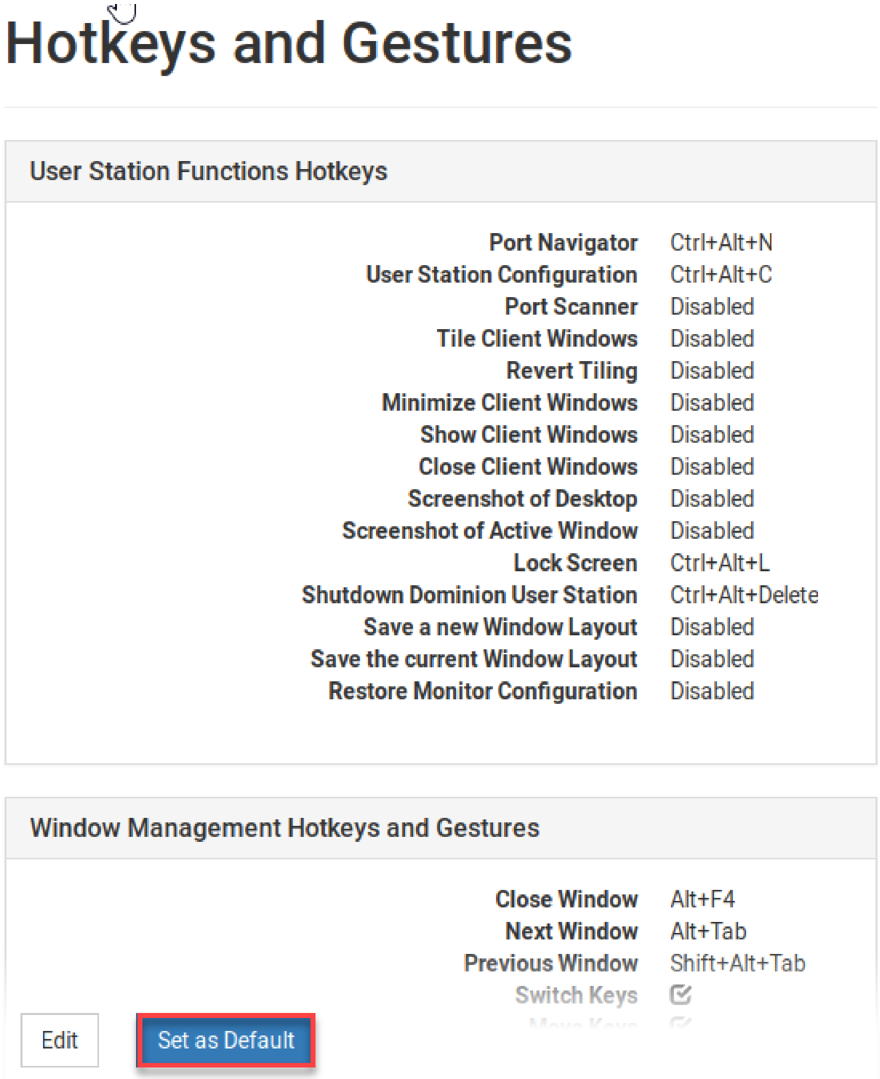
Close Client Windows: Disabled

The hotkeys configured here are always processed locally by the Dominion User Station desktop. They are not sent to target servers if you use them from within a target session.

If you want to use such hotkeys as Alt+Tab or Ctrl+Alt+Delete in a target session, you should reconfigure these desktop hotkeys to different key combinations or disable them.

5. Click "Set as Default" to apply these new settings to all new users or to the users who have not setup their preferences.

Note: These settings will remain until the user customizes.



Hotkeys and Gestures

User Station Functions Hotkeys

Port Navigator	Ctrl+Alt+N
User Station Configuration	Ctrl+Alt+C
Port Scanner	Disabled
Tile Client Windows	Disabled
Revert Tiling	Disabled
Minimize Client Windows	Disabled
Show Client Windows	Disabled
Close Client Windows	Disabled
Screenshot of Desktop	Disabled
Screenshot of Active Window	Disabled
Lock Screen	Ctrl+Alt+L
Shutdown Dominion User Station	Ctrl+Alt+Delete
Save a new Window Layout	Disabled
Save the current Window Layout	Disabled
Restore Monitor Configuration	Disabled

Window Management Hotkeys and Gestures

Close Window	Alt+F4
Next Window	Alt+Tab
Previous Window	Shift+Alt+Tab
Switch Keys	☑
Move Keys	☑

Move Keys

Move Keys are key combinations that move the foreground window around on the desktop. You can enable or disable these hotkeys using the "Move Keys" setting. See Hotkeys and Gestures (on page 145).

Hotkey	Function
Ctrl + Alt + Shift + ←	When there are two monitors connected, move the window to the other monitor.
Ctrl + Alt + Shift + →	

Hotkey	Function
Ctrl + Alt + ↑	Move the window to the screen edge in the specified direction on the monitor.
Ctrl + Alt + ↓	
Ctrl + Alt + ←	
Ctrl + Alt + →	
Ctrl + Alt + 1 (on the keypad)	Move the window to the screen corner in the specified direction on the monitor.
Ctrl + Alt + 3 (on the keypad)	
Ctrl + Alt + 7 (on the keypad)	
Ctrl + Alt + 9 (on the keypad)	
Ctrl + Shift + ↑	Move the window, in the specified direction, to the nearest edge, which is one of the following: • Borders of another window • Monitor edges in the dual-monitor configuration • Desktop boundaries
Ctrl + Shift + ↓	
Ctrl + Shift + ←	
Ctrl + Shift + →	
Ctrl + Windows + ↑	Enlarge the window in the specified direction until its border touches the nearest edge, which is one of the following: • Borders of another window • Monitor edges in the dual-monitor configuration • Desktop boundaries *Note: If the window border already aligns with the screen edge, the window size shrinks instead.*
Ctrl + Windows + ↓	
Ctrl + Windows + ←	
Ctrl + Windows + →	

Hotkey	Function
Alt + Windows + ↑	Shrink the window in the specified direction until its border touches the nearest edge, which is one of the following: • Borders of another window • Monitor edges in the dual-monitor configuration • Desktop boundaries *Note: If no nearest edges are found in the specified direction, the window size is halved instead.*
Alt + Windows + ↓	
Alt + Windows + ←	
Alt + Windows + →	

Switch Keys

Switch keys allow you to switch between open windows using Shift + Windows + Arrow keys.

To enable or disable switch keys, see Hotkeys and Gestures (on page 145).

Window Layouts

The window layouts feature allows you to save layouts of running access client windows so that the specific layout can be restored upon selection. The window layout data that is saved includes the visual attributes of each access client session, such as size, position, and displaying monitor, as well as the connection information for each.

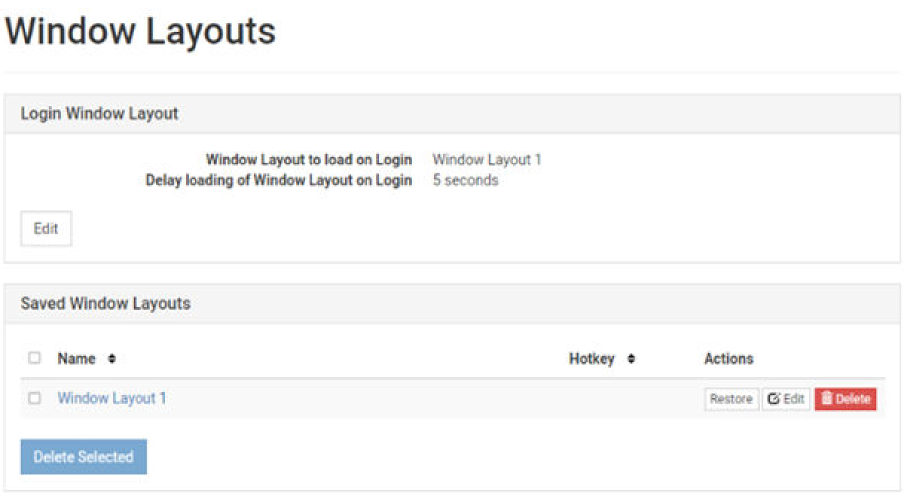
Layouts are saved on a per user basis. The layouts saved by one user are not available to other users. There is a maximum of 16 named layouts per user.

You can access Window Layouts in the Port Navigator or the Main Menu. To create Window Layouts see: Window Layouts (Create) (on page 22)

► *To manage layouts:*

The tools for window layouts management allow you to set a layout to be restored upon login, to apply a delay to loading on login, renaming or deleting layouts and assigning hotkeys to.

1. If not displayed, launch the User Station Configuration window. See: User Station Configuration (on page 81)
2. Click Preferences > Window Layouts.



Window Layouts

Login Window Layout

Window Layout to load on Login: Window Layout 1
Delay loading of Window Layout on Login: 5 seconds

Saved Window Layouts

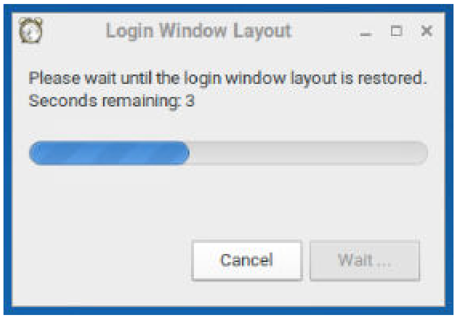
□	Name	Hotkey	Actions
□	Window Layout 1		Restore Edit Delete

3. Login Window Layout: The layout that is restored on a user's login.
   - None: default, no layout is restored upon login.
   - As saved on last logout: Upon the next logout, the state of all clients is saved as a layout, and this layout is restored on the next login. This type of saved layout does not overwrite a named layout that is selected at the time of logout.

     Note: The "logout" window layout is saved 30 seconds after login, then every 15 seconds.

   - List of named layouts: Select a named layout from your list of saved layouts.
4. Delay loading of Window Layout on Login: Time can be set to load the window layouts.
   - Default is 0 second and can be set up to 30 seconds.
5. Saved Window Layouts: Lists all named layouts and provides options.
   - Each layout has options to Restore, Edit or Delete.
   - Click Restore to open the layout now. This option works the same as the Main Menu: Window Layouts selection.
   - Click Edit to change the name or hotkey. Names must be 4-32 characters. Hotkeys will be verified for availability.
   - Click Delete on a layout, or select multiple layouts and click Delete Selected to remove layouts. Click to confirm deletion.

Once a delay time is configured, upon login you will see message before window layouts are restored.



Login Window Layout

Please wait until the login window layout is restored.
Seconds remaining: 3

Port Scanner Settings

You can configure the scanner intervals, delays, and orientation, and specify storage of snapshots from the scanner. Note that you can also configure intervals and orientation from the Port Scanner window. See Scanner Options (on page 125). However, snapshot settings only appear in the User Preferences > Port Scanner Settings page.

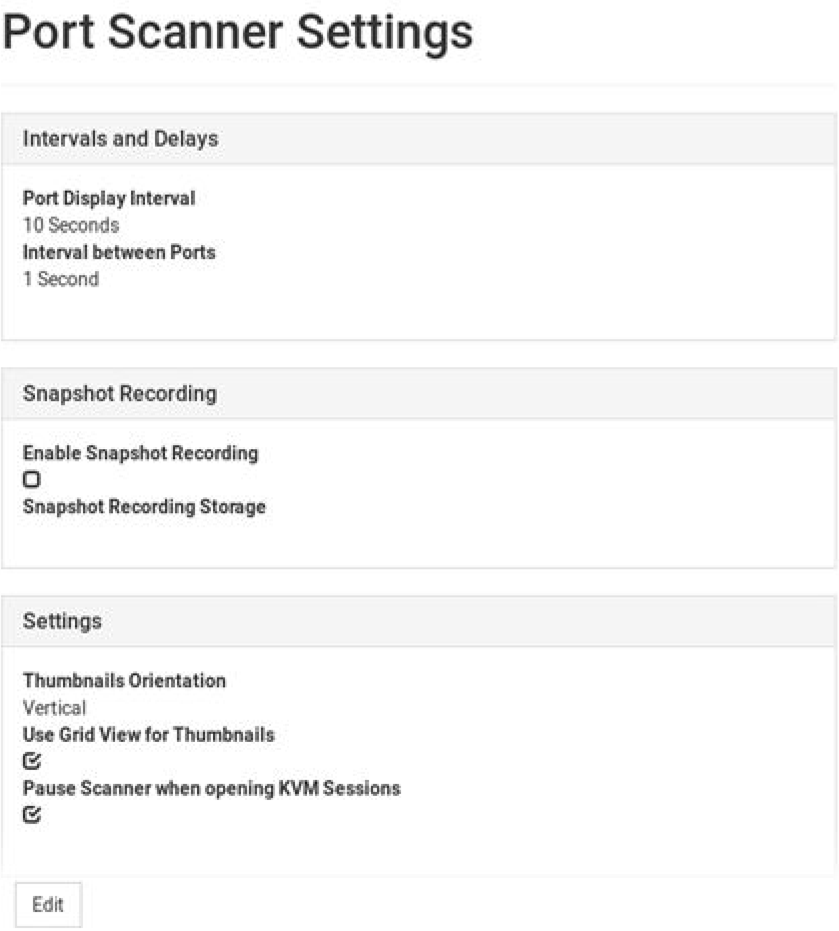
When enabled, snapshots are stored on an accessible USB device or mounted network storage. The image saved is the thumbnail image from the scanner. Sub-directories are created on the location per KX device, named after the device, port by number and name. Images are named by timestamp. Duplicate KX devices with the same name will all use the same directory.

You must have the "Record Scanner Snapshots" permission to capture snapshots from the scanner. See User Groups (on page 165).

► *To configure port scanner settings:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Preferences > Port Scanner Settings. The Port Scanner Settings page opens, showing the current preferences.

- ☑ indicates the setting is enabled.
- □ indicates the setting is disabled.



Port Scanner Settings

Intervals and Delays

Port Display Interval
10 Seconds
Interval between Ports
1 Second

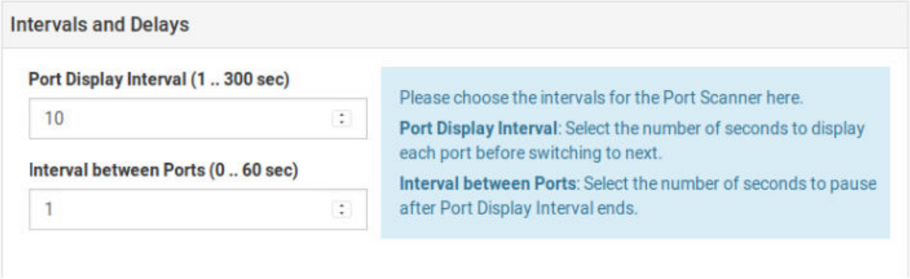
Snapshot Recording

Enable Snapshot Recording
□
Snapshot Recording Storage

Settings

Thumbnails Orientation
Vertical
Use Grid View for Thumbnails
☑
Pause Scanner when opening KVM Sessions
☑

3. Click Edit to make changes.
4. To set Intervals and Delays:
   - Port Display Interval (1..300 sec): Select the number of seconds to display each port before switching to next
   - Interval between Ports (0..60 sec): Select the number of seconds to pause after Port Display Interval ends.



Intervals and Delays

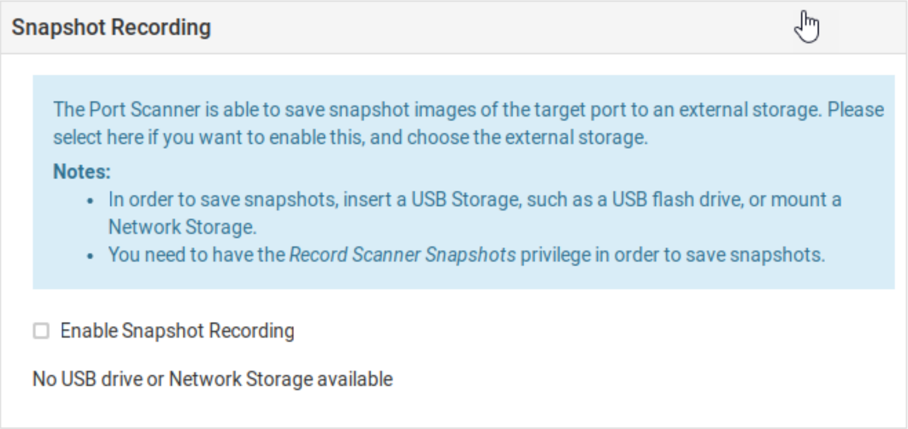
Port Display Interval (1 .. 300 sec)
10

Interval between Ports (0 .. 60 sec)
1

Please choose the intervals for the Port Scanner here.
Port Display Interval: Select the number of seconds to display each port before switching to next.
Interval between Ports: Select the number of seconds to pause after Port Display Interval ends.

5. To set Snapshot Recording:

- Enable Snapshot Recording: Select the checkbox to turn the feature on.
- Make sure a USB drive or network storage is accessible.
- Make sure you have the Record Scanner Snapshots privilege.



Snapshot Recording

The Port Scanner is able to save snapshot images of the target port to an external storage. Please select here if you want to enable this, and choose the external storage.

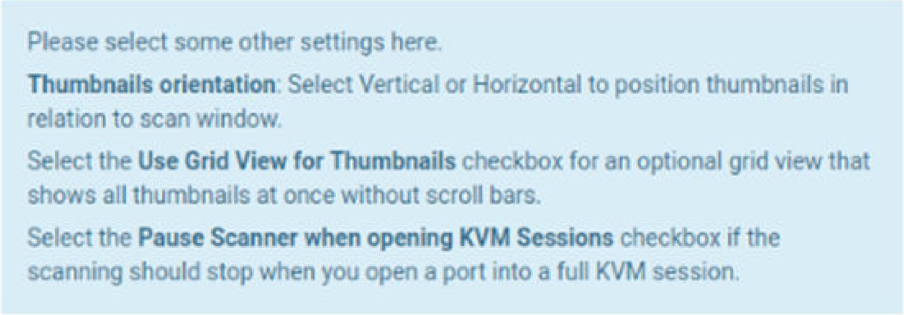
Notes:

- In order to save snapshots, insert a USB Storage, such as a USB flash drive, or mount a Network Storage.
- You need to have the *Record Scanner Snapshots* privilege in order to save snapshots.

☐ Enable Snapshot Recording

No USB drive or Network Storage available

6. To configure remaining preferences:
   - Thumbnails Orientation: Select Vertical or Horizontal to position thumbnails in relation to scan window.
   - Select the Use Grid View for Thumbnails checkbox for an optional grid view that shows all thumbnails at once without scroll bars.
   - Select the Pause Scanner when opening KVM Sessions checkbox if the scanning should stop when you open a port into a full KVM session.



Please select some other settings here.

Thumbnails orientation: Select Vertical or Horizontal to position thumbnails in relation to scan window.

Select the **Use Grid View for Thumbnails** checkbox for an optional grid view that shows all thumbnails at once without scroll bars.

Select the **Pause Scanner when opening KVM Sessions** checkbox if the scanning should stop when you open a port into a full KVM session.

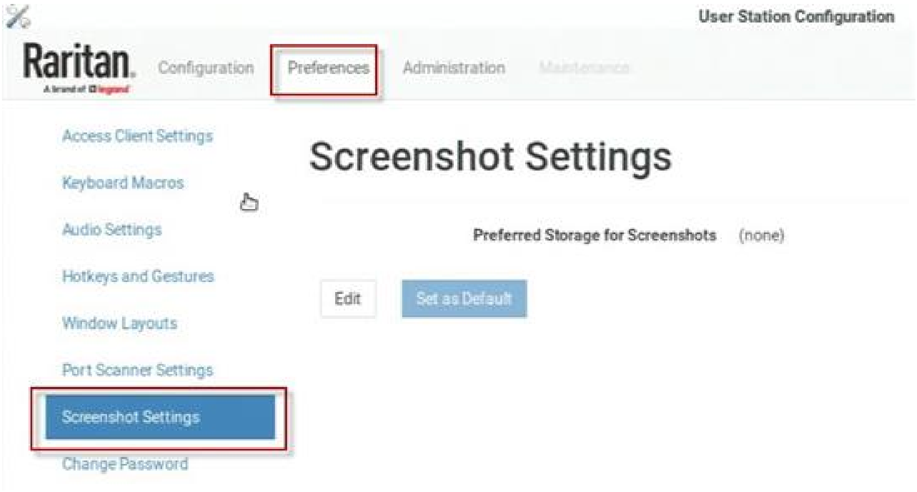
7. Click Save.
8. To save these settings as the default for all new users and existing users who have not changed their settings, click Set as Default. System Administration privilege required.

Screenshot Settings

You have an option to set configured media to save screen shots, provided you have "System Administration" or "Take Screenshot" privilege. You can configure a Network storage or USB drive as your set configured media.

► *To configure Screenshot Settings:*

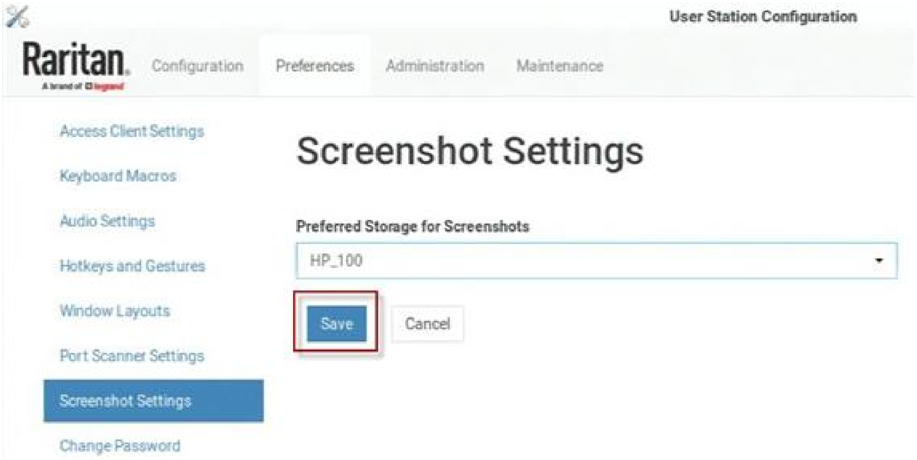
1. If not displayed, launch the User Station Configuration window. See .User Station Configuration (on page 81).
2. Click Preferences > Screenshot Settings. The Screenshot Settings page opens, showing the current preferences. By default no preferences are configured.



Screenshot Settings

Preferred Storage for Screenshots (none)

3. Connect USB drive or configure a network storage. See Network Storages (on page 221).
4. Click Edit. The Preferred Storage for Screenshots list becomes available.
5. Select the storage media and click Save.

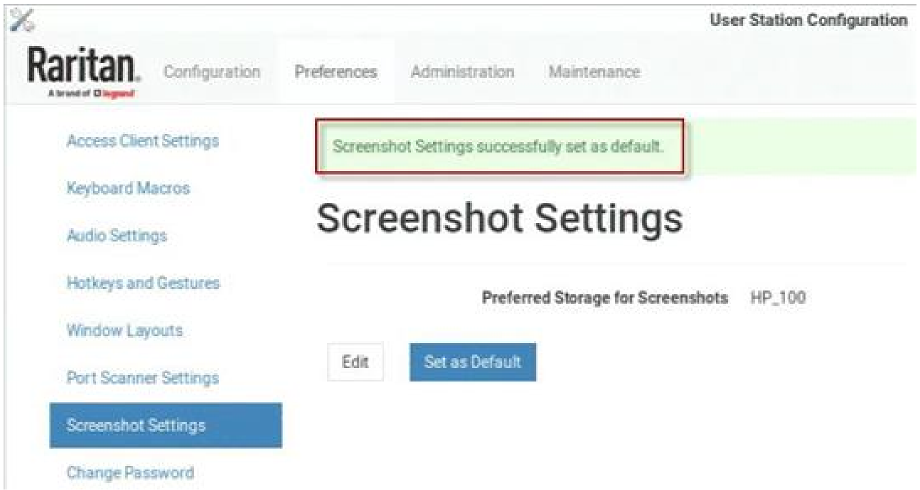


Screenshot Settings

Preferred Storage for Screenshots

HP_100

6. To save this Preferred Storage location as the default for all new users and existing users who have not changed their settings, click Set as Default. System Administration privilege required.

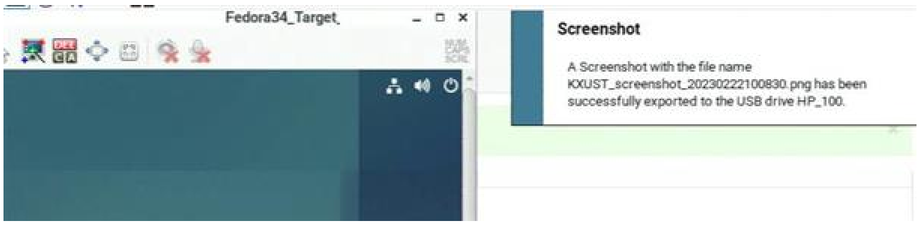


Screenshot Settings successfully set as default.

Screenshot Settings

Preferred Storage for Screenshots HP_100

- Once screen shot is taken by the configured hot key, it is saved directly to the configured media, and you will see confirmation.



Screenshot

A Screenshot with the file name KXUST_screenshot_20230222100830.png has been successfully exported to the USB drive HP_100.

Change Password

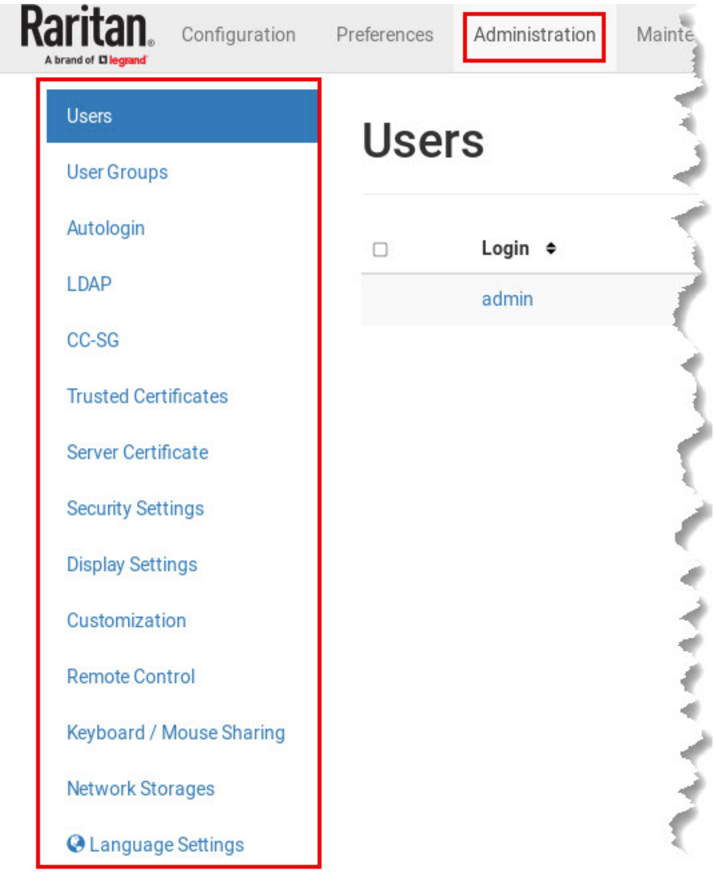
You can change your own password.

► *To change your password:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Preferences > Change Password. The Change Password page opens, and you can enter new password.
3. Click Save.

Administration Features

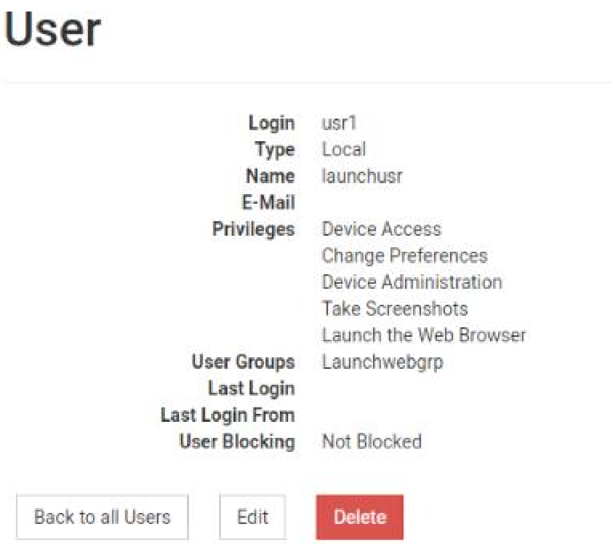
In the User Station Configuration window, click Administration to perform the following User Station administration tasks.



In This Chapter

Users

The Dominion User Station provides a built-in administrator account, which is ideal for initial login and system administration.



User

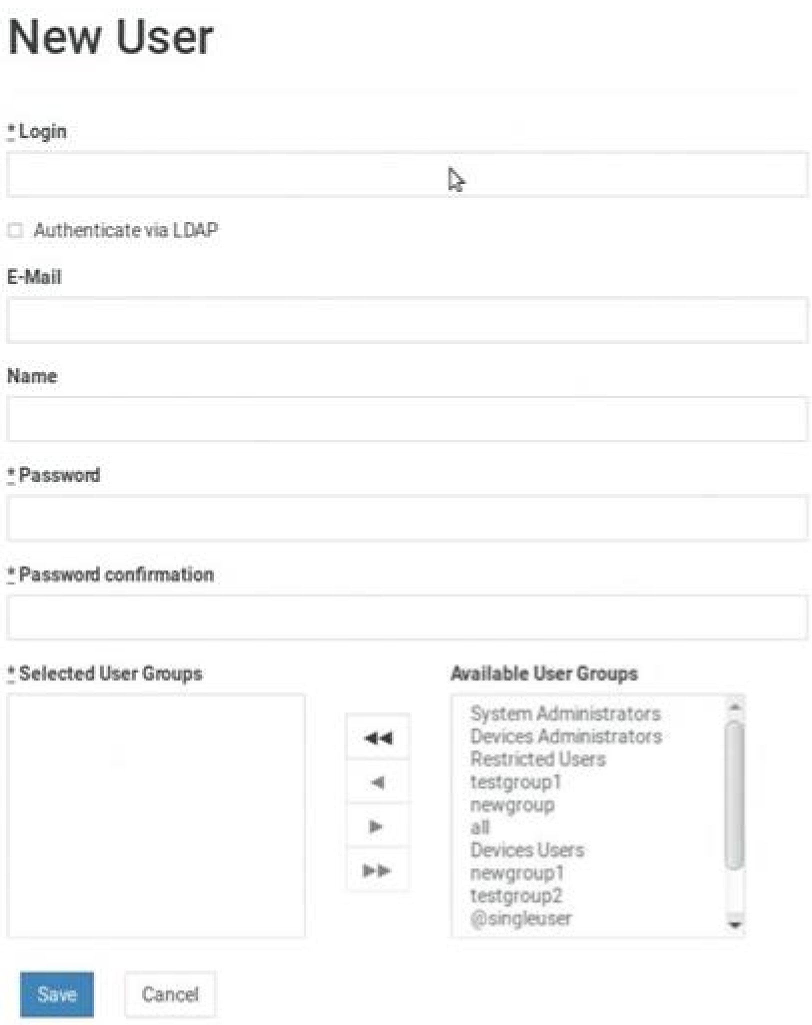
Login	usr1
Type	Local
Name	launchusr
E-Mail	
Privileges	Device Access Change Preferences Device Administration Take Screenshots Launch the Web Browser
User Groups	Launchwebgrp
Last Login	
Last Login From	
User Blocking	Not Blocked

You can add user profiles with configurable privileges for other users to operate and administer the User Station.

Note that the Dominion User Station's user profiles determine the permissions users are granted to have on the User Station instead of the KVM switches. See Authentication of User Stations and KVM/ Serial Switches (on page 263).

► *To create a user profile:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. In the User Station Configuration menu, click Administration > Users > New User. The New User page opens.



New User

* Login

□ Authenticate via LDAP

E-Mail

Name

* Password

* Password confirmation

* Selected User Groups

Available User Groups

System Administrators
Devices Administrators
Restricted Users
testgroup1
newgroup
all
Devices Users
newgroup1
testgroup2
@singleuser

3. Enter information for the new user. The fields marked with * are mandatory.

Field	Description
Login	User name for logging in to the User Station. • 2 to 255 characters • Restricted character: colon (:) :
Authenticate via LDAP	Select this checkbox if this user will be authenticated via LDAP. See LDAP (on page 170). If deselected, this user is authenticated via the local database of the User Station and you must store user passwords on the User Station.
Email	The email address to reach the user.
Name	Real name or nickname of the user.

Field	Description
Password, Password confirmation	Password for logging in to the User Station. Minimum of 8 characters, at least 1 lowercase, 1 upper case and 1 numeric are required.
Selected User Groups	Assigning user groups determines the permissions granted to this user. See User Groups (on page 165). • Use the arrow buttons to move the user groups as needed. The user will be a member of the groups in the Selected User Groups list.

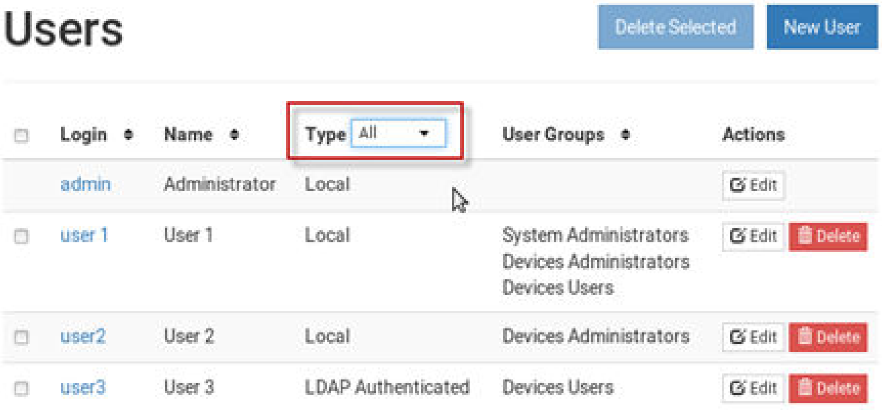
4. Click Save, and the new user profile's content is shown.

Editing or Deleting Users

To view existing user profiles in the User Station Configuration window, click Administration > Users.

Select an option in the Type field to show the desired user types. Note that this field is configurable only for users with the "System Administration" permission.

- Local: Shows local users only, who are authenticated via the User Station's local database.
- LDAP: Shows the users who are authenticated via LDAP.
- CC-SG: Shows the users who are authenticated using CC-SG.
- All: Shows all users, including Local, LDAP, and CC-SG. You must be the admin user to view all users.



□	Login ⬍	Name ⬍	Type All ▾	User Groups ⬍	Actions
	admin	Administrator	Local		Edit
□	user 1	User 1	Local	System Administrators Devices Administrators Devices Users	Edit Delete
□	user2	User 2	Local	Devices Administrators	Edit Delete
□	user3	User 3	LDAP Authenticated	Devices Users	Edit Delete

Click each user's login name to view details.

Note that you cannot delete the built-in *admin* user, but you can modify its data other than the privileges (user groups).

▶ *To modify a user profile:*

1. Click the desired user's Edit button. The Edit User page opens.
2. Make necessary changes to the information shown. See Users (on page 159).
   - You cannot change the login name.
   - To change the user's password, type the new password in the "Password" and "Password confirmation" fields.
3. Click Save.

▶ *To delete a user profile:*

1. Click the desired user's Delete button, or select the check boxes for users you want to delete and click Delete Selected.
2. Click OK on the confirmation message.

Import Users

The import feature enables bulk importing and updating of existing user information into the Dominion User Station. To use this functionality, place a properly formatted CSV file in the root directory of a connected USB drive or mounted Network Storage. Only users with Admin or System Administrator privileges can perform imports.

When the Dominion User Station detects that a user listed in the CSV file already exists in the system, it updates that user's credentials based on the information provided in the file. Before importing, Dominion User Station validates all entries in the CSV. If any errors are found, an appropriate error message is displayed.

Users CSV File Requirements

You can import users and user groups along with their credentials using a CSV file. To create the CSV file, enter the user information in the following comma-separated format:

<login>, <user email>, <full name>, <password>, <user group>, <user group>, ...

Email and full name are optional. If the full name is not provided, the system will use the login ID as the display name. Ensure the file is saved with a '.csv' extension.

Sample User CSV file:

user1,user1@raritan.com,User1 Test,Zxcvbn1!,Devices Users

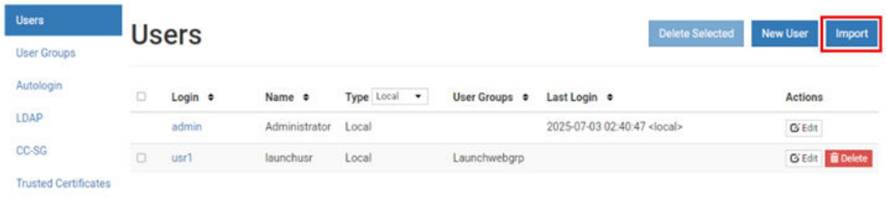
user2,user2@raritan.com,User2 Test,Zxcvbn1!,Devices Administrators

user3,user3@raritan.com,User2 Test,Zxcvbn1!,System Administrators

Add Users via Import

► *To add Users via Import:*

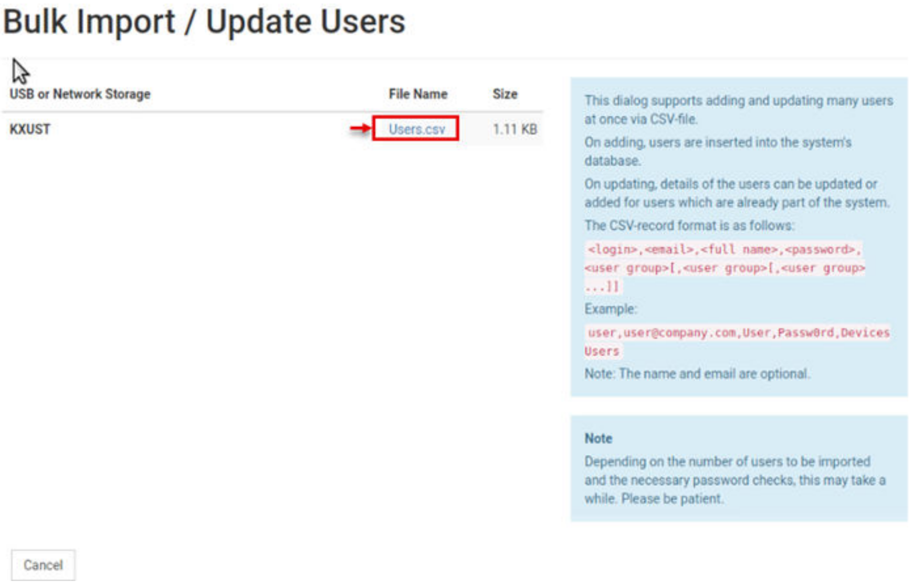
1. Once you've created the CSV file, save it on USB drive and attach it to the Dominion User Station or copy to a mounted Network Storage.
2. Choose Administration > Users > Import



Users

□	Login	Name	Type Local	User Groups	Last Login	Actions
	admin	Administrator	Local		2025-07-03 02:40:47 <local>	Edit
□	usr1	launchusr	Local	Launchwebgrp		Edit Delete

3. The Storage list displays all CSV files found in the root folder of connected USB and mounted Network Storages on the Bulk Import/Update Users page.



Bulk Import / Update Users

USB or Network Storage	File Name	Size
KXUST	Users.csv	1.11 KB

This dialog supports adding and updating many users at once via CSV-file.

On adding, users are inserted into the system's database.

On updating, details of the users can be updated or added for users which are already part of the system.

The CSV-record format is as follows:

```
<login>,<email>,<full name>,<password>,
<user group>[,<user group>[,<user group>
...]]
```

Example:

```
user,user@company.com,User,Passw0rd,Devices
Users
```

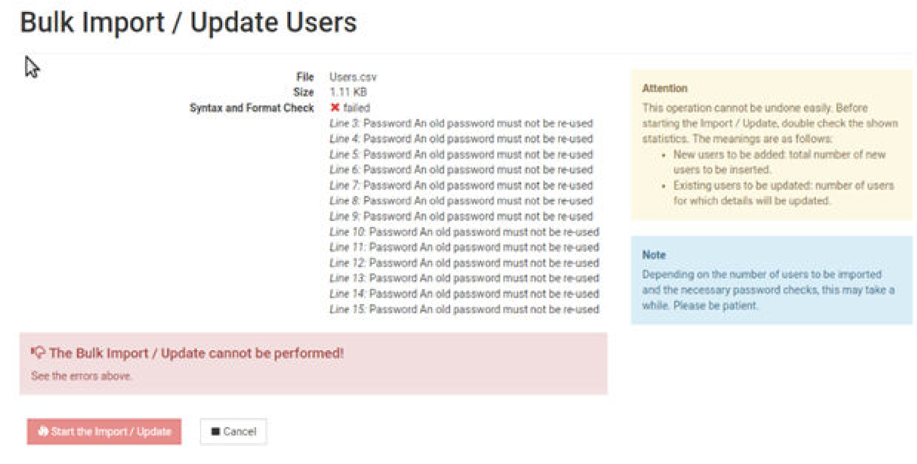
Note: The name and email are optional.

Note

Depending on the number of users to be imported and the necessary password checks, this may take a while. Please be patient.

4. Click on the CSV file to import.

System will do Syntax and Format checks and will provide the count of the users to be added. If the file is not valid, an error message appears. Click cancel and correct the errors identified and select to import the file again.



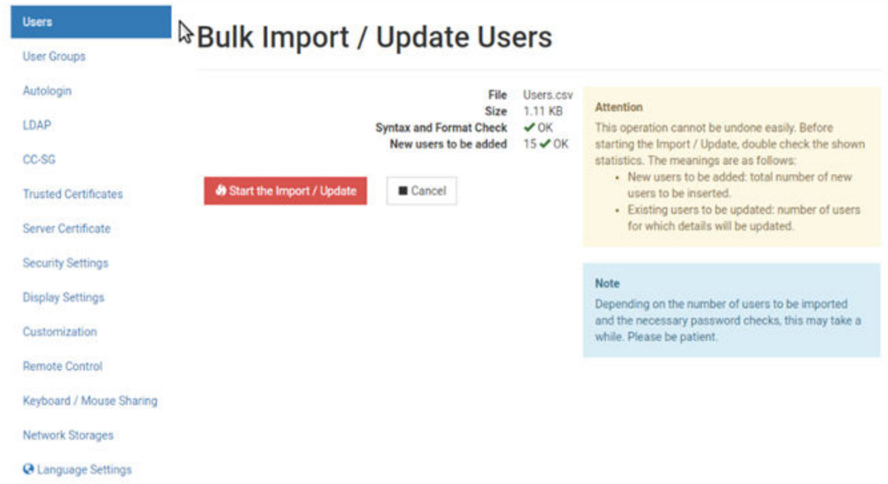
Bulk Import / Update Users

File Users.csv
Size 1.11 KB
Syntax and Format Check ✗ failed
Line 3: Password An old password must not be re-used
Line 4: Password An old password must not be re-used
Line 5: Password An old password must not be re-used
Line 6: Password An old password must not be re-used
Line 7: Password An old password must not be re-used
Line 8: Password An old password must not be re-used
Line 9: Password An old password must not be re-used
Line 10: Password An old password must not be re-used
Line 11: Password An old password must not be re-used
Line 12: Password An old password must not be re-used
Line 13: Password An old password must not be re-used
Line 14: Password An old password must not be re-used
Line 15: Password An old password must not be re-used

The Bulk Import / Update cannot be performed!
See the errors above.

Attention
This operation cannot be undone easily. Before starting the Import / Update, double check the shown statistics. The meanings are as follows:
- New users to be added: total number of new users to be inserted.
- Existing users to be updated: number of users for which details will be updated.

Note
Depending on the number of users to be imported and the necessary password checks, this may take a while. Please be patient.



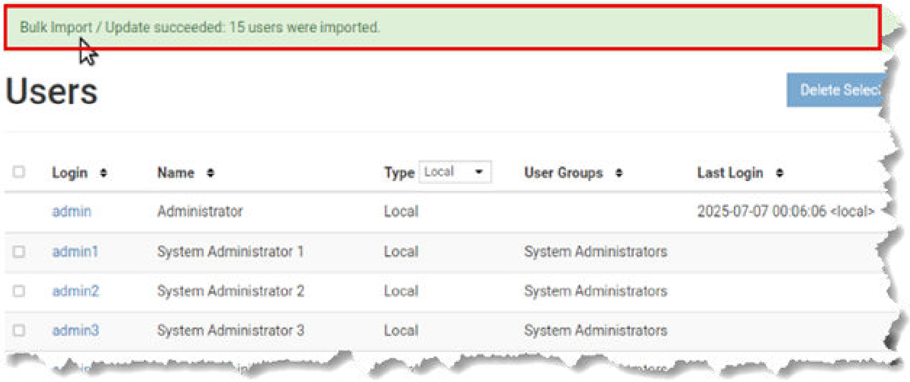
Bulk Import / Update Users

File Users.csv
Size 1.11 KB
Syntax and Format Check ✓ OK
New users to be added 15 ✓ OK

Attention
This operation cannot be undone easily. Before starting the Import / Update, double check the shown statistics. The meanings are as follows:
- New users to be added: total number of new users to be inserted.
- Existing users to be updated: number of users for which details will be updated.

Note
Depending on the number of users to be imported and the necessary password checks, this may take a while. Please be patient.

5. Click Start the Import/Update.
6. Check the Actions area to see the import results. Items that imported successfully show in green text.



Bulk Import / Update succeeded: 15 users were imported.

Users

□	Login ⬍	Name ⬍	Type Local ▾	User Groups ⬍	Last Login ⬍
	admin	Administrator	Local		2025-07-07 00:06:06 <local>
□	admin1	System Administrator 1	Local	System Administrators	
□	admin2	System Administrator 2	Local	System Administrators	
□	admin3	System Administrator 3	Local	System Administrators	

Troubleshoot CSV File Problems

► *To troubleshoot CSV file validation:*

If any issues are detected during CSV file validation, error messages will appear in the Problems section of the Import page. Each message includes the line number where the error occurred, helping you quickly locate and resolve the issue.

Once you've corrected the errors, re-validate the file to ensure all issues have been resolved.

User Groups

A user group determines the privileges its members can have.

There are several factory default user groups.

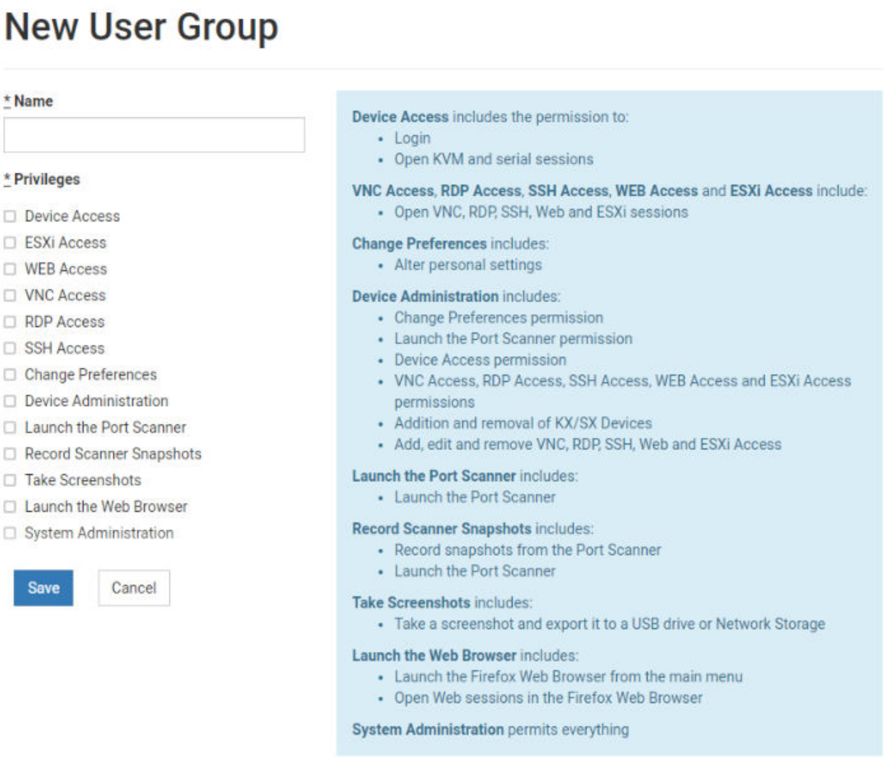
User groups	Default privileges
System Administrators	System Administration. See Privileges (on page 166).
Devices Administrators	Device Administration. Device Access.
Devices Users	Device Access. Change Preferences. Launch the Port Scanner
Restricted Users	Device Access

The Restricted Users group lacks the Change Preferences privilege, so this group can be used for access-only users.

You can create a new user group if the default user groups do not satisfy your needs.

► *To create a new user group:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Administration > User Groups > New User Group. The New User Group page opens.



New User Group

* Name

* Privileges

☐ Device Access
☐ ESXi Access
☐ WEB Access
☐ VNC Access
☐ RDP Access
☐ SSH Access
☐ Change Preferences
☐ Device Administration
☐ Launch the Port Scanner
☐ Record Scanner Snapshots
☐ Take Screenshots
☐ Launch the Web Browser
☐ System Administration

Save Cancel

Device Access includes the permission to:
- Login
- Open KVM and serial sessions

VNC Access, **RDP Access**, **SSH Access**, **WEB Access** and **ESXi Access** include:
- Open VNC, RDP, SSH, Web and ESXi sessions

Change Preferences includes:
- Alter personal settings

Device Administration includes:
- Change Preferences permission
- Launch the Port Scanner permission
- Device Access permission
- VNC Access, RDP Access, SSH Access, WEB Access and ESXi Access permissions
- Addition and removal of KX/SX Devices
- Add, edit and remove VNC, RDP, SSH, Web and ESXi Access

Launch the Port Scanner includes:
- Launch the Port Scanner

Record Scanner Snapshots includes:
- Record snapshots from the Port Scanner
- Launch the Port Scanner

Take Screenshots includes:
- Take a screenshot and export it to a USB drive or Network Storage

Launch the Web Browser includes:
- Launch the Firefox Web Browser from the main menu
- Open Web sessions in the Firefox Web Browser

System Administration permits everything

3. Enter information for the new user group.

Field	Description
Name	Type a name for the new user group.
Privileges	Assign one or multiple privileges to the new user group. See Privileges (on page 166).

4. Click Save, and the new user group's data is shown.

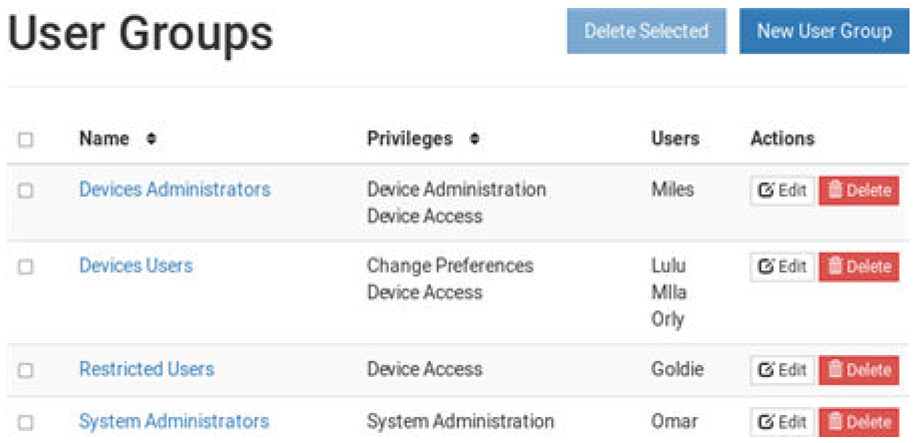
Privileges

Privilege	Operations permitted
Device Access	• Log in to the User Station. • Open KVM and serial sessions.
ESXi Access WEB Access	• Open ESXi or WEB sessions.
VNC Access RDP Access SSH Access	• Open VNC, RDP, and SSH sessions. • These permissions alone do not grant login privilege. User must also be a member of a group with System Administration, Device Administration or Device Access privileges.

Privilege	Operations permitted
Change Preferences	- Alter personal settings - Users who don't have this privilege cannot launch User Station Configuration, window layouts, or system settings
Device Administration	- Log in to the User Station. - Change Preferences permission. - Device Access permission. - Launch the Port Scanner. - ESXi Access, WEB Access, VNC Access, RDP Access and SSH Access permissions. - KX/SX device addition and removal. - Add, edit and remove ESXi, WEB, VNC, RDP and SSH access.
Launch the Port Scanner	- Launch the Port Scanner
Take Screenshots	- Take a screenshot and export it to a USB drive or network storage using the hotkey. - This permission alone does not grant login privileges. User must also be a member of a group with System Administration, Device Administration or Device Access privileges.
Launch the Web Browser	- This permission allows user to launch the Firefox Web Browser from the main menu. - Open Web sessions in the Firefox Web Browser. Each session is independent. - User can configure "Open in Firefox" for web targets; either for all (Access Client Settings) or for specific targets (Access Point Priorities) - Some settings like Tool Bar, Window Decorations, Full-Screen Mode covers all Monitors and Security Settings do not work with the Firefox Web Browser
Record Scanner Snapshots	- Record snapshots from the Port Scanner. - Launch the Port Scanner.
System Administration	All operations on the User Station are permitted.

Editing or Deleting User Groups

To view all user groups in the User Station Configuration window, click Administration > User Groups.



User Groups

□	Name	Privileges	Users	Actions
□	Devices Administrators	Device Administration Device Access	Miles	Edit Delete
□	Devices Users	Change Preferences Device Access	Lulu Mila Orly	Edit Delete
□	Restricted Users	Device Access	Goldie	Edit Delete
□	System Administrators	System Administration	Omar	Edit Delete

The Users column lists the names of all users who belong to this user group. If the real name is not available in the user profile, the user's login name is shown. See Users (on page 159).

Each user group shows a maximum of five users in this view.

Click each user group's name to view its details.

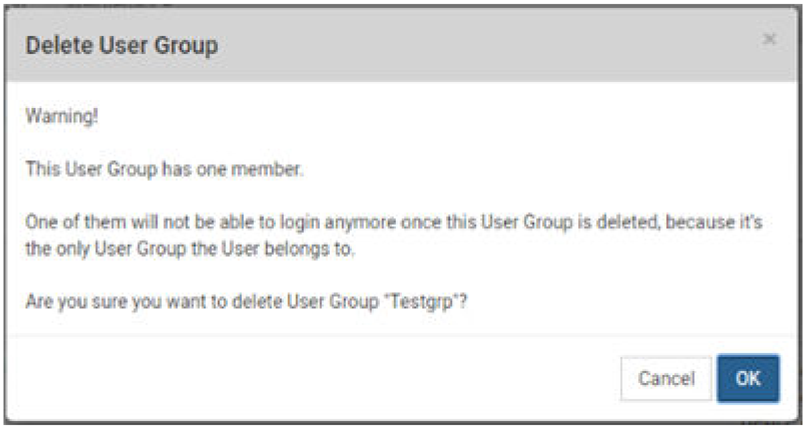
You can delete any user group even if it contains users.

► *To modify a user group:*

1. Click the desired user group's Edit button.
2. Make necessary changes to the information shown. See User Groups (on page 165).
3. Click Save.

► *To delete a user group:*

1. Click the desired user group's Delete button.
2. A confirmation message appears.
   - If any user will not be able to log in after losing this user group, the confirmation message shows a warning similar to the following diagram. This is because the selected user group is the only user group that one or some of the group members have.



Delete User Group

Warning!

This User Group has one member.

One of them will not be able to login anymore once this User Group is deleted, because it's the only User Group the User belongs to.

Are you sure you want to delete User Group "Testgrp"?

3. Click OK to confirm the deletion or Cancel to abort it.

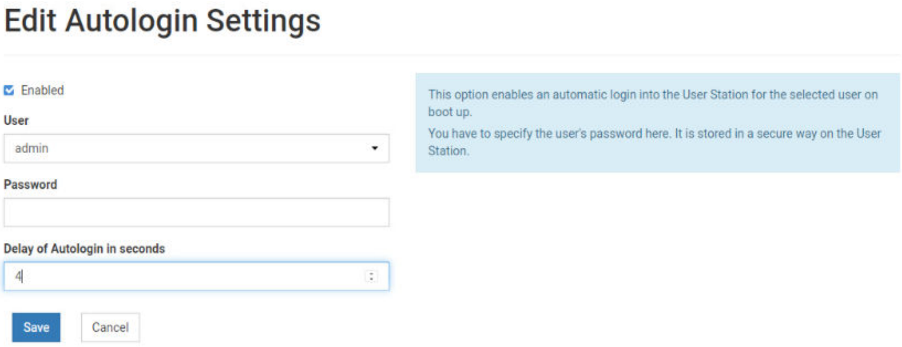
Auto login

Enable the Autologin feature to allow a selected user to be automatically logged into the Dominion User Station when it boots up. To change users, log out, then re-login as the new user. Autologin is supported for local, CC-SG and LDAP logins.

Note: To configure Autologin for keyboard/mouse sharing setups, see Configuring Keyboard/Mouse Sharing (on page 219).

► *To configure Autologin:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Administration > Autologin. The Autologin Settings page opens.
3. Click Edit to change the settings.
4. Select the Enabled checkbox to enable autologin, then select the user name in the list.
5. Provide the password.
6. Enter a value for "Delay of Autologin in seconds" to specify number of seconds to delay login after KXUST startup.
7. Click Save.



Edit Autologin Settings

☑ Enabled

User
admin

Password

Delay of Autologin in seconds
4

This option enables an automatic login into the User Station for the selected user on boot up.

You have to specify the user's password here. It is stored in a secure way on the User Station.

LDAP

The external LDAP authentication has the following two modes:

- Authentication and authorization via LDAP
- Only authentication via LDAP

LDAP cannot be used when CC-SG Integration is enabled.

Note: For single sign-on capability in Dominion User Station, your KX devices, the Dominion User Station and your users must exist in the same LDAP environment, and the value of "login name attribute" should be the same as UID.

▶ *Authentication and authorization via LDAP:*

a. On the LDAP server(s), create both USERS AND USER GROUPS for the User Station.

b. On the User Station, create user groups whose group names are the same as those on the LDAP server(s). See User Groups (on page 165).

    - You can also import desired user groups from the LDAP server into the User Station after performing an LDAP search for user group objects. See Searching for LDAP Users and Groups (on page 179).
    - User names for this LDAP authentication mode are NOT needed on the User Station.

LDAP alias, which allows one user to have multiple logins, such as multiple common names, does NOT work in the LDAP authentication and authorization mode.

▶ *Only authentication via LDAP:*

a. On the LDAP server(s), create users for the User Station.

    - User groups are NOT needed on the LDAP server(s).

b. On the User Station, create both USERS AND USER GROUPS. The user names must be the same as those on the LDAP server(s), but the user passwords are not stored on the User Station. See Users (on page 159) and User Groups (on page 165).

    - You can also import desired user names from the LDAP server into the User Station after performing an LDAP search for user objects. See Searching for LDAP Users and Groups (on page 179).

LDAP alias works fine in the LDAP authentication only mode.

► *User Station configuration required for either LDAP authentication mode:*

- Add the LDAP server(s). See Adding LDAP Servers (on page 171).
- Enable the LDAP authentication. See Enabling or Disabling the LDAP Authentication (on page 178) or Configuring the Maximum Search Results and Local Authentication Settings (on page 181).

TIP: When "admin" is entered as the user name and LDAP is enabled, an additional checkbox "Authenticate Locally" appears on the login page. You can select Authenticate Locally to authenticate using User Station's local database instead of the LDAP server(s) regardless of the LDAP authentication mode.

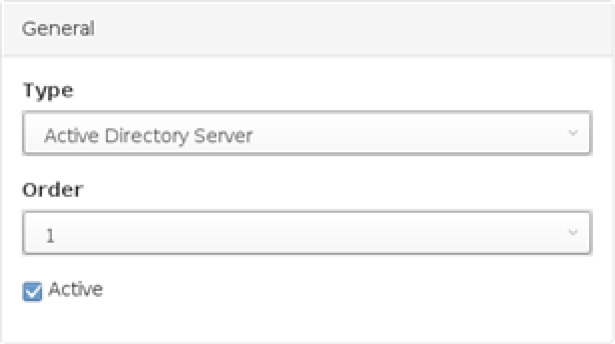
Adding LDAP Servers

To apply external LDAP authentication, at least one LDAP server must be added to the User Station. If you are not familiar with the LDAP settings, consult your LDAP administrator for help.

If there are multiple LDAP servers added, the order of the LDAP servers determines the authentication priority. The User Station first connects to the first LDAP server for user authentication, then the second if the first LDAP server fails, and so on until it successfully authenticates the user. If all LDAP servers fail the authentication, the user's access is denied.

► *To add LDAP servers:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Administration > LDAP > Add New Server. The New LDAP Server page opens, with 5 groups of settings displayed.
3. The General section determines general LDAP settings.



General

Type

Active Directory Server

Order

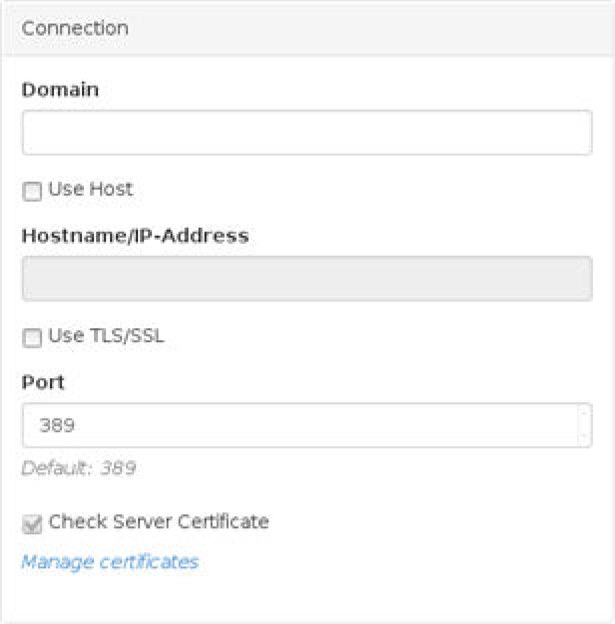
1

☑ Active

Setting	Description
Type	The type of the new LDAP server: • Active Directory Server: Microsoft Active Directory • LDAP server: OpenLDAP

Setting	Description
Order	The order of this LDAP server, which determines the authentication priority when there are multiple LDAP servers. If adding more than one LDAP server, you can change the priority by selecting the sequential number of any existing LDAP server. That existing LDAP server and all servers that follow it will move down one position in the order.
Active	Leave this checkbox enabled unless you want to disable this LDAP server temporarily.

4. Enter the LDAP server's data in the Connection section.



Connection

Domain

□ Use Host

Hostname/IP-Address

□ Use TLS/SSL

Port

389

Default: 389

☑ Check Server Certificate

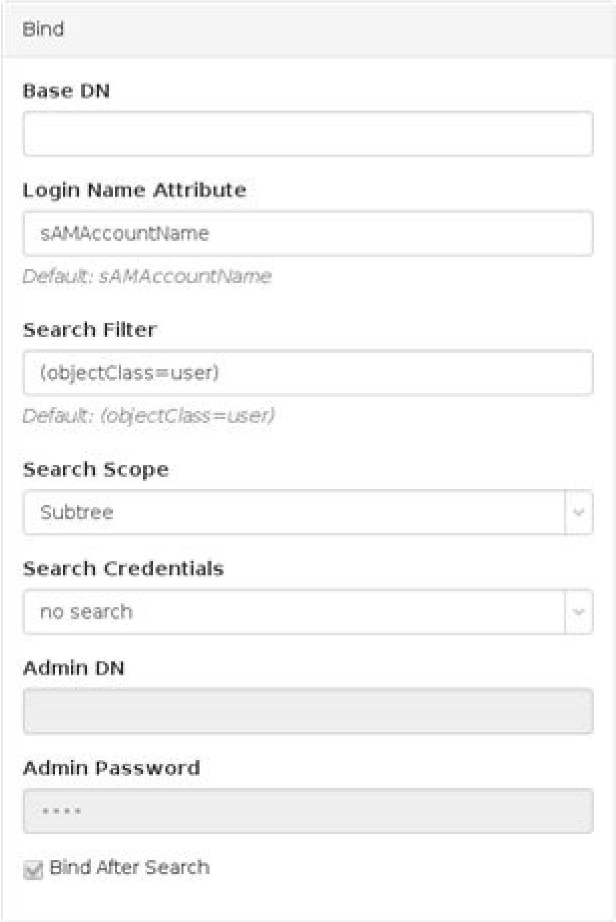
Manage certificates

Setting	Description
Domain	Configurable when "Type" is set to "Active Directory Server." The Active Directory server's domain name. Usually the User Station can determine the Active Directory server's host name via its domain name and DNS. If you select the following Use Host checkbox, this behavior is replaced.
Use Host	Configurable when "Type" is set to "Active Directory Server." Enable this checkbox when intending to manually specify the host name or IP address of the Active Directory server.
Hostname/ IP-Address	The LDAP server's host name or IP address.

Setting	Description
Use TLS/SSL	Select this checkbox if the security connection is required for the LDAP server.
Port	TCP port for the LDAP authentication, whose default is either of the following: • 389 (standard) • 636 (TLS/SSL)
Check Server Certificates	Configurable when the Use TLS/SSL checkbox is selected. Select this checkbox if it is required to validate the LDAP server's certificate by the list of accepted certificates on the User Station prior to the connection. If the certificate validation fails, the connection is refused.
Manage certificates	Click this link for installing a CA certificate as needed. See Trusted Certificates (on page 190).

Note: Currently, encrypted LDAP connections are not using the FIPS-accredited cryptographic code.

1. Enter the bind credentials in the Bind section.



Bind

Base DN

Login Name Attribute

sAMAccountName

Default: sAMAccountName

Search Filter

(objectClass=user)

Default: (objectClass=user)

Search Scope

Subtree

Search Credentials

no search

Admin DN

Admin Password

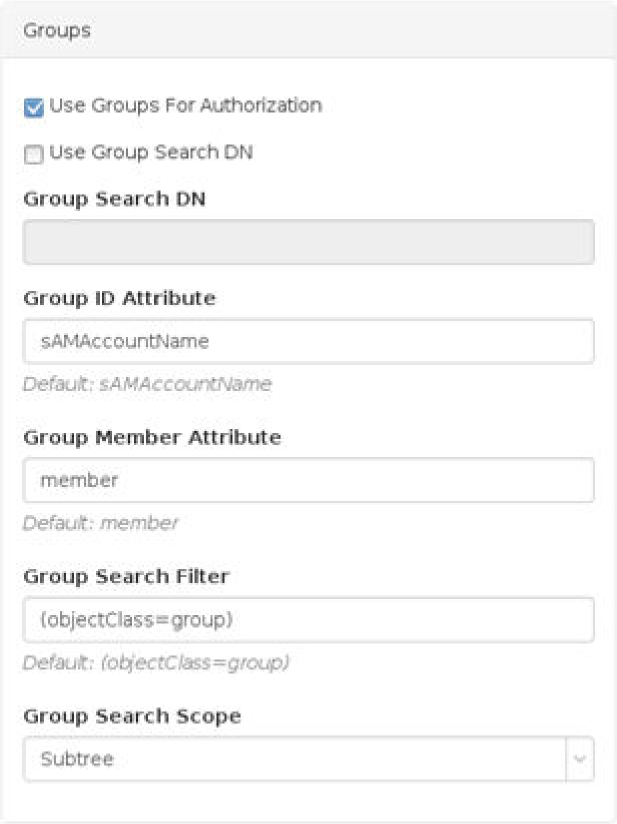
****

☑ Bind After Search

Setting	Description
Base DN	Distinguished Name (DN) of the search base, which is the starting point of the LDAP search. - Example: `ou=dev,dc=example,dc=com`
Login Name Attribute	The attribute of the LDAP user class which denotes the login name. Note that only relative distinguished names (RDNs) can be specified in this field. - Example: `cn`
Search Filter	Search criteria for finding LDAP user objects within the directory tree.
Search Scope	The depth to search for LDAP user objects, which starts at the directory level denoted by the "Base DN." - One: Searches one level below the base DN, with the base excluded. - Subtree: Searches all levels below the base DN, including the base.

Setting	Description
Search Credentials	If the authentication of a user requires the LDAP search, specify the search credentials for it: - no search: No LDAP search is performed. - anonymous: Enables the LDAP search without dedicated search credentials. - use admin credentials: Enables the LDAP search by entering the dedicated search credentials - a DN and password.
Admin DN, **Admin Password**	Configurable when "Search Credentials" is set to "use admin credentials." Distinguished Name and password of the administrator user who is permitted to perform the LDAP search.
Bind After Search	Configurable when "Search Credentials" is NOT set to "no search." Select this checkbox if the LDAP bind operation shall be performed with a DN derived from a search operation for the user who's trying to log in. Usually this checkbox is: - Deselected for the "Active Directory Server." - Selected for the "LDAP server."

2. To use LDAP groups for the authorization, configure the Groups section.



Groups

☑ Use Groups For Authorization

□ Use Group Search DN

Group Search DN

Group ID Attribute

sAMAccountName

Default: sAMAccountName

Group Member Attribute

member

Default: member

Group Search Filter

(objectClass=group)

Default: (objectClass=group)

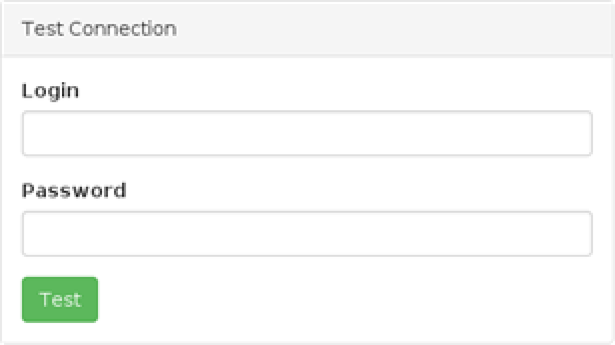
Group Search Scope

Subtree

Setting	Description
Use Groups For Authorization	Select this checkbox if authorization via LDAP is intended. See LDAP (on page 170). When disabled, authorization is managed by the User Station, and this LDAP server only manages authentication.
Use Group Search DN	Select this checkbox when intending to search a dedicated base DN instead of the "Base DN" for user groups. When disabled, "Base DN" is used for group searches.
Group Search DN	Configurable when "Use Group Search DN" is enabled. The dedicated base DN for group searches.
Group ID Attribute	The attribute of the LDAP group class which denotes the ID of the group which is used to match local group names.

Setting	Description
Group Member Attribute	The attribute of the LDAP group class which denotes the users who belong to a group. Its value must be either one below: • A user's DN • Value of the "Login Name Attribute" *Note: If the value is not either one, the group member detection may not work as expected.*
Group Search Filter	Search criteria for finding LDAP group objects within the directory tree.
Group Search Scope	The depth to search for LDAP group objects, which starts at the directory level denoted by the "Base DN" or a group search base DN. • One: Searches one level below the base DN, with the base excluded. • Subtree: Searches all levels below the base DN, including the base.

3. To test whether the connection to the new LDAP server can be successfully established, type the LDAP user name and password in the Test Connection section and click Test.



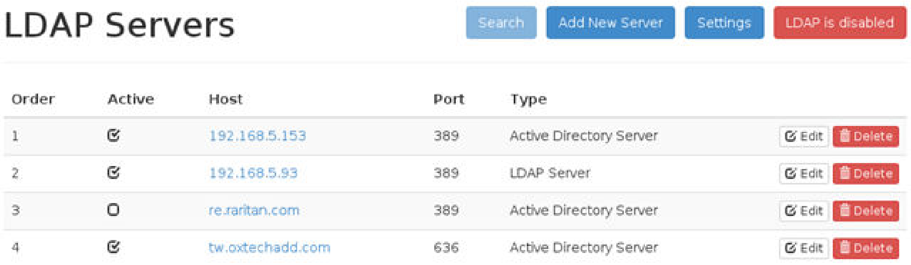
4. Click Save.
5. Repeat the same steps to add more LDAP servers as needed.

Editing or Deleting LDAP Servers

To show a list of existing LDAP servers, click Administration > LDAP.

In the Active column:

- ☑ indicates that LDAP server is enabled.
- □ indicates that LDAP server is disabled.



Order	Active	Host	Port	Type	
1	☑	192.168.5.153	389	Active Directory Server	Edit Delete
2	☑	192.168.5.93	389	LDAP Server	Edit Delete
3	○	re.raritan.com	389	Active Directory Server	Edit Delete
4	☑	tw.oxtechadd.com	636	Active Directory Server	Edit Delete

▶ *To modify an LDAP server setting:*

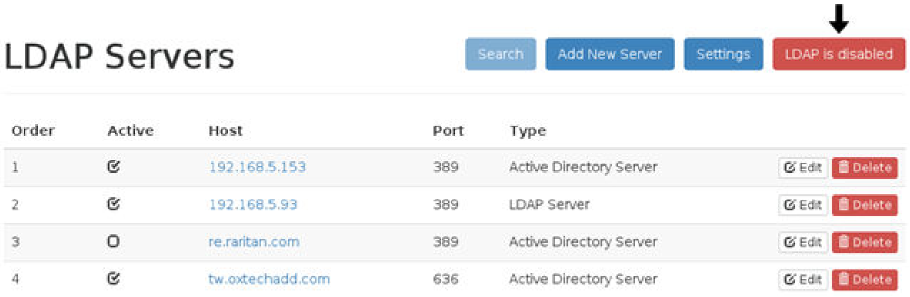
1. Click the desired LDAP server's Edit button. The Edit LDAP Server page opens.
2. Make necessary changes to the information shown. For information on each field, see Adding LDAP Servers (on page 171).
3. Click Save.

▶ *To delete an LDAP server:*

1. Click the desired server's Delete button.
2. Click OK on the confirmation message.

Enabling or Disabling the LDAP Authentication

Click Administration > LDAP to open the LDAP Servers page. The right-most button indicates the current LDAP authentication setting.



Order	Active	Host	Port	Type	
1	☑	192.168.5.153	389	Active Directory Server	Edit Delete
2	☑	192.168.5.93	389	LDAP Server	Edit Delete
3	○	re.raritan.com	389	Active Directory Server	Edit Delete
4	☑	tw.oxtechadd.com	636	Active Directory Server	Edit Delete

When that page shows LDAP is disabled, the LDAP authentication is currently disabled, which is the default. While disabled, all users are authenticated via the local database of the User Station so their user credentials must be available on the User Station. Therefore, only local users can log in. See Users (on page 159).

When that page shows LDAP is enabled, the LDAP authentication is currently enabled. While enabled, all users are authenticated via the LDAP servers so only LDAP users can log in. The only local user that can log in is the *admin* user.

▶ *To enable/disable the LDAP authentication:*

- To enable it, click .

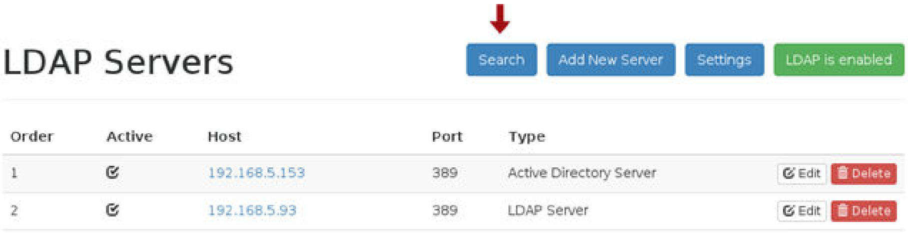
- To disable it, click .

Tip 1: You can also enable or disable the LDAP authentication on the Edit LDAP Settings page. See Configuring the Maximum Search Results and Local Authentication Settings (on page 181).

Tip 2: To enable or disable a specific LDAP server only, select or deselect the desired LDAP server's Active checkbox. See Editing or Deleting LDAP Servers (on page 177).

Searching for LDAP Users and Groups

When LDAP authentication is enabled, you can manually search for LDAP users or user groups as needed.

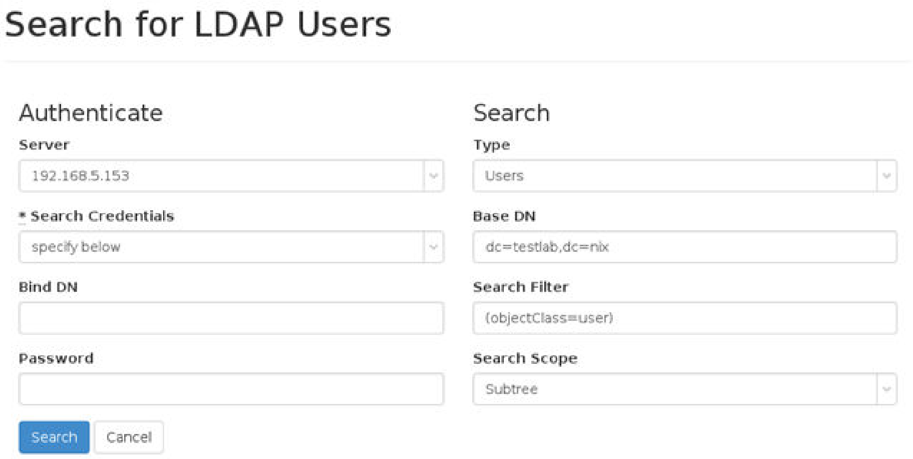


LDAP Servers

Order	Active	Host	Port	Type	
1	✓	192.168.5.153	389	Active Directory Server	Edit Delete
2	✓	192.168.5.93	389	LDAP Server	Edit Delete

▶ *To search for LDAP users and groups:*

1. Click Administration > LDAP > Search. The "Search for LDAP Users" page opens.
   - If the Search button is disabled, enable the LDAP authentication first. See Enabling or Disabling the LDAP Authentication (on page 178).



Search for LDAP Users

Authenticate

Server: 192.168.5.153

* Search Credentials: specify below

Bind DN:

Password:

Search

Type: Users

Base DN: dc=testlab,dc=nix

Search Filter: (objectClass=user)

Search Scope: Subtree

2. In the Server field, select the desired LDAP server from the list of *active* LDAP servers.
3. The following settings on this page are pre-populated with the values of the selected LDAP server, but you can adjust them to match your search needs. If you are not familiar with the LDAP settings, consult your LDAP administrator for help.

Setting	Description
Search Credentials	One or two options are available, depending on the selected LDAP server's configuration. • stored admin credentials: Use the admin credentials stored in the LDAP server's configuration. • specify below: Use the search credentials specified in the following two fields.
Bind DN, **Password**	With "specify below" selected, you must specify the search credentials in the two fields.
Type	The type of user data to search - User or User Group.
Base DN	Distinguished Name (DN) of the search base, which is the starting point of the LDAP search.
Search Filter	Search criteria for finding LDAP user objects within the directory tree.
Search Scope	The depth to search for LDAP user or group objects, which starts at the directory level denoted by the "Base DN." • Base: Searches the base DN only. • One: Searches one level below the base DN, with the base excluded. • Subtree: Searches all levels below the base DN, including the base.

4. Click Search.
5. From the search result, you can select desired LDAP users or groups and add them to the User Station by clicking the buttons below.

- *Add as local user*:

  This button is displayed for those users who are not added to the User Station yet. Click this button to add the LDAP user as a local user who can also be authenticated via LDAP in the "LDAP authentication only" mode. Its authorization is managed by the User Station so ensure this user is a member of at least one user group in the local database. See Editing or Deleting Users (on page 161).
- *Add this group*:

  This button is displayed for those groups that are not added on the User Station yet. Click this button to add the LDAP group as a user group with the "Device Access", "Change Preferences"and "Launch the Port Scanner" privilege assigned. "Record Scanner Snapshots" permission can be added by admin. To modify the privileges, see Editing or Deleting User Groups (on page 167).
- *Add selected*:

  To select multiple LDAP users or groups at a time, select their checkboxes and then click this button.

Warning: You MUST NOT add the LDAP users whose login names do NOT meet the User Station's login name requirements. These LDAP users, if added, will fail to log in to the User Station. For login name requirements, see Users (on page 159).

Configuring the Maximum Search Results and Local Authentication Settings

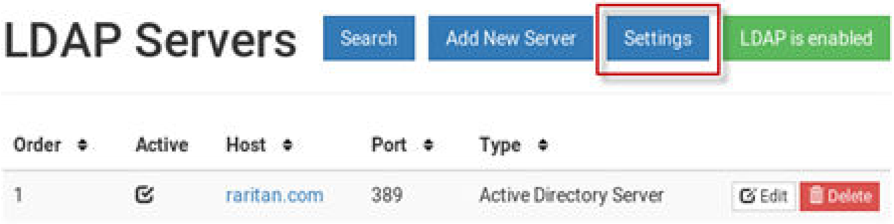
In the LDAP settings, you can set parameters for maximum search results and allow access for local users.

By default, these options are disabled.

- Max Search Results: The default limitation is 1000. If the found result entries are more than the upper limit you set, those result entries exceeding the maximum are not displayed but a message shows up to remind you to specify a more accurate search filter.
- Allow access to local users: When this setting is enabled, an option is added to the login screen to allow users to select local authentication instead of LDAP authentication.

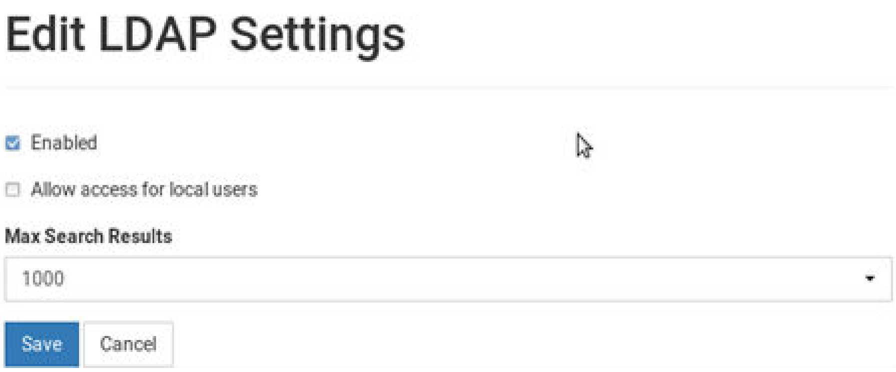
► *To configure the maximum LDAP search results:*

1. Click Administration > LDAP, then click the Settings button.



Order	Active	Host	Port	Type	
1	☑	raritan.com	389	Active Directory Server	Edit Delete

2. The Edit LDAP Settings page opens.



Edit LDAP Settings

☑ Enabled

☐ Allow access for local users

Max Search Results

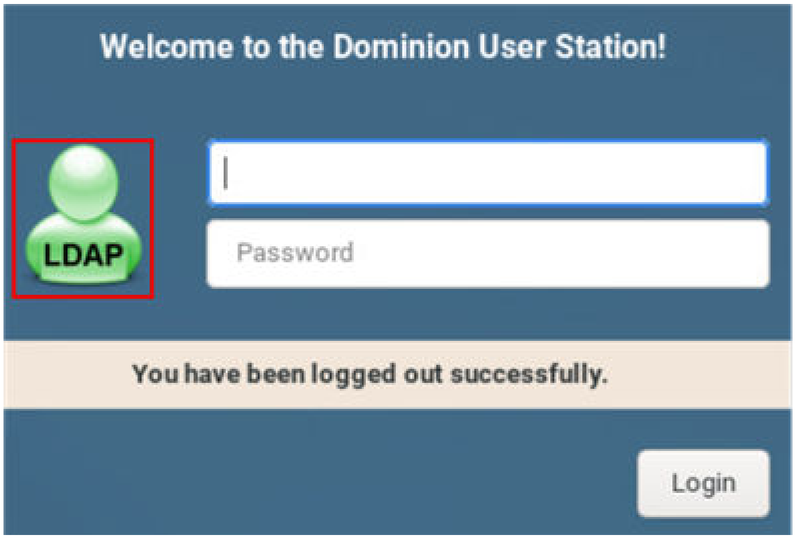
1000

3. LDAP authentication must be enabled to set the upper limit for the LDAP search results. To enable, select the Enabled checkbox.
4. Select the desired value in the Max Search Results field: *10, 100*, *1000* or *10000*.
5. Select "Allow access for local users" to enable the login screen checkbox for local authentication.
6. Click Save.

Logging in with LDAP

When LDAP is enabled, Dominion User Station presents a different login page. The login icon indicates the authentication type being used: Local, LDAP, or CC-SG.

When local users are allowed, an extra checkbox is also available for users to "Authenticate locally". See Configuring the Maximum Search Results and Local Authentication Settings (on page 181) for help with this setting.



Welcome to the Dominion User Station!

You have been logged out successfully.

LDAP Login Failure Message

LDAP user login attempt may fail with the event log message:

- Login of 'name' failed with hostname "IP Address" does not match the certificate at LDAPs://<IP address>

► *To resolve:*

- Update the LDAP server configuration. You may add the hostname, or disable TLS/SSL:

1. Open the User Station Configuration page. Choose Administration > LDAP.
   - Click the LDAP server's Edit button. Enter the hostname in the Hostname/IP-Address field, instead of the IP address.
   - OR, if you prefer, disable Use TLS/SSL for LDAP server.
2. Click Save.

CommandCenter Secure Gateway Integration

Raritan's CommandCenter® Secure Gateway (CC-SG) is an easy to deploy, plug-and-play appliance that provides IT administrators and lab managers with a secure, single point of remote access and control. Raritan's CC-SG consolidates multiple remote access technologies, including Dominion® KVM-over-IP switches and serial console servers, Raritan PX PDUs, service processors, and in-band methods such as RDP, SSH and VNC.

CC-SG integration in Dominion User Station allows you to access and control KX3, KX4-101, and SX2 nodes as well as any nodes with SSH, VNC, RDP,Web, or ESXi (VMW Viewer) interfaces without explicitly adding them directly to Dominion User Station. When CC-SG integration is setup, you can login to Dominion User Station with your CC-SG user name and password. Dominion User Station uses your CC-SG authorization information to automatically show the nodes you have access to in the Dominion User Station Navigator. Your permissions to view, access, and control are the same as in CC-SG because the same authentication and authorization are used.

The login page and the Navigator show a CC-SG label when integration is in effect:

- See Logging in with CC-SG Integration (on page 184)
- See Navigator with CC-SG Integration (on page 185)

Launching KVM/Serial sessions for ports works exactly the same as your usual Dominion User Station experience, using the KVM or Serial Client. See Using the KVM Client, Using the Serial Client (on page 127)

SSH, VNC, RDP, and ESXi sessions are also launched by clicking the target, and the appropriate tool opens for the session type.

CC-SG Integration Requirements

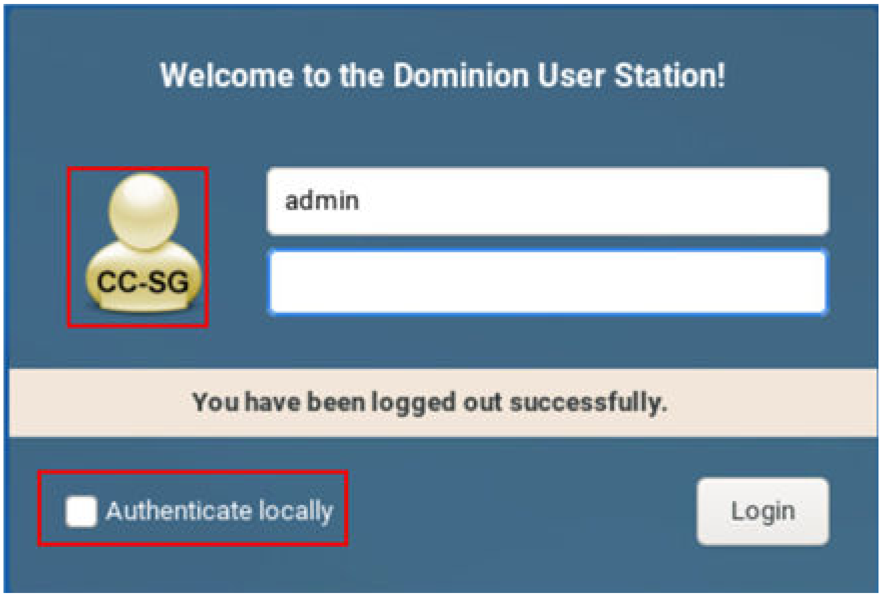
- Compatible CC-SG version: check the Dominion User Station Release Notes for latest compatible versions.
- LDAP cannot be enabled on Dominion User Station when CC-SG integration is enabled.

Logging in with CC-SG Integration

When CC-SG integration is enabled, the login page includes a CC-SG icon. Login with your CC-SG user name and password to access the targets you have permissions for on CC-SG.

Depending on your setting, you may see an extra checkbox for local users.

- Authenticate locally checkbox: This checkbox appears when the user name "admin" is entered so you can login with the standard Dominion User Station "admin" user. Users who need to use locally added KVM targets should select this checkbox, and enter local Dominion User Station login credentials. Authenticating locally means that CC-SG integration will be temporarily disabled for the current session.
- LDAP cannot be enabled when CC-SG integration is enabled.



Welcome to the Dominion User Station!

admin

You have been logged out successfully.

CC-SG Authentication via SmartCard

When Authentication via SmartCard Certificate is enabled you can use your PIV SmartCard to log in to the User Station. You must configure the CC-SG to Enable Client Certificate Authentication, but it must not be set to Require Client Certificate Authentication.

Note: Remote Control and the Remote API do not work with Certificate Authentication.

Authenticate via SmartCard

► *To configure SmartCard integration:*

1. Click Administration > CC-SG.
2. Click Edit and select Authentication via SmartCard Certificate.
3. Click Save and Logout.

► *To log in via SmartCard:*

1. On the login screen, Use SmartCard for Authentication is checked by default.
2. Enter the SmartCard PIN instead of user name/password.

Note: SmartCard must be present during the login and for the screen saver unlock. The login with SmartCard only works with PIV cards and the certificate must be present on the card in the "Certificate for PIV Authentication" slot. The maximum of 8 characters PIN length is supported.

If SmartCard is configured, you can still login to the Dominion User Station manually with your user name and password, but you cannot use a SmartCard for auto-login. You can configure auto login using a user name and password.

SmartCard login is supported for all the KXUSTs where Keyboard and Mouse sharing is setup and the Controller and the Clients have the option "Automatically log in /out users" selected.

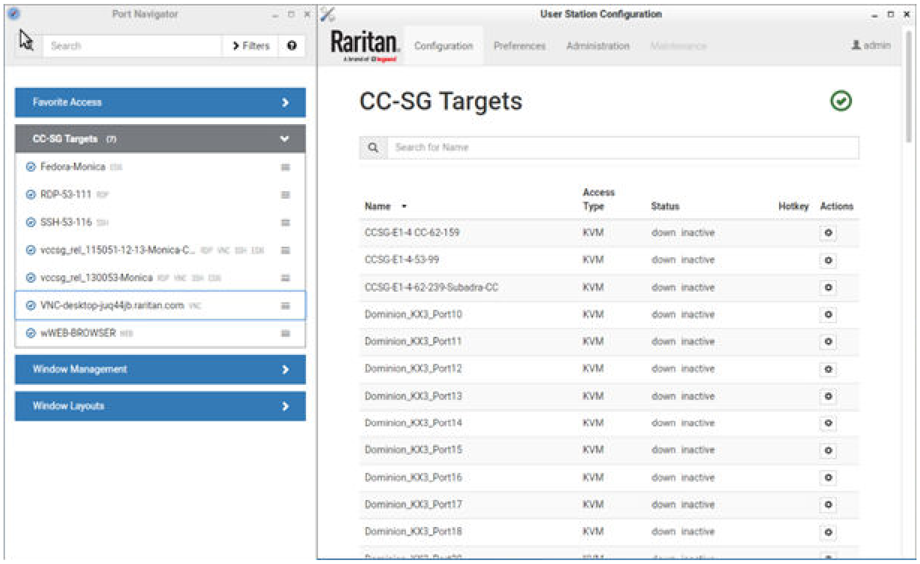
Navigator with CC-SG Integration

When CC-SG integration is enabled, the Navigator is optimized to show your Favorite Access items and CC-SG Targets. The CC-SG Targets section includes nodes that the user is authorized to view, including KVM, Serial, SSH, VNC, RDP, Web and ESXi interfaces. Ports of KVM and Serial switches that are configured locally on the Dominion User Station do not appear when you are logged in with a CC-SG user account.

Your nodes and interfaces are detected automatically. Each supported interface that is detected serves as an access method for the target. VMW Viewer interfaces are imported as ESXi access points. Only nodes already created on CC-SG are visible in Dominion User Station, and you cannot add, edit or delete nodes in Dominion User Station.

Your Dominion User Station supports the default interface feature of CC-SG. If you click the node (target) of a CC-SG, the default interface opens as follows

1. If a video group is defined, then the video group is launched as default (M-KVM).
2. If not, then the default interface as configured in CC-SG is launched.
3. If the default interface is not supported on the Dominion User Station, then the target is launched as per the pre-defined order of access points as in non CC-SG mode.



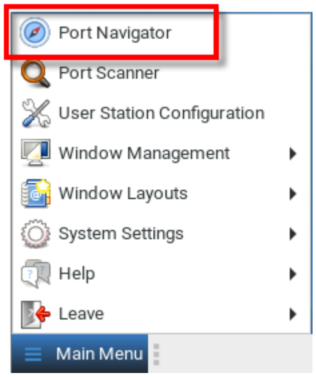
CC-SG Targets

Name	Access Type	Status	Hotkey	Actions
CCSG-E1-4 CC-62-159	KVM	down inactive		⚙
CCSG-E1-4-53-99	KVM	down inactive		⚙
CCSG-E1-4-62-239-Subadra-CC	KVM	down inactive		⚙
Dominion_KX3_Port10	KVM	down inactive		⚙
Dominion_KX3_Port11	KVM	down inactive		⚙
Dominion_KX3_Port12	KVM	down inactive		⚙
Dominion_KX3_Port13	KVM	down inactive		⚙
Dominion_KX3_Port14	KVM	down inactive		⚙
Dominion_KX3_Port15	KVM	down inactive		⚙
Dominion_KX3_Port16	KVM	down inactive		⚙
Dominion_KX3_Port17	KVM	down inactive		⚙
Dominion_KX3_Port18	KVM	down inactive		⚙

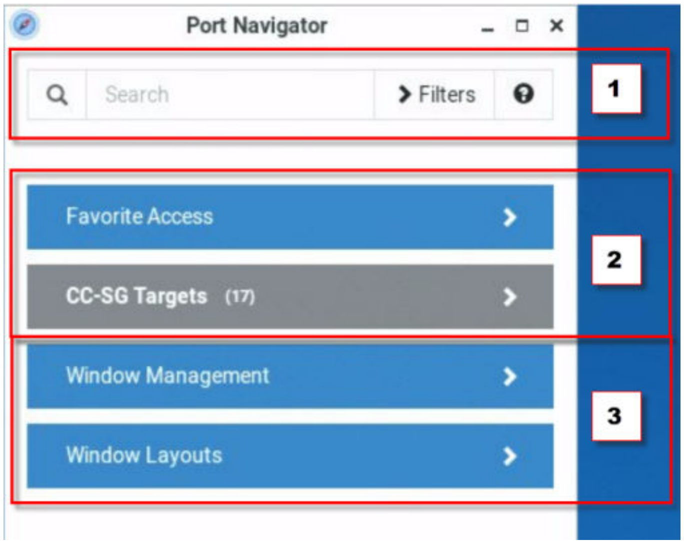
The Port Navigator window is displayed by default.

► *To launch Port Navigator:*

- Press Ctrl+Alt+N. OR choose Main Menu > Port Navigator.



- The Port Navigator window opens.



1. Search, Filters, and Help:

- Search:

Searches for ports, or targets, containing the search word(s). See Using Search (on page 120).

- Additional Filters:

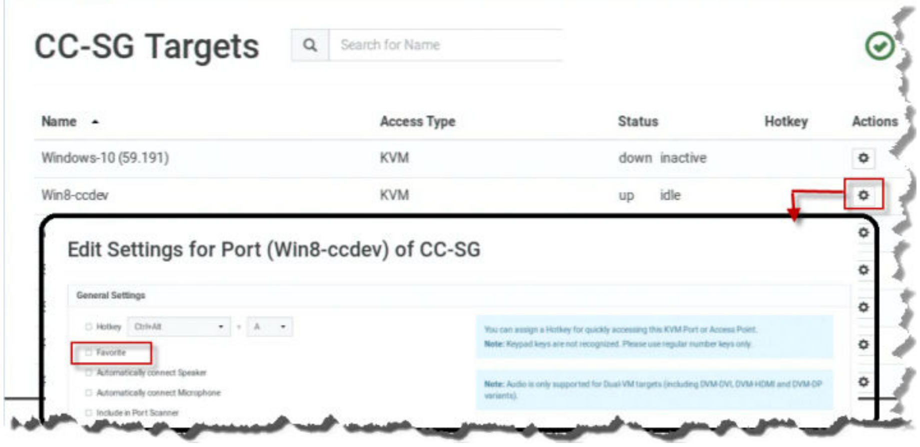
Determines which items are displayed in this window based on connectivity and availability. See Using Filters (on page 121).

- Help ❓ :

Shows the colors and icons denoting states. See Identifying States of KVM/Serial Switches and Ports (on page 118).

2. Favorite Access and CC-SG Targets:

Favorite Access panel: When you first log in as a CC-SG user to the Dominion User Station, your list of favorites as configured in the CC-SG is shown. You can also customize the favorite access via edit settings of existing CC-SG targets in User Station Configuration.



Name ▲	Access Type	Status	Hotkey	Actions
Windows-10 (59.191)	KVM	down inactive		⚙
Win8-ccdev	KVM	up idle		⚙

Edit Settings for Port (Win8-ccdev) of CC-SG

General Settings

□ Hotkey Ctrl+Alt + A

□ Favorite

□ Automatically connect Speaker

□ Automatically connect Microphone

□ Include in Port Scanner

You can assign a Hotkey for quickly accessing this KVM Port or Access Point.
Note: Keypad keys are not recognized. Please use regular number keys only.

Note: Audio is only supported for Dual-VM targets (including DVM-DVI, DVM-HDMI and DVM-DP variants).

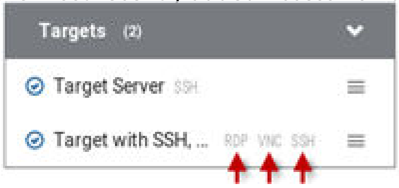
Note: Once changes are made to port settings in Dominion User Station, no new updates to favorites from CC-SG will be made. CC-SG will not overwrite preferences you have set in the Dominion User Station.

CC-SG Targets panel:

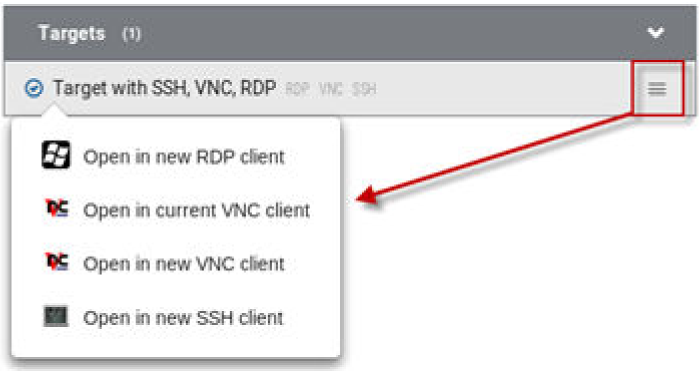
- Shows a list of all CC-SG Targets. Targets with KVM/Serial access also show port status.
- Video groups open all the configured ports for the group. "M-KVM" access method is assigned to video groups.
- Left-click on the Target opens the appropriate client. If there is more than one access method defined, the following hierarchy applies for which type of Access to use:
  - M-KVM
  - Default Interface

Note: If a video group is defined, then the video group is launched as default (M-KVM), otherwise the default interface as configured in CC-SG is launched. If the default interface is not supported on the Dominion User Station, then the target is launched as per the pre-defined order of access points as in non CC-SG mode.

- Next to the Target name, all configured access methods are listed. Click the access method directly to open the appropriate client. If there are multiple Access Points of the same type defined then the most recently added Access Point is opened.



- Right-click on the Target, or click the hamburger menu to list all access methods defined for the Target.



- The default is to show items whose status is Up. See Using Filters (on page 121).
- For dual port video, the name of the primary port is displayed instead of the port names. Dual port video groups whose primary port is Up will show in the list.

1. Window Management and Window Layouts:

- Window Management: Manage open sessions with window management tools. See Window Management (on page 20).
- Window Layouts: Access saved layouts. See Window Layouts (on page 151).

ESXi Access Requirements

You can access your VMW Viewer interfaces in the Navigator using the VMware “ESXi Embedded Host Client.” The ESXi server must support the ESXi Embedded Host Client and must be version 6.0 or higher. Upon launching, the Remote Console of the virtual machine is shown. Single sign-on is not supported, so you must enter credentials each time you launch the interface.

To launch ESXi access, you must have the ESXi Access privilege

CC-SG Authentication Fallback

CC-SG has a fall-back authentication mechanism. CC-SG maintains an ordered list of authentication methods and if one authentication method fails CC-SG tries authentication with the next mechanism in the list.

For the best results with CC-SG integration, make sure users have the same access privileges in each authentication server that may be used.

Trusted Certificates

You must install trusted certificates on the User Station in these scenarios:

- A valid CA certificate is required to establish the LDAP connection. Then you must:
    a. Consult your LDAP server administrator to get the CA certificate file.
    b. Install this CA certificate onto the User Station.
- When FIPS mode is enabled, all encrypted connections to KVM/Serial switches are processed using the FIPS accredited cryptographic code and the authenticity of those KVM/Serial switches is checked via their certificate chain. When Check KX/SX Device Certificate is enabled, authenticity of KVM/Serial switches is checked via their certificate chain. You must install the trusted device or root-certificate of each KVM/Serial switch on the User Station, or the connection to the KVM/Serial switches fails.

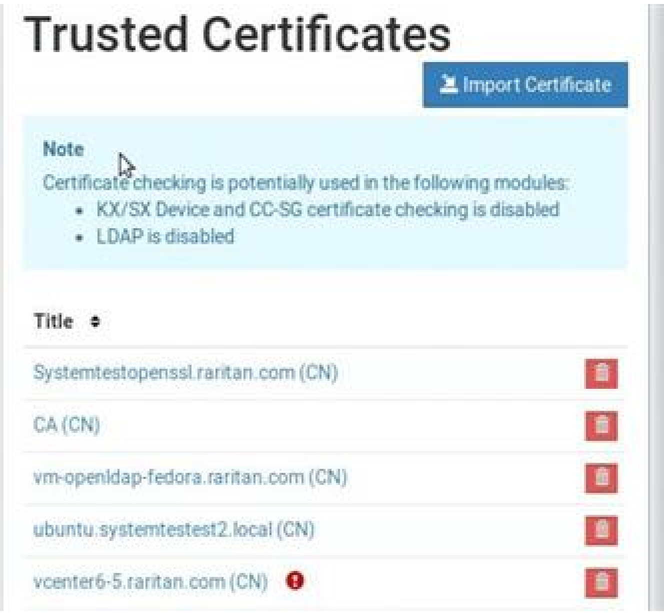
When CC-SG integration in enabled, and FIPS mode or Check KX/SX Device Certificate is enabled as well, you must install the CC-SG certificate. Also, if the CC-SG and the KX/SX managed by the CC-SG have certificates signed by different CAs, then the certificates from both the CC-SG and the KX/SX devices should be added to the KX User Station , or the connection fails. A connection error message appears. See Certificate Failure Messages (on page 191). Certificates using RSA or DSA algorithm with key-sizes smaller than 1024 bit are not accepted by Dominion User Station.

For more details about creating certificates that are accepted, see Certificate Requirements.

► *To install the CA Certificates on the User Station:*

1. Plug a USB drive or mount a network storage containing the appropriate certificate file into the User Station.
2. Click Administration > Trusted Certificates, then click the Import Certificate button.

The Import Trusted Certificate page opens with a list of detected certificates.



Trusted Certificates

Note

Certificate checking is potentially used in the following modules:

- KX/SX Device and CC-SG certificate checking is disabled
- LDAP is disabled

Title
Systemtestopenssl.raritan.com (CN)
CA (CN)
vm-openldap-fedora.raritan.com (CN)
ubuntu.systemtestest2.local (CN)
vcenter6-5.raritan.com (CN)

3. Click Import to install the desired certificate onto the User Station. Certificate files must be one of the following types: PEM, DER, TXT, CER, or CRT and must contain a PEM or DER encoded certificate.
4. The content of the installed certificate is displayed.
   - To show a list of installed certificates, click Back to all Certificates.
   - To remove this certificate, click Remove and then OK.
5. If multiple certificates are needed, repeat the same steps to install more.

Removing an Installed Certificate

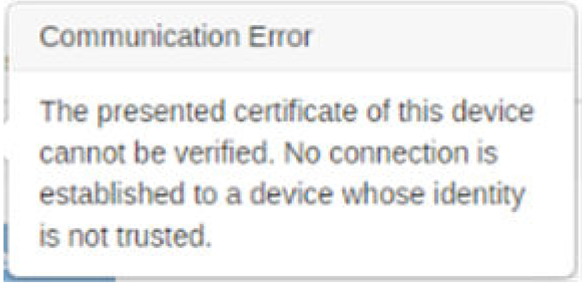
If any installed certificate is outdated, invalid or no longer required, you can remove it.

► *To remove a certificate from the User Station:*

1. Click Administration > Trusted Certificates. A list of installed certificates is displayed.
2. Click the red trash icon for the certificate you want to remove. Or, click the certificate that you want to remove to check the contents first, then click Remove.
3. Click OK on the confirmation message.

Certificate Failure Messages

In the FIPS mode and when Check KX/SX Device Certificates is enabled, if the KVM/Serial connection failure is resulted from the absence of a valid KVM/Serial switch certificate on the User Station, an error message similar to the following appears.



Communication Error

The presented certificate of this device cannot be verified. No connection is established to a device whose identity is not trusted.

Server Certificate

Services that occur over network, such as remote control, are secured with TLS. This requires the installation of a TLS certificate on the Dominion User Station.

By default, the Dominion User Station has a demo certificate. You must have System Administrator privileges to view, download or change the certificate. A new certificate can be installed by:

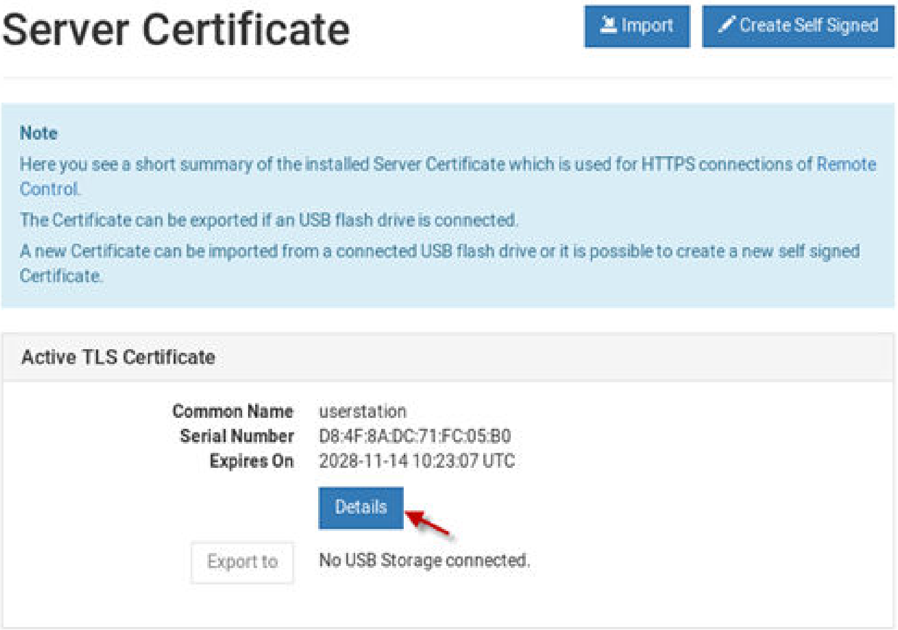
- Uploading a new certificate and private key. See Import Private Key and Certificate (on page 193).
- Create a private key and a self-signed certificate in the Dominion User Station interface. See Create Self Signed (on page 194).

Note: It is strongly recommended to update the preinstalled demo server certificate if you want to use the Remote Control feature. See Remote Control via Web Browser (on page 212).

If the demo server certificate is not updated, a warning message is displayed: "You're still using the preinstalled server certificate. Please change it!"

► *To view the current server certificate:*

- Click Administration > Server Certificate. The summary information of the installed certification displays. Click Details for more.
- With a USB drive connected or a Network Storage mounted, you can export the file.



Note

Here you see a short summary of the installed Server Certificate which is used for HTTPS connections of Remote Control.

The Certificate can be exported if an USB flash drive is connected.

A new Certificate can be imported from a connected USB flash drive or it is possible to create a new self signed Certificate.

Active TLS Certificate

Common Name userstation
Serial Number D8:4F:8A:DC:71:FC:05:B0
Expires On 2028-11-14 10:23:07 UTC

No USB Storage connected.

Import Private Key and Certificate

If you would like to use your own private key and certificate, you can import it from an attached USB drive or network storage.

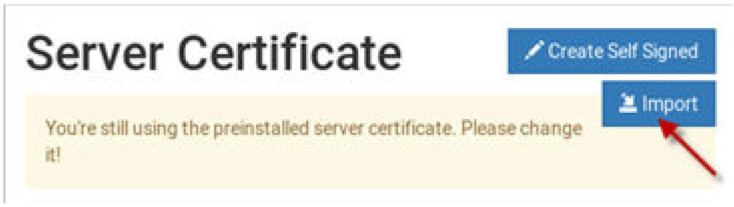
Passphrase protected keys are not supported. The private key and certificate must be combined in one file. The following file types are supported:

- PEM format (.txt, .pem)
- PKCS12 (.p12, .pfx)

If the uploaded certificate is invalid, does not match the rules, or cannot be parsed otherwise, an error message displays.

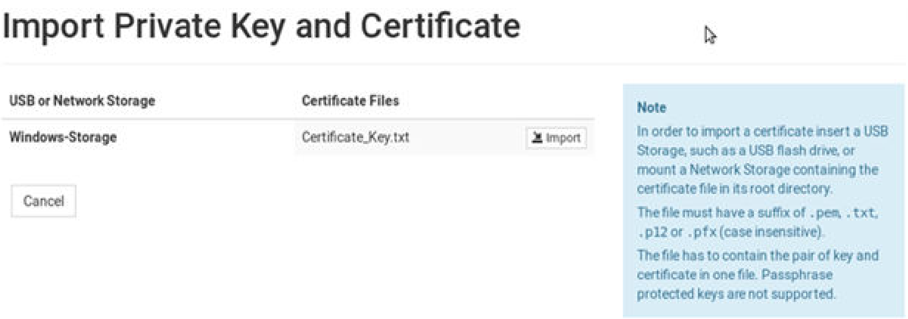
► *To import private key and certificate:*

1. Plug a USB drive or mount a network storage containing the appropriate certificate file in the root directory into the User Station
2. Click Administration > Server Certificate.
3. Click the Import button.



You're still using the preinstalled server certificate. Please change it!

4. The certificate filenames found on the USB flash drive or network storage appear in a list. Click Import for the correct file.



Import Private Key and Certificate

USB or Network Storage	Certificate Files
Windows-Storage	Certificate_Key.txt

Note

In order to import a certificate insert a USB Storage, such as a USB flash drive, or mount a Network Storage containing the certificate file in its root directory.

The file must have a suffix of `.pem`, `.txt`, `.p12` or `.pfx` (case insensitive).

The file has to contain the pair of key and certificate in one file. Passphrase protected keys are not supported.

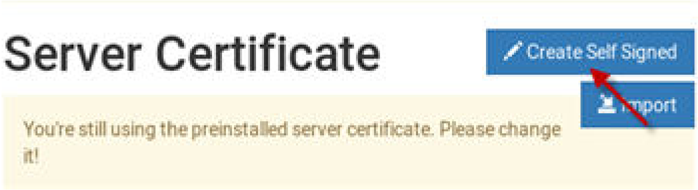
5. The file is imported and validated. The certificate details are displayed.
6. Click Install New Certificate to use the imported certificate. Installing the certificate requires a reboot.

Create Self Signed

If you would like to use a self signed certificate, you can create the Private Key and the Certificate using Dominion User Station. After creating the certificate, you will install it.

► *To create a self signed certificate:*

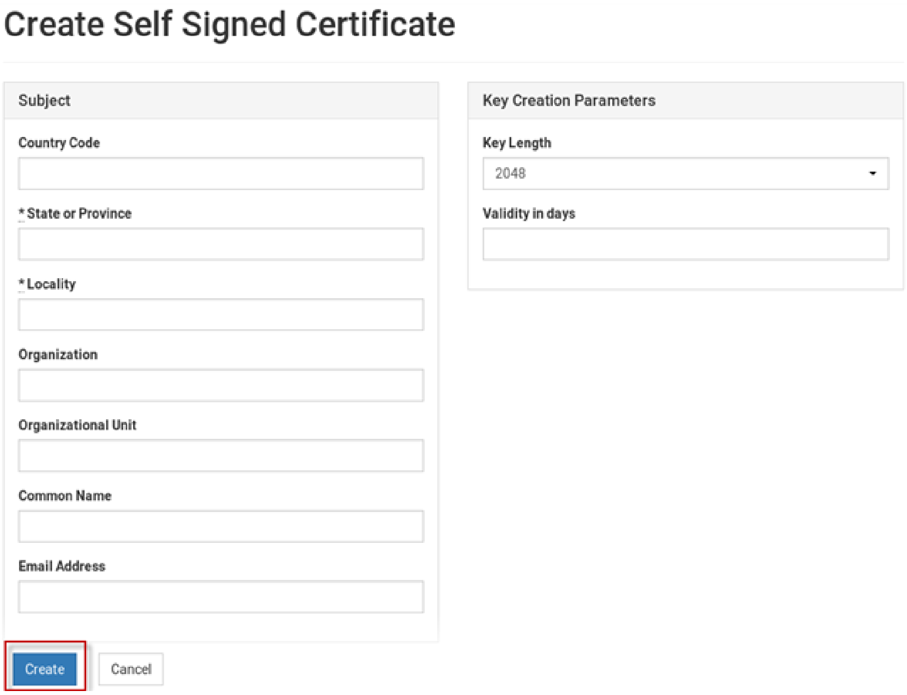
1. Click Administration > Server Certificate.
2. Click the Create Self Signed button.



Server Certificate

You're still using the preinstalled server certificate. Please change it!

3. Enter certificate details and key parameters.
   - Country Code: Must be uppercase, 2-letter country code.
   - State or Province
   - Locality
   - Organization: Optional.
   - Organizational Unit: Optional.
   - Common Name: Must be a hostname.
   - Email address: Optional.
   - Key Length: 2048 or 4096.
   - Validity in days: 1 to 36525.
4. Click Create.



Create Self Signed Certificate

Subject

Country Code

* State or Province

* Locality

Organization

Organizational Unit

Common Name

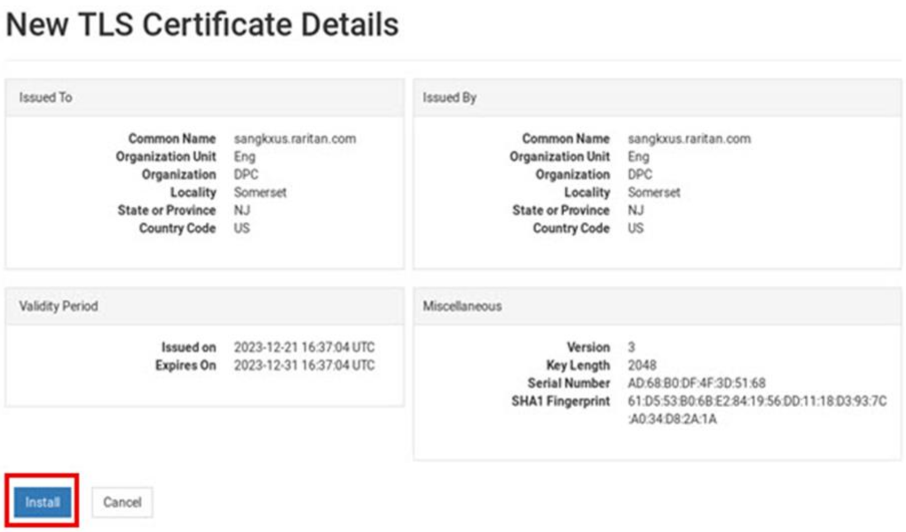
Email Address

Key Creation Parameters

Key Length: 2048

Validity in days

5. The certificate and key details display. If you approve, click Install to use this certificate. Installing the certificate requires a reboot.



New TLS Certificate Details

Issued To

Common Name	sangkxus.raritan.com
Organization Unit	Eng
Organization	DPC
Locality	Somerset
State or Province	NJ
Country Code	US

Issued By

Common Name	sangkxus.raritan.com
Organization Unit	Eng
Organization	DPC
Locality	Somerset
State or Province	NJ
Country Code	US

Validity Period

Issued on	2023-12-21 16:37:04 UTC
Expires On	2023-12-31 16:37:04 UTC

Miscellaneous

Version	3
Key Length	2048
Serial Number	AD:68:B0:DF:4F:3D:51:68
SHA1 Fingerprint	61:D5:53:B0:6B:E2:84:19:56:DD:11:18:D3:93:7C :A0:34:D8:2A:1A

Security Settings

Enable/Disable FIPS Mode and Device Certificate Settings

The User Station optionally uses a FIPS 140-2 encryption module that supports the Security Requirements for Cryptographic Modules of the Federal Information Processing Standards (FIPS), which is defined in the *FIPS PUB 140-2, Annex A: Approved Security Functions*. These standards are used to protect the Federal government's sensitive information with the cryptographic-based security systems in the U.S. and Canada.

The Check KX/SX Device/CC-SG Certificates option allows Dominion User Station to enforce SSL certificate checks in communication with the KX3/SX for both port information and KVM/Serial sessions.

When FIPS mode is enabled, all encrypted connections to KVM/Serial switches are processed using the FIPS accredited cryptographic code and the authenticity of those KVM/Serial switches is checked via their certificate chain. When Check KX/SX Device Certificate is enabled, authenticity of KVM/Serial switches is checked via their certificate chain. You must install the trusted device or root-certificate of each KVM/Serial switch on the User Station, or the connection to the KVM/Serial switches fails. See Trusted Certificates (on page 190).

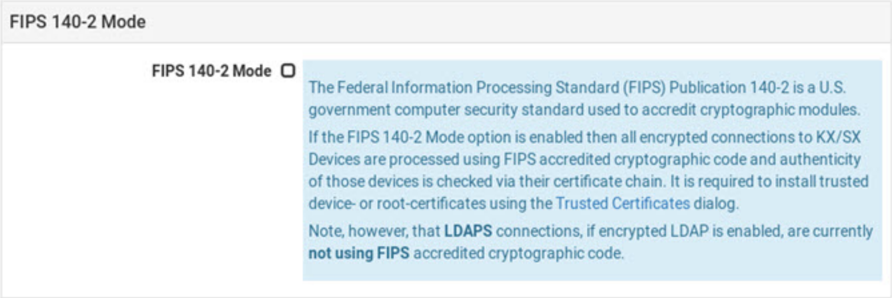
Important: In the FIPS mode, the User Station CANNOT connect to any KVM target on a KX3 or login to CC-SG if the security settings on the device are TLS 1.3 only and also fails to connect with RDP access clients.

Note: Currently, encrypted LDAP connections are not using the FIPS-accredited cryptographic code.

► *To enable or disable the FIPS mode and configure device certificate settings:*

1. Click Administration > Security Settings. The Security Settings page opens.

- ☑ indicates the setting is enabled.
- □ indicates the setting is disabled.



FIPS 140-2 Mode

FIPS 140-2 Mode □

The Federal Information Processing Standard (FIPS) Publication 140-2 is a U.S. government computer security standard used to accredit cryptographic modules.

If the FIPS 140-2 Mode option is enabled then all encrypted connections to KX/SX Devices are processed using FIPS accredited cryptographic code and authenticity of those devices is checked via their certificate chain. It is required to install trusted device- or root-certificates using the Trusted Certificates dialog.

Note, however, that **LDAPS** connections, if encrypted LDAP is enabled, are currently **not using FIPS** accredited cryptographic code.

Note: These options require certificates to be installed. Click Manage Certificates to check certificates or install more. See Trusted Certificates (on page 190).

2. Click Edit, and then select or deselect the checkboxes for FIPS, or KX/SX/CC-SG Certificate Settings.

Note: If certificates have not been installed yet, you will see a message. Click Manage Certificates to go to the import page. Certificate hostname verification is enforced.

3. Click Save.
4. Click OK on the confirmation message.
5. The User Station now reboots if FIPS mode was changed. Wait until the login page reappears.

Enable Keys and Certificates Check for SSH, RDP, Web and ESXi Clients

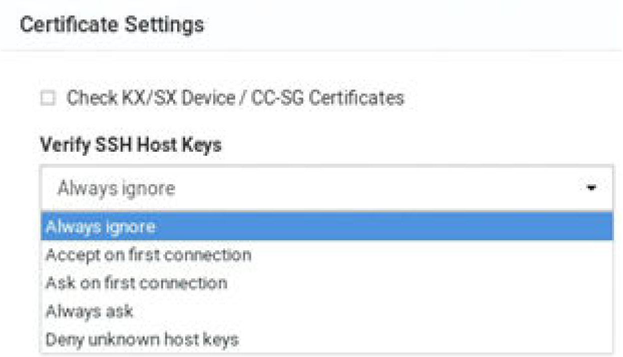
To strengthen security you can store SSH , RDP, WEB and ESXI keys and certificates. These keys and certificates are stored per target and per user.

Note: By default, verification of SSH keys and RDP, Web and ESXi certificates is ignored.

► *Configure SSH Keys Verification:*

1. Click Administration > Security Settings. The Security Settings page opens.
2. Click Edit.
3. In the Verify SSH Host Keys field, select an option.
   - Always ignore.
   - Accept on first connection.
   - Ask on first connection.
   - Always ask.
   - Deny unknown host keys.
4. Click Save.

The SSH key will upload to the SSH Host Key section of the Settings page on the SSH Client.


Certificate Settings

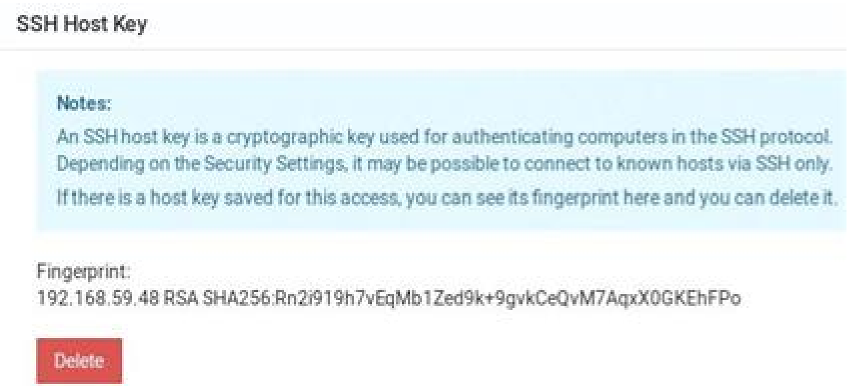
□ Check KX/SX Device / CC-SG Certificates

Verify SSH Host Keys

Always ignore

► *Delete SSH Key:*

1. Click Configuration >Targets > Click Edit Preferences of the target.
2. Scroll down to SSH Host Key Section.
3. Click Delete to remove the key.



SSH Host Key

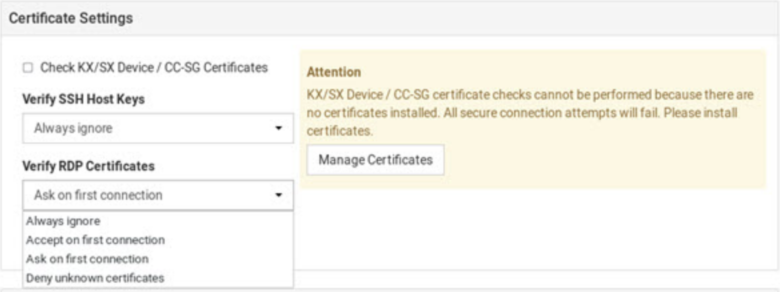
Notes:
An SSH host key is a cryptographic key used for authenticating computers in the SSH protocol. Depending on the Security Settings, it may be possible to connect to known hosts via SSH only. If there is a host key saved for this access, you can see its fingerprint here and you can delete it.

Fingerprint:
192.168.59.48 RSA SHA256:Rn2i919h7vEqMb1Zed9k+9gvkCeQvM7AqxX0GKEhFPo

► *Configure RDP Certificate Verification:*

1. Click Administration > Security Settings. The Security Settings page opens.
2. Click Edit.
3. In the Verify RDP Certificates field, select an option.
   - Always ignore.
   - Accept on first connection.
   - Ask on first connection.
   - Deny unknown certificates.
4. Click Save.

The RDP Certificate will upload to the RDP Certificate section of the Settings page on the RDP Client.



Certificate Settings

□ Check KX/SX Device / CC-SG Certificates

Verify SSH Host Keys
Always ignore

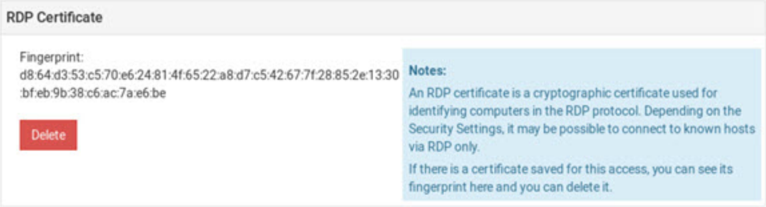
Verify RDP Certificates
Ask on first connection

Attention
KX/SX Device / CC-SG certificate checks cannot be performed because there are no certificates installed. All secure connection attempts will fail. Please install certificates.

Note: RDP connections are not supported if FIPs mode is enabled.

► *Delete RDP Certificate:*

1. Click Configuration >Targets > Click Edit Preferences of the target.
2. Scroll down to RDP Certificate section.
3. Click Delete to remove the certificate.



RDP Certificate

Fingerprint:
d8:64:d3:53:c5:70:e6:24:81:4f:65:22:a8:d7:c5:42:67:7f:28:85:2e:13:30
:bf:eb:9b:38:c6:ac:7a:e6:be

Notes:

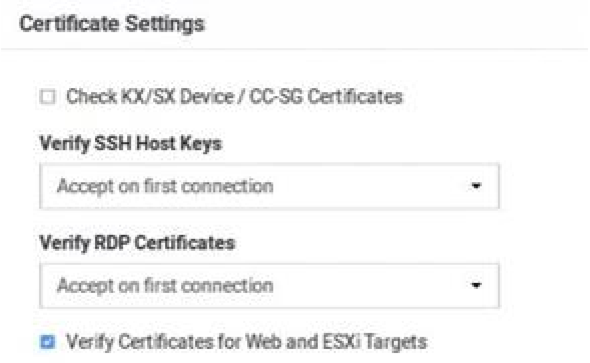
An RDP certificate is a cryptographic certificate used for identifying computers in the RDP protocol. Depending on the Security Settings, it may be possible to connect to known hosts via RDP only.

If there is a certificate saved for this access, you can see its fingerprint here and you can delete it.

► *Configure Web and ESXi Certificate Check:*

Note: Web and ESXi certificates can be installed under Trusted Certificates.

1. Click Administration > Security Settings. The Security Settings page opens.
   - ☑ indicates the setting is enabled.
   - □ indicates the setting is disabled.
2. Scroll down and click Edit.
3. Select or de-select the Verify Certificates for Web and ESXi Targets check box.



Certificate Settings

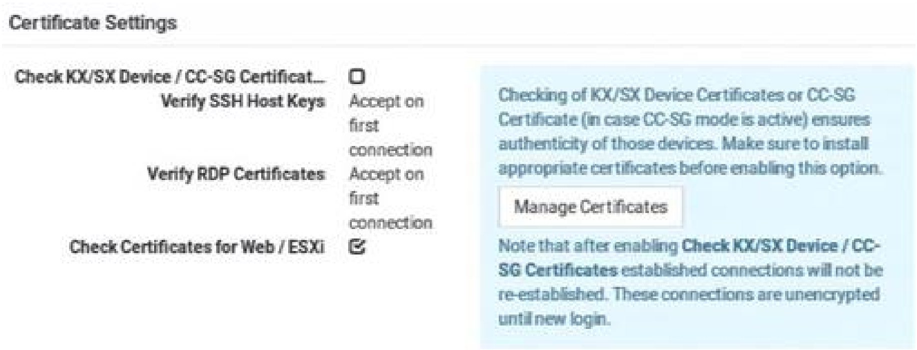
□ Check KX/SX Device / CC-SG Certificates

Verify SSH Host Keys: Accept on first connection

Verify RDP Certificates: Accept on first connection

☑ Verify Certificates for Web and ESXi Targets

4. Scroll down and click Save.



Certificate Settings

Check KX/SX Device / CC-SG Certificat...	□
Verify SSH Host Keys	Accept on first connection
Verify RDP Certificates	Accept on first connection
Check Certificates for Web / ESXi	☑

Checking of KX/SX Device Certificates or CC-SG Certificate (in case CC-SG mode is active) ensures authenticity of those devices. Make sure to install appropriate certificates before enabling this option.

Note that after enabling **Check KX/SX Device / CC-SG Certificates** established connections will not be re-established. These connections are unencrypted until new login.

Note: Enabling Check Certificates for Web/ESXi forces HTTPS certificate checks.

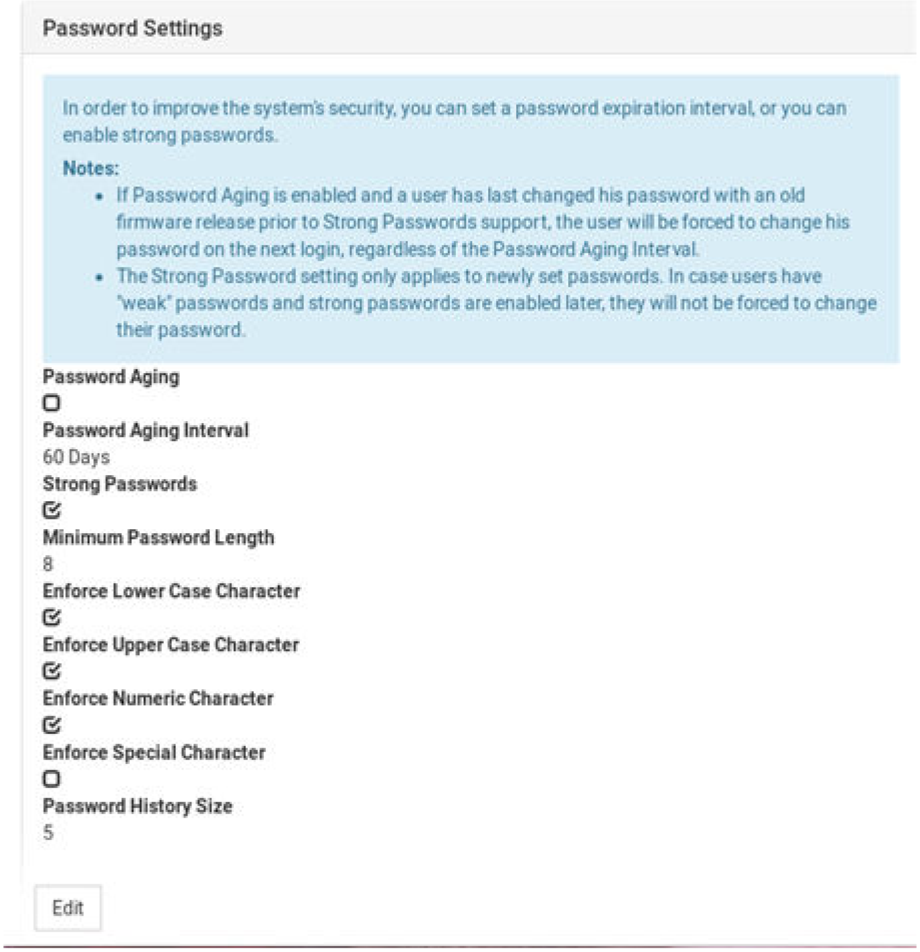
Strong Password Settings

Password aging and strong passwords can be enabled to offer additional security. Password Aging forces users to change passwords regularly. Strong Passwords can be enabled to specify length and characters required, and limit reuse of old passwords.

Note: Strong Passwords is enabled by default.

► *To configure password settings:*

1. Click Administration > Security Settings. The Security Settings page opens.
   - ☑ indicates the setting is enabled.
   - □ indicates the setting is disabled.



Password Settings

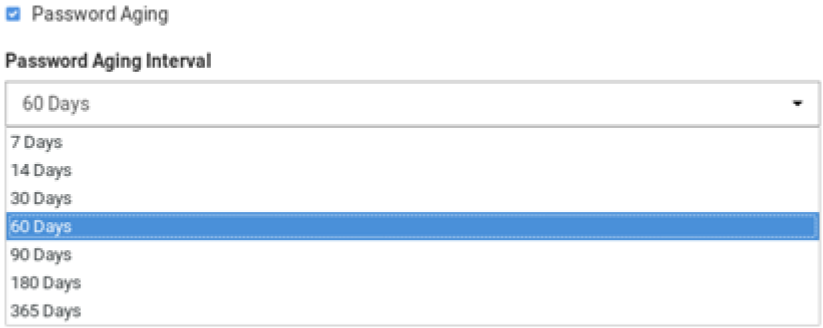
In order to improve the system's security, you can set a password expiration interval, or you can enable strong passwords.

Notes:

- If Password Aging is enabled and a user has last changed his password with an old firmware release prior to Strong Passwords support, the user will be forced to change his password on the next login, regardless of the Password Aging Interval.
- The Strong Password setting only applies to newly set passwords. In case users have "weak" passwords and strong passwords are enabled later, they will not be forced to change their password.

Password Aging
□
Password Aging Interval
60 Days
Strong Passwords
☑
Minimum Password Length
8
Enforce Lower Case Character
☑
Enforce Upper Case Character
☑
Enforce Numeric Character
☑
Enforce Special Character
□
Password History Size
5

2. Click Edit, then scroll down to the password options.
3. Specify options for Password Aging:
   - Select the Password Aging checkbox to enable the feature.
   - Password Aging Interval: All users are required to change their password at the selected interval.



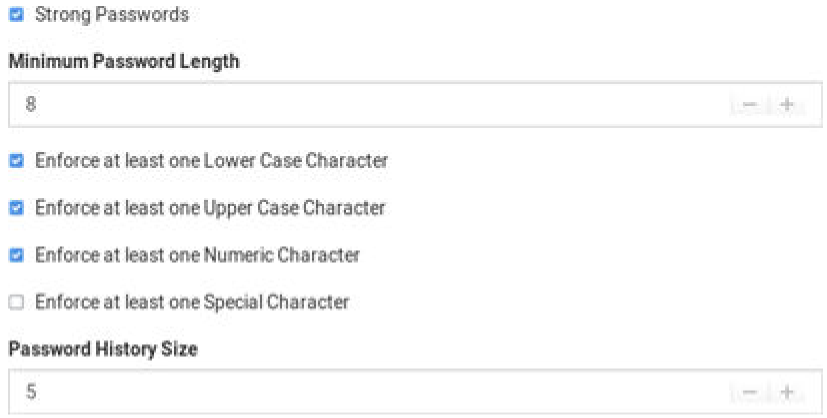
☑ Password Aging

Password Aging Interval

60 Days

4. Strong Passwords:

- Select the Strong Passwords checkbox to enable the feature. This requires users to create passwords that meet the additional criteria specified.
- Minimum Password Length: The minimum number of characters required in a password.
- Enforce characters: Users must include at least one of the specified characters, Lower Case, Upper Case, Numeric, Special.
- Select a Password History Size: The number specifies how many previous passwords are kept in the history and cannot be reused. For example, if Password History Size is set to 5, users cannot reuse any of their previous five passwords.



☑ Strong Passwords

Minimum Password Length

8 − +

☑ Enforce at least one Lower Case Character

☑ Enforce at least one Upper Case Character

☑ Enforce at least one Numeric Character

□ Enforce at least one Special Character

Password History Size

5 − +

5. Scroll down to click Save.

User Blocking

The User Blocking options specify the criteria by which users are blocked from accessing the system after the specified number of unsuccessful login attempts.

The admin user is excluded from User Blocking.

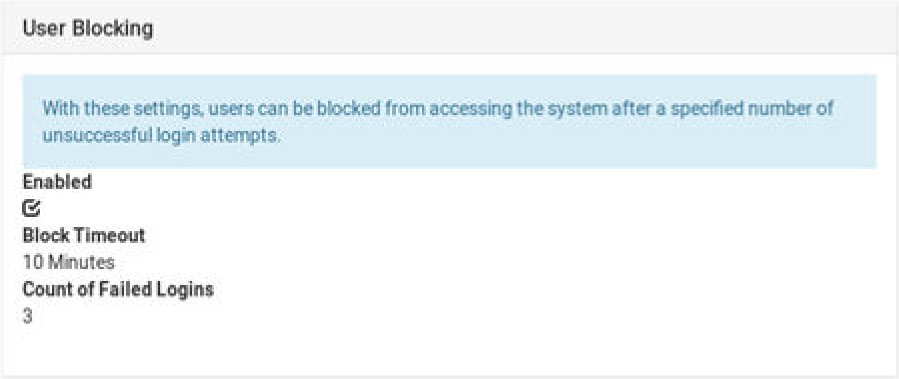
If a blocked user tries to log in, "Authentication Failed" is displayed at the login screen. The user is not notified that they are blocked. An event log message is generated when a user is blocked.

► *Unblocking:*

Users are automatically unblocked after the specified amount of time, or a System Administrator user can unblock the user early in the Users configuration. The blocking status is shown on the Users list.

► *To configure user blocking:*

1. Click Administration > Security Settings. The Security Settings page opens.
   - ☑ indicates the setting is enabled.
   - □ indicates the setting is disabled.



User Blocking

With these settings, users can be blocked from accessing the system after a specified number of unsuccessful login attempts.

Enabled

☑

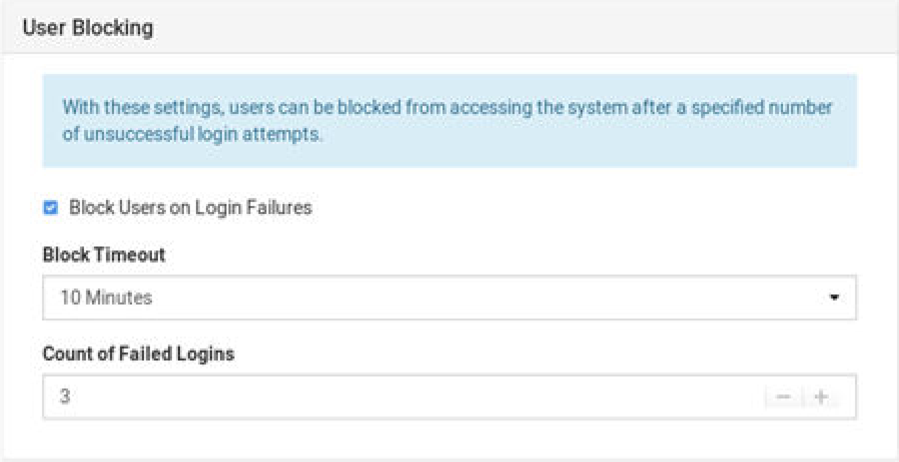
Block Timeout

10 Minutes

Count of Failed Logins

3

2. Click Edit, then scroll down to the user blocking options.
3. To enable user blocking, select the Block Users on Login Failures checkbox.
4. Block Timeout: The time period that the users with failed logins will be blocked from logging in.
5. Count of Failed Logins: The maximum number of failed logins before blocking a user.



User Blocking

With these settings, users can be blocked from accessing the system after a specified number of unsuccessful login attempts.

☑ Block Users on Login Failures

Block Timeout

10 Minutes

Count of Failed Logins

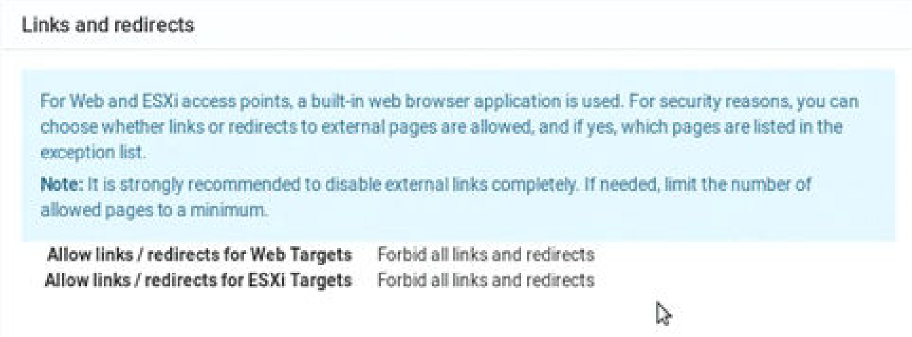
3

6. Scroll down to click Save.

Links and Redirects

The Links and Redirects option allows you to redirect or link to external sites of Web and ESXi access clients. You can choose whether links or redirects to external pages are allowed. If you allow, you can also specify pages in the exception list to minimize the security risk.

Note: By default, links and redirects for Web and ESXi targets are forbidden.



Links and redirects

For Web and ESXi access points, a built-in web browser application is used. For security reasons, you can choose whether links or redirects to external pages are allowed, and if yes, which pages are listed in the exception list.

Note: It is strongly recommended to disable external links completely. If needed, limit the number of allowed pages to a minimum.

Allow links / redirects for Web Targets Forbid all links and redirects

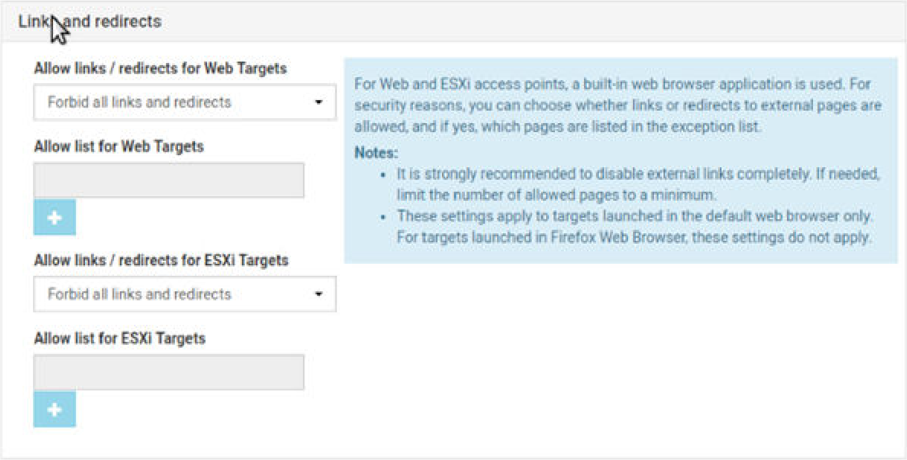
Allow links / redirects for ESXi Targets Forbid all links and redirects

► *To Configure Links and Redirects:*

1. Click Administration > Security Settings. The Security Settings page opens.
2. Click Edit then scroll down to the Links and redirects section.
3. In the Allow links/redirect for Web Targets field, select an option:
   - Forbid all links and redirects.
   - Allow the listed links and redirects.
   - Allow all links and redirects.
4. If you selected "Allow the listed links and redirects", add the URLs. that should be allowed to the Allow list for Web Targets. Click the plus sign to add more links to the list.
5. In the Allow links/redirect for ESXi Targets field, select an option:
   - Forbid all links and redirects.
   - Allow the listed links and redirects.
   - Allow all links and redirects.
6. If you selected "Allow the listed links and redirects", add the URLs. that should be allowed to the Allow list for ESXi Targets. Click the plus sign to add more links to the list.

Note: There is no limitation on number of added links.

Links and Redirects do not work when using the Firefox web browser.



Links and redirects

Allow links / redirects for Web Targets

Forbid all links and redirects

Allow list for Web Targets

Allow links / redirects for ESXi Targets

Forbid all links and redirects

Allow list for ESXi Targets

For Web and ESXi access points, a built-in web browser application is used. For security reasons, you can choose whether links or redirects to external pages are allowed, and if yes, which pages are listed in the exception list.

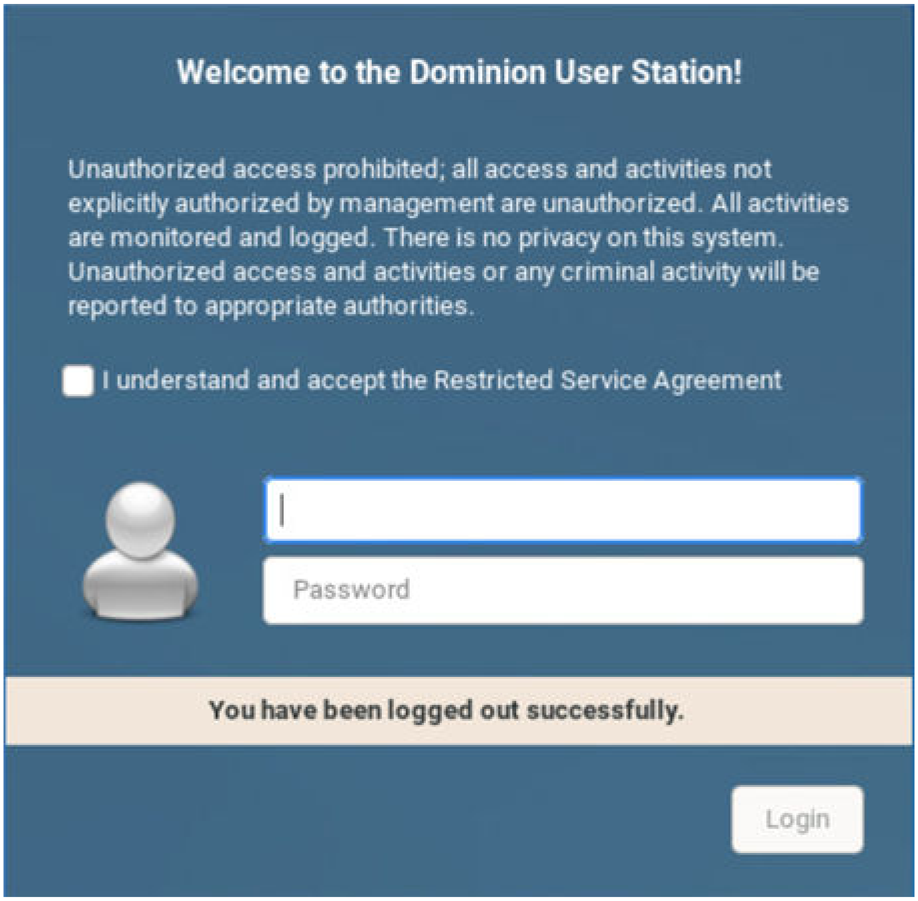
Notes:

- It is strongly recommended to disable external links completely. If needed, limit the number of allowed pages to a minimum.
- These settings apply to targets launched in the default web browser only. For targets launched in Firefox Web Browser, these settings do not apply.

1. Scroll down to click Save.

Restricted Service Agreement

After the Restricted Service Agreement feature is enabled, the agreement's content is displayed on the login screen. Users must select a checkbox to agree to the statement to login.



Welcome to the Dominion User Station!

Unauthorized access prohibited; all access and activities not explicitly authorized by management are unauthorized. All activities are monitored and logged. There is no privacy on this system. Unauthorized access and activities or any criminal activity will be reported to appropriate authorities.

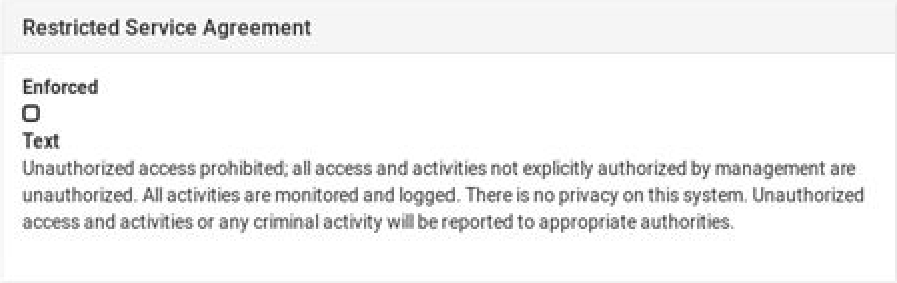
□ I understand and accept the Restricted Service Agreement

Password

You have been logged out successfully.

► *To configure the Restricted Service Agreement:*

1. Click Administration > Security Settings. The Security Settings page opens.
   - ☑ indicates the setting is enabled.
   - ☐ indicates the setting is disabled.



Restricted Service Agreement

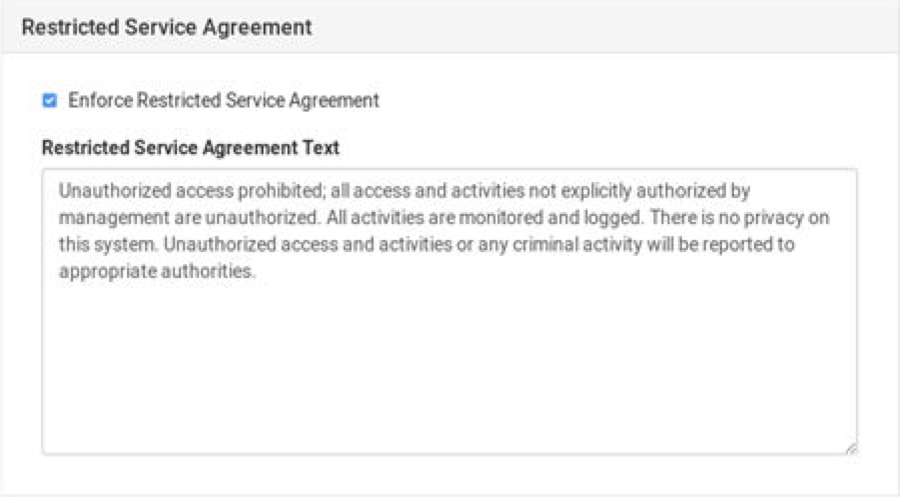
Enforced

☐

Text

Unauthorized access prohibited; all access and activities not explicitly authorized by management are unauthorized. All activities are monitored and logged. There is no privacy on this system. Unauthorized access and activities or any criminal activity will be reported to appropriate authorities.

2. Click Edit then scroll down to the Restricted Service Agreement options.
3. To enable the feature, select the Enforce Restricted Service Agreement checkbox.
4. A default agreement is provided. You can edit or replace the default text as needed.



Restricted Service Agreement

☑ Enforce Restricted Service Agreement

Restricted Service Agreement Text

Unauthorized access prohibited; all access and activities not explicitly authorized by management are unauthorized. All activities are monitored and logged. There is no privacy on this system. Unauthorized access and activities or any criminal activity will be reported to appropriate authorities.

5. Click Save.

Display Settings

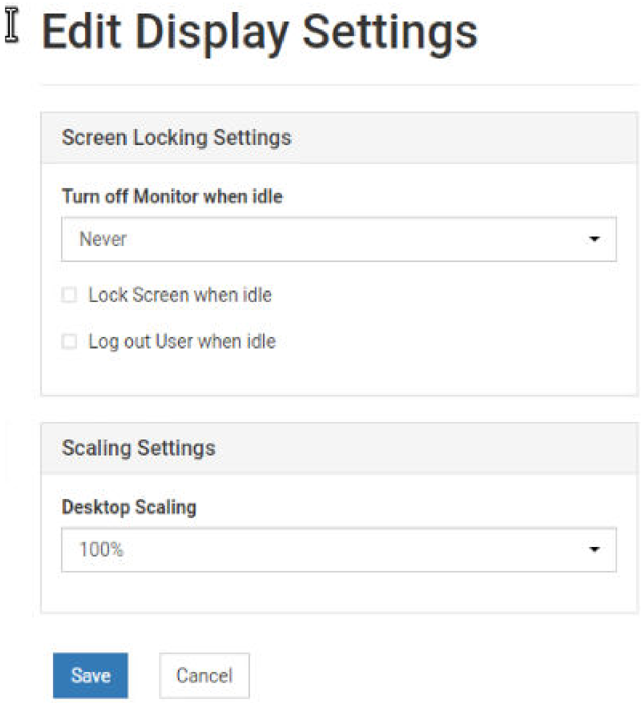
The User Station display can be configured to turn off the monitor when idle, and to either lock the screen or automatically log the user off. These settings include screen locking, display scaling, and desktop scaling, and are applied universally to all users.

You must have "System Administrators" privileges to configure display settings.

Note: Port Scanning sessions and KVM sessions do not prevent monitor turn-off and/or screen locking when those options are configured.

► *To edit the display settings:*

1. Click Administration > Display Settings.
2. Click Edit.
3. To turn off the monitor after an idle timeout period, select the time period:
   - Select Never to keep monitor on.
   - Select 1, 2, 3, 5, 10, 15, 30 or 60 Minutes to enable the monitor turn off after the specified idle time period.
4. To lock the screen when idle, check the Lock Screen when idle checkbox. Lock Screen can only be enabled with Turn off Monitor after idle timeout. The screen is locked after the idle time period.
5. To log out the user when idle, check the Log out User when idle checkbox. Log out User can only be enabled with Turn off Monitor after idle timeout. The user will be logged out after the idle time period.
6. In the Scaling Settings, select the Desktop Scaling that works best for your monitor: 100% or 200%. If you are using a 4k UHD monitor, 200% scaling may be preferable.
7. Click Save.



Edit Display Settings

Screen Locking Settings

Turn off Monitor when idle: Never

□ Lock Screen when idle

□ Log out User when idle

Scaling Settings

Desktop Scaling: 100%

Customization

To customize your Dominion User Station GUI appearance, you can replace the default Raritan desktop background, application logo, and login screen with your own images and messaging. System Administration privilege is required.

Customizations are applied for all users. Changes are logged to the event log with image name and user who performed the change. Customization's are included in backups and restore, while a factory reset restores the original default images. You can also restore the defaults at anytime.

Image files must be saved to the root directory of a USB stick or mounted network storage for upload.

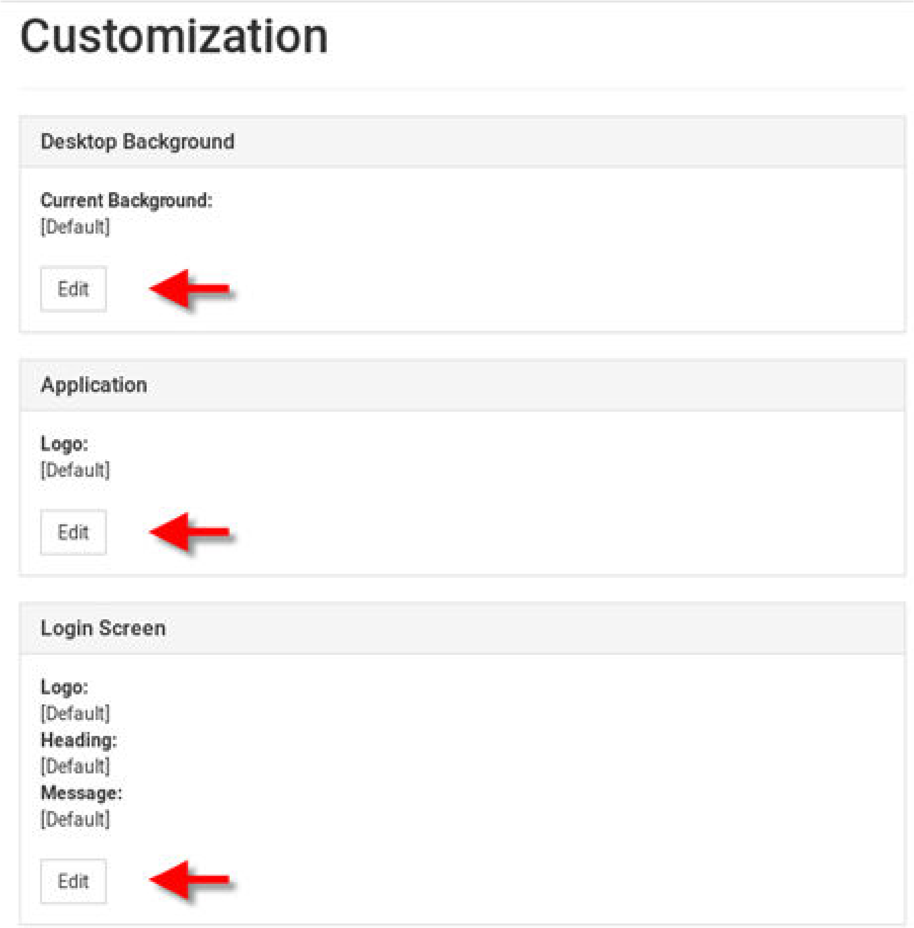
Note: If the desktop does not show the new background image, it is likely the image file is broken. Replace with a different image file.

► *Image requirements:*

- Desktop background image: JPG, PNG, or SVG images up to 128 MB. Solid background color that is not transparent
- Application logo: Appears in the Configuration application in the top-left corner. JPG, PNG, or SVG images up to 512KB. Application logo images are automatically scaled to 110 x 48 pixels, or 220 x 96 pixels when 200% desktop scaling is used.
- Logo on the login screen: JPG, PNG, or SVG images up to 512 KB. Logo images are automatically scaled to 80 x 80 pixels, or 160 x 160 pixels when 200% desktop scaling is used.

► *To customize the Dominion User Station:*

1. Save the desired image files to a USB flash drive, and connect the USB flash drive to the Dominion User Station.
2. Click Administration > Customization and click Edit for the section you want to change.
   - Desktop Background: background image only
   - Application: logo image only
   - Login screen: logo image, plus Header and Message text options



Customization

Desktop Background

Current Background:
[Default]

Application

Logo:
[Default]

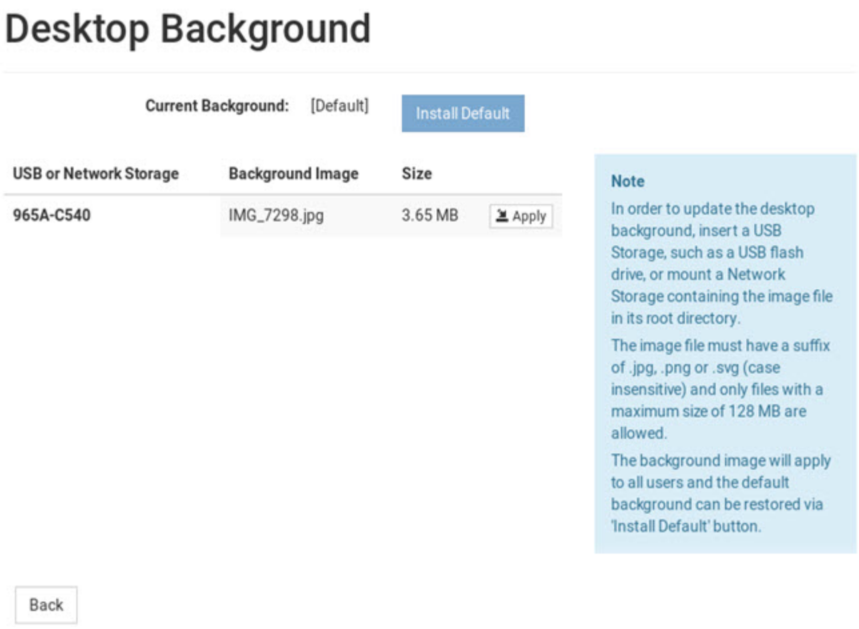
Login Screen

Logo:
[Default]
Heading:
[Default]
Message:
[Default]

3. If an custom image is currently in use, the file name is listed, while non-customized sections will show "Default". Image files found on the USB device or mounted network storage are listed as options. Click the Apply button for the image file you want to use.

Or, to restore the default image, click Install Default. This option is disabled when a custom file is not in use.

Once the image is set, click Back to return to the options.



Desktop Background

Current Background: [Default]

USB or Network Storage	Background Image	Size
965A-C540	IMG_7298.jpg	3.65 MB

Note

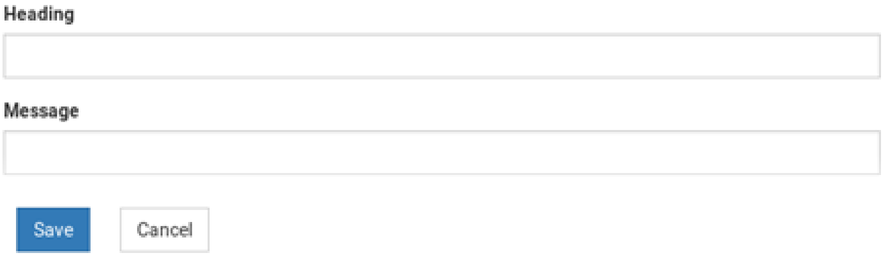
In order to update the desktop background, insert a USB Storage, such as a USB flash drive, or mount a Network Storage containing the image file in its root directory.

The image file must have a suffix of .jpg, .png or .svg (case insensitive) and only files with a maximum size of 128 MB are allowed.

The background image will apply to all users and the default background can be restored via 'Install Default' button.

- In this example, the current desktop background is the default Raritan branding, and there are 2 image files found on the connected USB device. Both listed images meet the requirements for a background image as JPG files under 128MB.

4. For Login Screen customization, you can also enter a custom Heading and Message, then click Save.

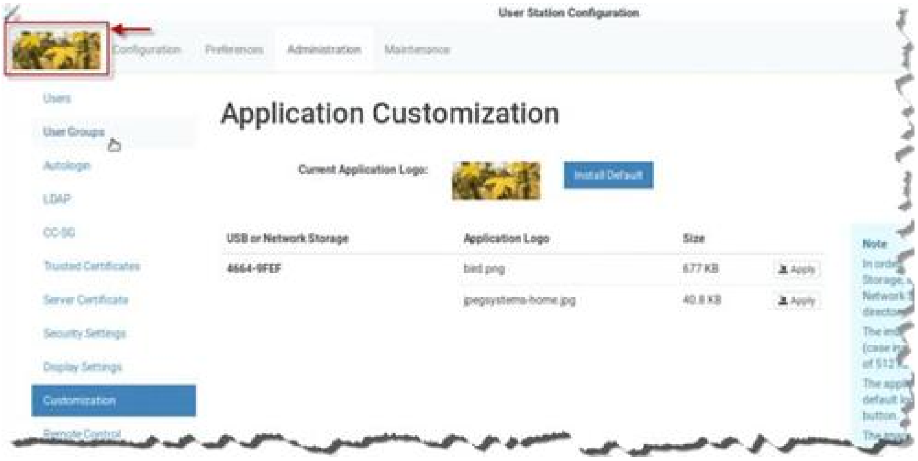


5. Desktop background image changes take effect immediately. Log out to see the login screen changes on your next login attempt.

Customization Examples

► *Customized "ABC" logo on User Station Configuration:*

In this example, the customized "application logo" was just saved.



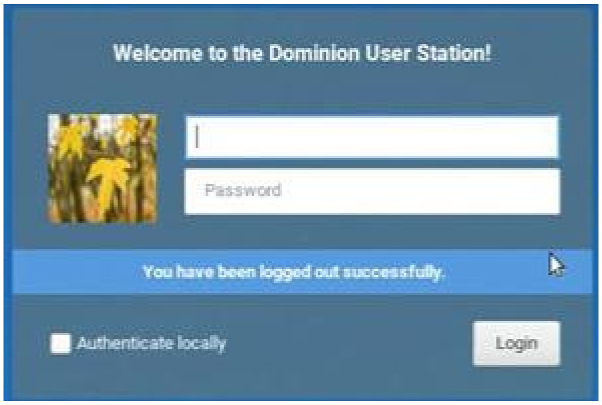
Application Customization

Current Application Logo:

USB or Network Storage	Application Logo	Size	
4664-9FEF	bird.png	6.77 KB	Apply
	jpegsystems-home.jpg	40.8 KB	Apply

► *Customized login screen:*

In this example, a customized login screen was configured. The login screen contains the customized "sunshine" logo image, and the customized message "Welcome to the Dominion User Station!".



Welcome to the Dominion User Station!

You have been logged out successfully.

Remote Control

One common use case for remote control is to connect the controlled user station to a wall monitor and remotely control the display of various target servers on monitor via web browser.

Using a web browser, connect to the Remote Control interface of the Dominion User Station using the IP address or hostname as the URL. Login as usual. Upon successful login, the Dominion User Station presents the Port Navigator just as it appears in the local console. Selecting and opening ports works the same as in the local console, but the KVM clients open in full screen mode at the Dominion User Station that is being remotely controlled. If "Unrestricted Navigator" is enabled, you can also use window management and window layout features, launch multiple sesions, and use non-full-screen view.

Remote Control can also be accomplished via the RESTful API (HTTPS & JSON) to control Dominion User Station programmatically from customer applications. There are two main use cases: to launch sessions or window layouts and/or to perform administrative tasks.

Remote Control via Web Browser

The remote control via web browser configuration allows the Dominion User Station to be controlled via web browser accessed by a smart phone or PC that can reach the Dominion User Station on the network.

By default, Remote Control via web browser offers full-screen sessions only, without access to Window Layouts or Window Management. Enable the Unrestricted Navigator setting to add those features to remote control sessions.

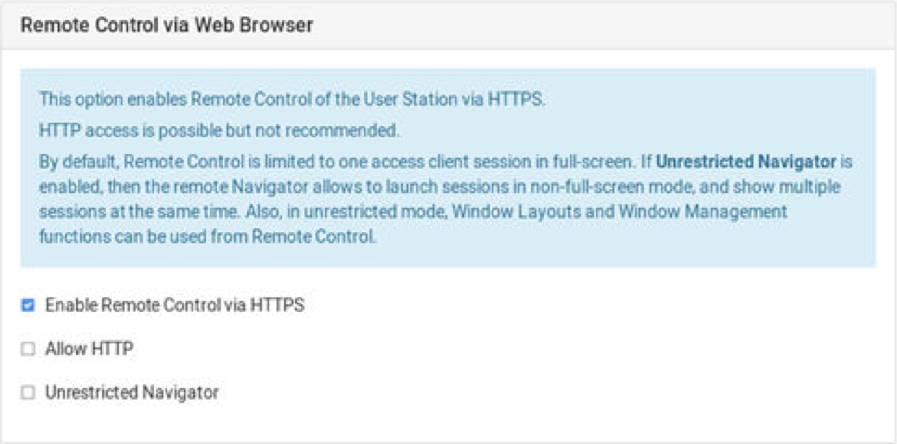
► *Supported browsers:*

- Chrome 60+
- Firefox 52+
- Safari 11+
- Edge 42+

► *To configure remote control:*

You must have the System Administration privilege.

1. Click Administration > Remote Control.
2. Click the Edit button to enable the options.
3. Select Enable Remote Control via HTTPS to enable the feature.
4. Allow HTTP:
   - If "Allow HTTP" is checked, Remote Control is available via both HTTP and HTTPS. There is no redirect.
   - If "Allow HTTP" is not checked, HTTP is redirected to HTTPS.
5. Unrestricted Navigator: Enable Unrestricted Navigator to allow additional features:
   - The Unrestricted Navigator can launch sessions in non-full-screen mode, and show multiple sessions at the same time.
   - Windows Layout and Window Management functions can be used from Remote Control.
6. Click Save.



Remote Control via Web Browser

This option enables Remote Control of the User Station via HTTPS.

HTTP access is possible but not recommended.

By default, Remote Control is limited to one access client session in full-screen. If **Unrestricted Navigator** is enabled, then the remote Navigator allows to launch sessions in non-full-screen mode, and show multiple sessions at the same time. Also, in unrestricted mode, Window Layouts and Window Management functions can be used from Remote Control.

☑ Enable Remote Control via HTTPS

☐ Allow HTTP

☐ Unrestricted Navigator

Remote Control via API

The Dominion User Station supports a remote RESTful API via HTTPS, allowing programmed remote control to:

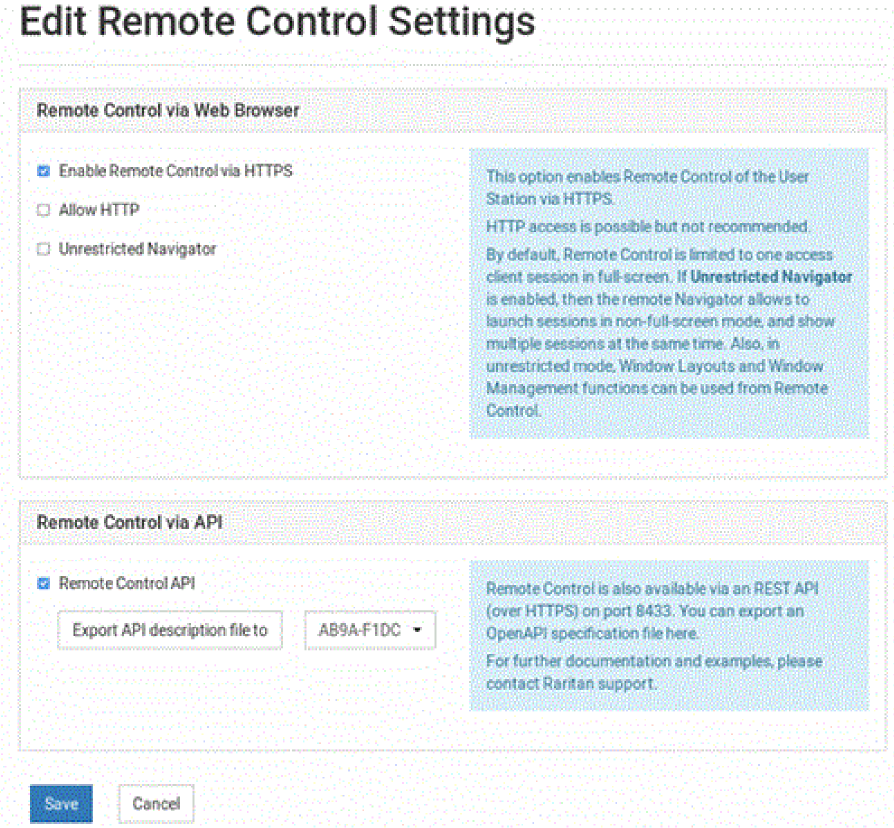
- Launch Access Client sessions or Windows Layouts.
- Perform certain administrative tasks.
- See API (on page 248) for API documentation.

► *API Overview*

- The API can be enabled independently from the regular remote control setting.
- The API uses HTTPS (HTTP is not an option), listening on port 8443.
- If remote control is enabled, the API is available only on port 8443.
- Regular remote control cannot be used on port 8443.
- The API is not available on regular remote control ports 80 and 443.
- The API uses JSON documents for both POST request data (method parameters) and responses.
- One checkbox on the Remote Control page enables/disables the API access, which is disabled by default.
- The API Description document (in OpenAPI format) can be exported to a USB drive or a network storage.
- The TLS certificate can be configured using the Server Certification setting of the Configuration tool.

► *To configure Remote Control via API:*

1. Click Administration > Remote Control.
2. Click the Edit button to enable the options.
3. Select the Enable Remote Control via HTTPS checkbox.
4. Select the Remote Control via API checkbox.
   - Export the API file to a connected USB drive or configured network storage. Choose a file format and click "Export the API file".
5. Click Save.



Edit Remote Control Settings

Remote Control via Web Browser

☑ Enable Remote Control via HTTPS

□ Allow HTTP

□ Unrestricted Navigator

This option enables Remote Control of the User Station via HTTPS.

HTTP access is possible but not recommended.

By default, Remote Control is limited to one access client session in full-screen. If **Unrestricted Navigator** is enabled, then the remote Navigator allows to launch sessions in non-full-screen mode, and show multiple sessions at the same time. Also, in unrestricted mode, Window Layouts and Window Management functions can be used from Remote Control.

Remote Control via API

☑ Remote Control API

Remote Control is also available via an REST API (over HTTPS) on port 8433. You can export an OpenAPI specification file here.

For further documentation and examples, please contact Raritan support.

Using the API

1. Create a login session to authenticate on further calls. There are API calls to create the login session.
2. The remote API session is bound to a local user session. If an API user logs in, the following will happen:

- If the API user is already logged in on the local console, the API will take over the session.
- If no user is logged in on the local console, the API user will be automatically logged in.
- If another user is logged in on the local console, then the user is logged off and the API user is logged in.

3. Once the session is created, the API uses HTTP cookies for authentication. When the session is created, the client receives cookies. These cookies must be sent back on further API requests.
4. When finished, the API user can log off the session. Logging off also terminates the session on the local console.

See API (on page 248) for details.

Access via iOS devices

You must install a CA-signed certificate on your Apple iOS devices (iPad/iPhone) before you can connect to the Dominion User Station. Access is prevented if only the default certificate is present. Depending on your browser, you may see an error such as "This Connection is Not Private".

When creating certificates, the certificate Common name should match the IP address/Hostname used to connect to the device. Install both the Dominion User Station certificate and the CA certificate used to sign the Dominion User Station certificate.

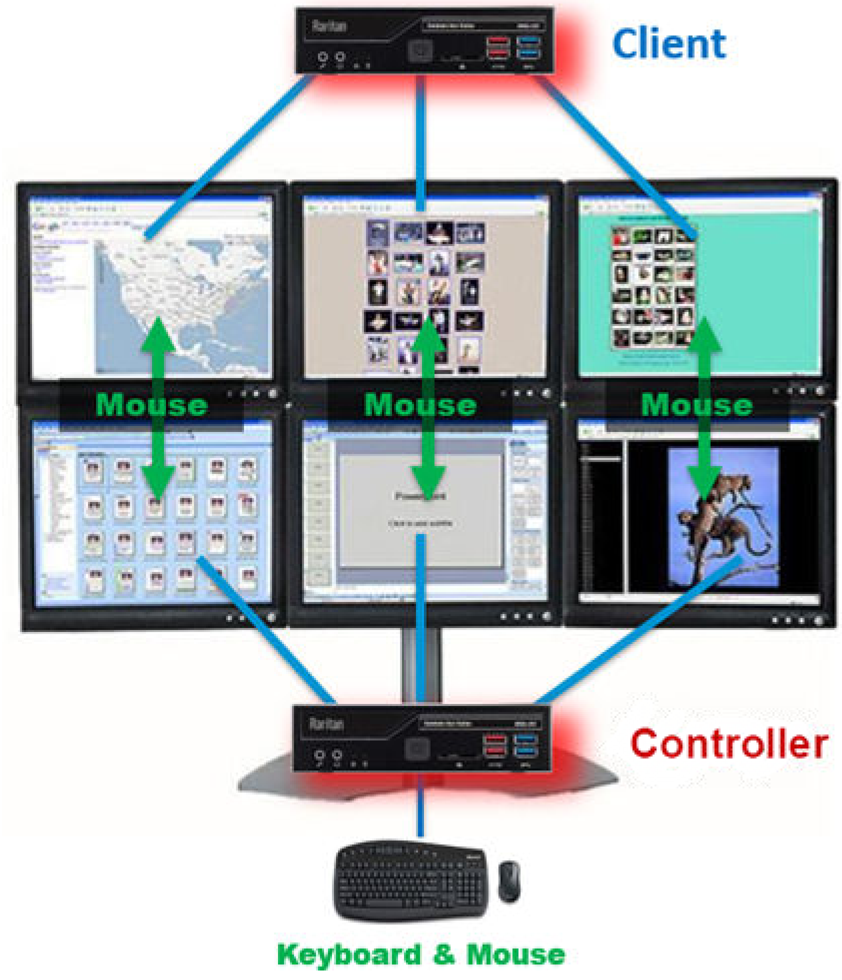
Keyboard/Mouse Sharing

Keyboard and Mouse Sharing allows you to control several Dominion User Stations by one keyboard and mouse that is connected to one of the Dominion User Stations. This can be useful in a control room setting with multiple monitors connected to multiple Dominion User Stations.

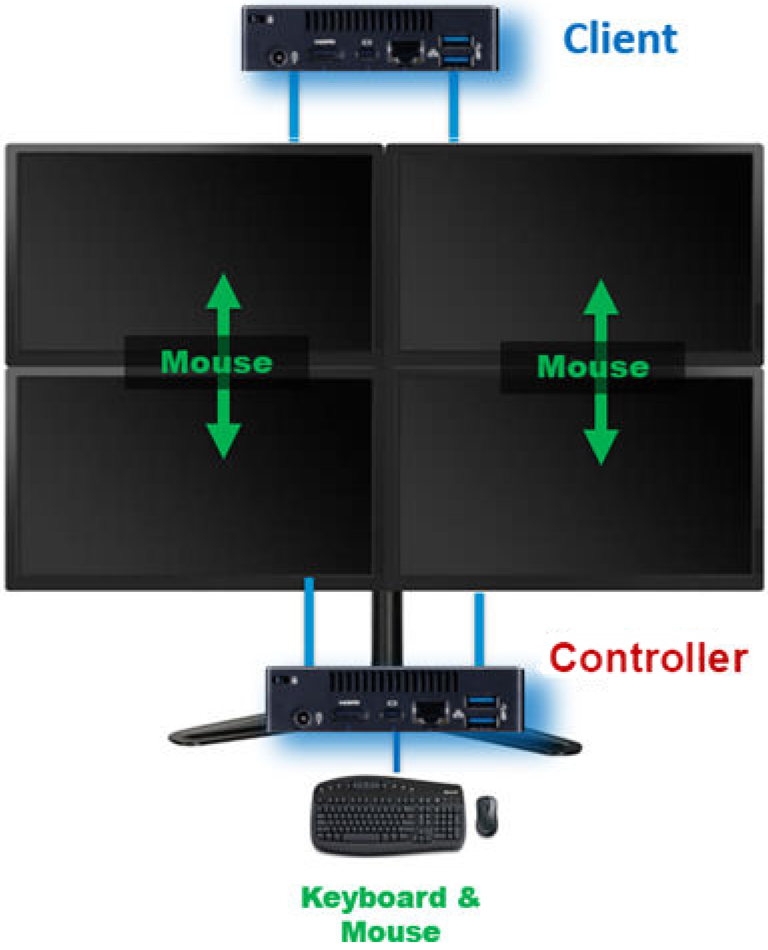
Note: The Keyboard/Mouse Sharing feature does not support Caps, Num and Scroll Lock.

User Station Vertical Configuration

► *KX4 User Station 6 Monitor Vertical Configuration Example:*

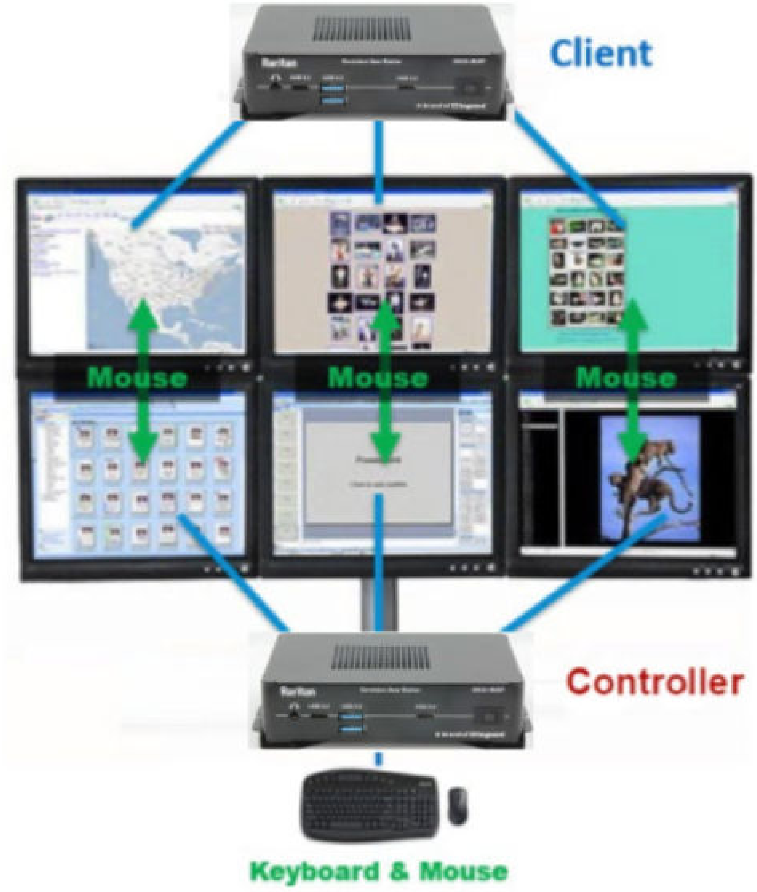


► *KX3 User Station 4 Monitor Vertical Configuration Example:*



Enhanced User Station Vertical Configuration

► *KX4-EUST 6 Monitors Vertical Configuration Example:*

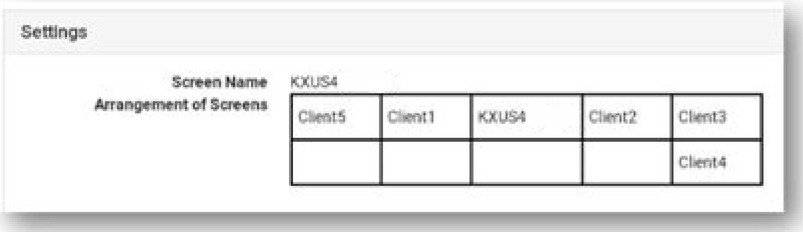


To configure, designate the Dominion User Station with the keyboard and mouse connected as "Controller". The Dominion User Stations you intend to share the keyboard and mouse with are designated as "client". For the initial configuration, connect a keyboard and mouse to each client Dominion User Station. You can remove these when the configuration is complete. Login to each client Dominion User Station to enter the controller's IP address/hostname and assign the client a unique screen name. In the controller setup, add the unique client names to the Arrangement of Screens, a grid representing the physical screen location. Screens can be added in any formation up to a 5 by 3 grid, as long as each screen has a neighbor on at least one edge. See Configuring Keyboard/Mouse Sharing (on page 219) for detailed instructions.

Once configured, the Mouse will move either horizontally or vertically from screen to screen. Each Dominion User Station can have its own extended desktop with multiple monitors, so the Mouse will move from the ends of each extended desktop. Each Dominion User Station is still independent--you cannot drag KVM Windows from one Dominion User Station to another.

► *Example Arrangement of Screens:*

The Arrangement of Screens is used to define how the mouse and keyboard moves between the screens of the Controller and Client User Stations. The mouse can move either horizontally or vertically as shown.



Settings

Screen Name KXUS4

Arrangement of Screens

Client5	Client1	KXUS4	Client2	Client3
				Client4

- Moving the Mouse to the right edge of Client5 will move to the left edge of Client1.
- Moving the Mouse to the left edge of Client2 will move to the right edge of KXUS4.
- Moving the Mouse to the bottom edge of Client3 will move to the top edge of Client4.

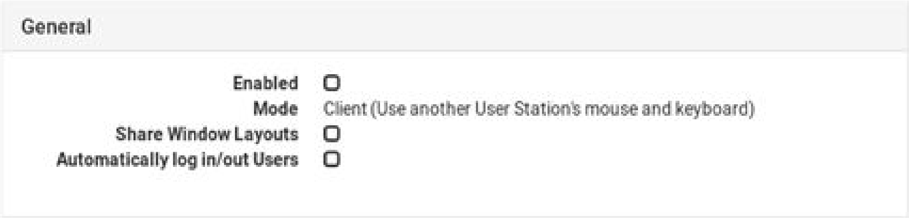
Configuring Keyboard/Mouse Sharing

If you need to configure your monitors first, see Monitor (on page 30).

Controller is the Dominion User Station where the keyboard and mouse are physically connected. Clients are Dominion User Stations that will share the Controller's keyboard and mouse.

► *To configure client screens:*

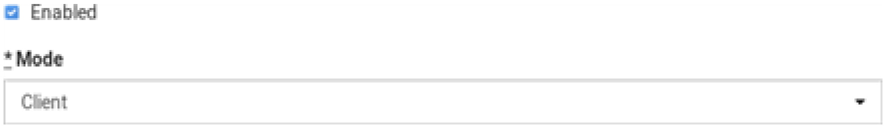
1. Login to a client Dominion User Station.
2. Click Administration > Keyboard/Mouse Sharing.



General

Enabled □
Mode Client (Use another User Station's mouse and keyboard)
Share Window Layouts □
Automatically log in/out Users □

3. Click Edit, then select Enabled.
4. Select Client in the Mode field.

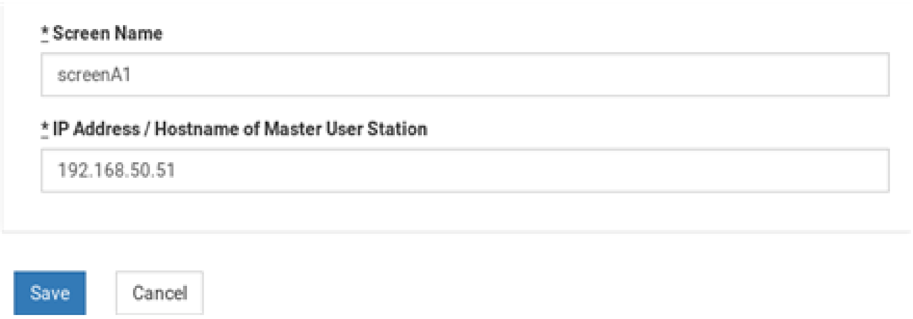


☑ Enabled

* Mode

Client ▾

5. Select the Share Window Layouts option to allow saved layouts to be shared among all clients in the keyboard/mouse sharing configuration.
   - Window Layouts must be created on all User Stations manually.
   - When you restore a layout on one User Station, all others restore the Window Layout with the same name.
6. Select the Automatically Log in/out Users option to automatically login/logout to all user stations connected by keyboard/mouse sharing while using the configuration.
7. In the Client Settings, enter a Screen Name to identify this client. All screens in the sharing formation must have unique names.
   - Up to 64 characters.
   - Alphanumeric characters allowed.
   - Hyphen and underscore allowed.
8. Enter the IP address/Hostname of the ControllerDominion User Station, which is where the keyboard and mouse are connected.



* Screen Name

screenA1

* IP Address / Hostname of Master User Station

192.168.50.51

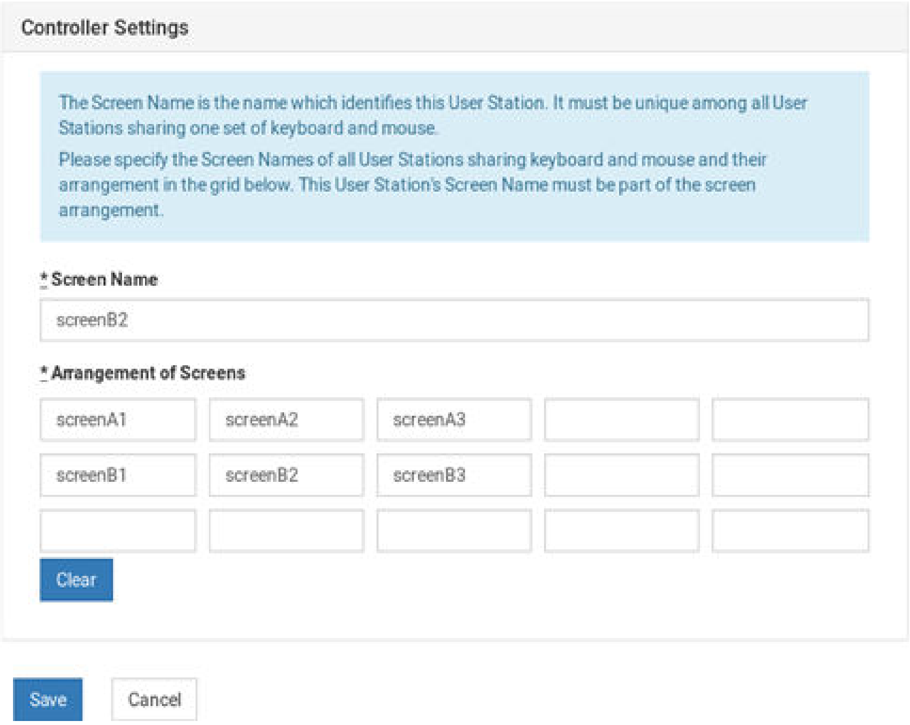
9. Click Save. Repeat this task for all client screens.

► *To configure the Controller:*

1. Login to the Controller Dominion User Station.
2. Click Administration > Keyboard/Mouse Sharing.
3. Click Edit, then select Enabled.
4. Select Controller in the Mode field.
5. Select the Share Window Layouts option to allow saved layouts to be shared among all clients in the keyboard/mouse sharing configuration.
6. Select the Automatically Log in/out Users option to automatically login/logout to all user stations connected by keyboard/mouse sharing while using the configuration.
7. In the Controller Settings, enter a Screen Name to identify this Controller screen. All screens in the sharing formation must have unique names.
   - Up to 64 characters.
   - Alphanumeric characters allowed.
   - Hyphen and underscore allowed.
8. In the Arrangement of Screens fields, enter the names of this controller screen and all client screens in the position representing their location in the sharing formation.

- Make sure the names entered here match the names in the "Screen Name" field in each client Dominion User Station's configuration exactly.
- No duplicate names allowed.
- Each screen must have at least one neighbor screen, either beside, above or below.

9. Click Save.



Controller Settings

The Screen Name is the name which identifies this User Station. It must be unique among all User Stations sharing one set of keyboard and mouse.

Please specify the Screen Names of all User Stations sharing keyboard and mouse and their arrangement in the grid below. This User Station's Screen Name must be part of the screen arrangement.

* Screen Name

screenB2

* Arrangement of Screens

screenA1	screenA2	screenA3		
screenB1	screenB2	screenB3		

Network Storages

You can configure Network Storages in the Dominion User Station. These storages are used like USB storage to install updates, export diagnostics, or for Backup and Restore files.

Two type of storages are supported:

- NFS (Network File System)
- CIFS/SMB(Common Internet File System, Server Message Block)

You can enable the automatic mounting of the storage at the boot or can do it manually.

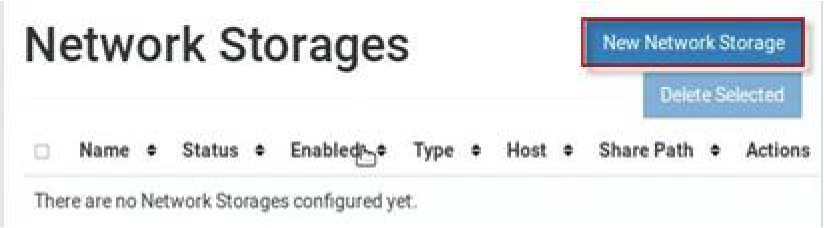
Note: When FIPs is enabled, the connection to CIFS/SMB shares will not work.

► *Important facts about Network Storage in Dominion User Station*

- Need administrative privileges to configure network storage.
- There are no limitations on the number of shares.
- The network share is available for all import/export operations and shows up next to the USB drive.
- Network shares are a global setting and may be used by all users.
- Event Log entries are created for creation, update, deletion of network shares

► *To configure Network Storage:*

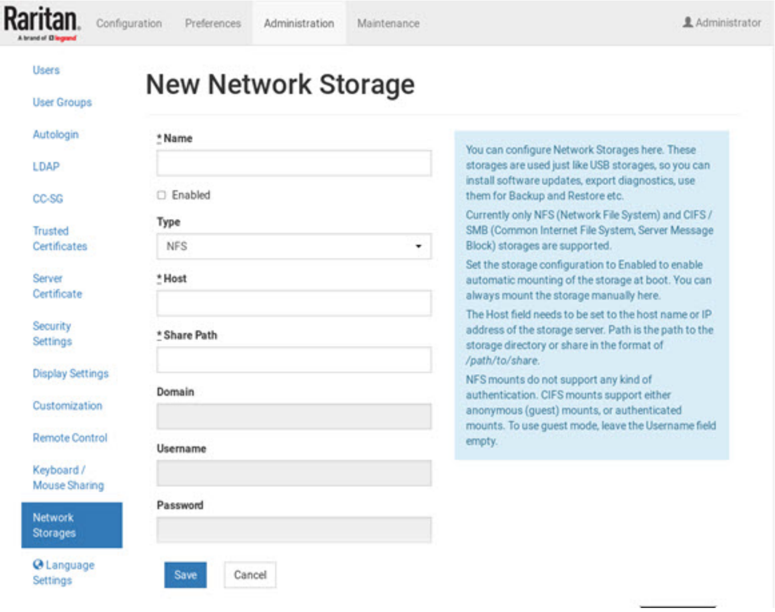
1. Click Administration->Network Storages.



Network Storages

□	Name ⬍	Status ⬍	Enabled ⬍	Type ⬍	Host ⬍	Share Path ⬍	Actions
There are no Network Storages configured yet.							

2. Click New Network Storage.



New Network Storage

* Name

□ Enabled

Type

NFS

* Host

* Share Path

Domain

Username

Password

You can configure Network Storages here. These storages are used just like USB storages, so you can install software updates, export diagnostics, use them for Backup and Restore etc.

Currently only NFS (Network File System) and CIFS / SMB (Common Internet File System, Server Message Block) storages are supported.

Set the storage configuration to Enabled to enable automatic mounting of the storage at boot. You can always mount the storage manually here.

The Host field needs to be set to the host name or IP address of the storage server. Path is the path to the storage directory or share in the format of */path/to/share*.

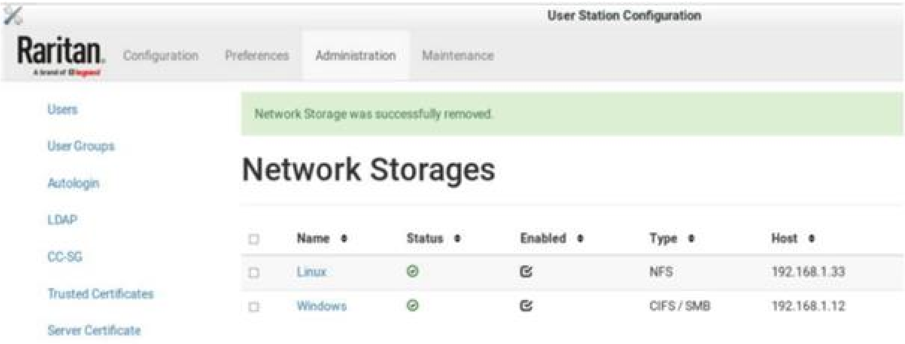
NFS mounts do not support any kind of authentication. CIFS mounts support either anonymous (guest) mounts, or authenticated mounts. To use guest mode, leave the Username field empty.

3. Enter details for New Network Storage.
   - Name: Required
   - Enabled: Select the checkbox to enable automatic mounting of the storage at boot, otherwise manual mounting will be set
   - Type: NFS, CIFS/SMB

- Host: Required, HostName or IP Address
- Share Path: Required, /path to share
- Domain/User name/Password: These entries are optional for CIFS/SMB. These are not required for NFS

Note: For CIFS/SMB, authentication is optional. Anonymous/guest mount is used if nothing is provided.

1. Click Save.



Network Storage was successfully removed.

Network Storages

□	Name	Status	Enabled	Type	Host
□	Linux	✓	☑	NFS	192.168.1.33
□	Windows	✓	☑	CIFS / SMB	192.168.1.12

Language Settings

The Language Settings feature allows you to change the Dominion User Station GUI and system language.

- English
- French: Français
- German: Deutsch
- Chinese (Simplified): 中文(简体)
- Japanese: 日本語

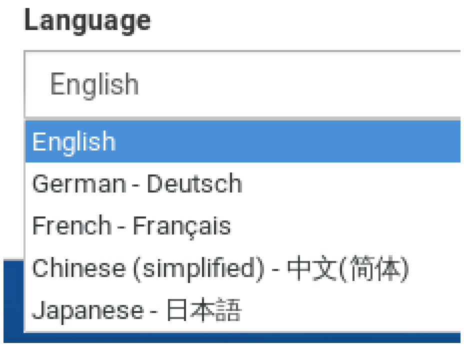
After setting a new language, you must reboot to fully update the language in every area. Note that some text is not available in all languages. Language setting is part of backup and restore, but upon factory reset the language setting is English.

Chinese and Japanese input methods are not supported.

► *To change the language setting:*

1. Click Administration > Language Settings. The current language selection is listed.

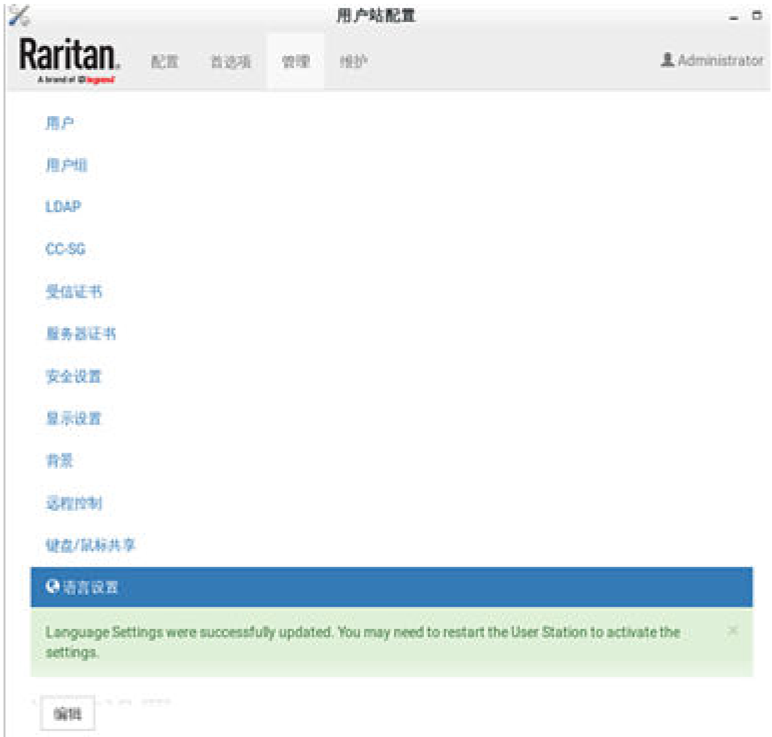
2. Click Edit, then select the language from the list.



Language

English

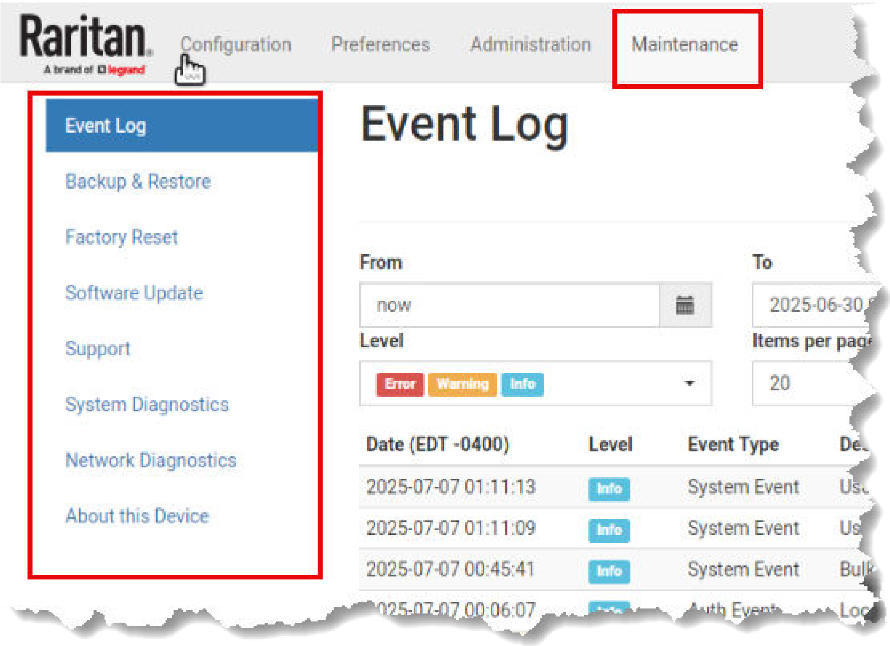
3. Click Save. You will see an immediate change in the GUI, but you must reboot the Dominion User Station to ensure a full language update.



Language Settings were successfully updated. You may need to restart the User Station to activate the settings.

Maintenance Features

In the User Station Configuration window, click Maintenance to perform the following User Station maintenance tasks.



From: now

To: 2025-06-30

Level: Error Warning Info

Items per page: 20

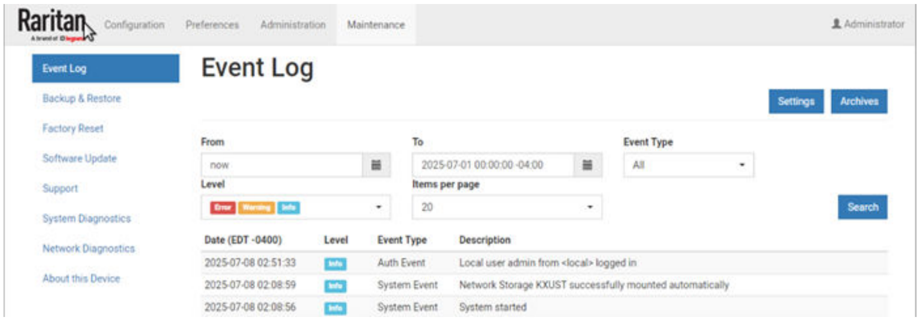
Date (EDT -0400)	Level	Event Type	De
2025-07-07 01:11:13	Info	System Event	Us
2025-07-07 01:11:09	Info	System Event	Us
2025-07-07 00:45:41	Info	System Event	Bulk
025-07-07 00:06:07	Info	Auth Event	Log

In This Chapter

Event Log

The Event Log is an application level log of activity taking place in the User Station. It records who did a certain task and when it was done. For example, login and logout, open connection to a KVM-port, updating the software and so on. The Event Log also records system incidents that cannot be shown otherwise, such as LDAP authentication and authorization processing and decisions.

The Event Log is different from the Diagnostic Log File that can be downloaded from the User Station, which contains the raw system logs that cannot be conveniently read or filtered.



Event Log

From: now

To: 2025-07-01 00:00:00 -04:00

Event Type: All

Level: Error Warning Info

Items per page: 20

Date (EDT -0400)	Level	Event Type	Description
2025-07-08 02:51:33	Info	Auth Event	Local user admin from <local> logged in
2025-07-08 02:08:59	Info	System Event	Network Storage KXUST successfully mounted automatically
2025-07-08 02:08:56	Info	System Event	System started

► *To search and view the Event Log:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Maintenance> Event Log. The Event Log page opens.
3. Search functions appear at the top of the screen. The most recent seven days of entries in the event log appear at the bottom of the screen.
   - Search by date: Select a date range in the From and To fields.
   - Search by Event Type: See Event Type and Description (on page 226). When Authentication is selected, you can select a user from the User field.
   - Search by Event Severity: Info, Warning, or Critical.
   - Items per Page: Select how many records to display per page of search results.
4. Click Search. The filtered list of events appears at the bottom of the search controls.

Event Type and Description

The Event Log includes the following events types.

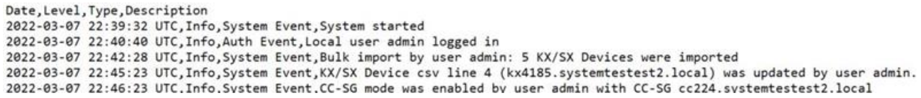
- Authentication Events: Description includes user name, auth type (Local, LDAP or CC-SG) and from (Local or IP address).
- LDAP Events: Errors and information for LDAP authentication and authorization.
- CC-SG Events: Access of CC-SG, connections failures.
- KVM Access Events: Access of KVM ports. Description includes device, port, user name and from (Local or IP address).
- Serial Access Events: Access of Serial ports. Description includes device, port, user name and from (Local or IP address).
- RDP, SSH, VNC, Web, and ESXi Access Events: Access sessions opened and/or closed.
- System Events: Changes of the system such as adding users or KX devices. User and from is logged in description when applicable.

Event Log Archives

Event Log records can be archived to clear the database. Event Log archives are always created and stored inside the User Station. The file created is a compressed CSV file containing one line per record and all attributes of the record. Each record has a timestamp in UTC.

All stored archives are listed with the following details:

- date of creation
- filename: kxust-event-log-archive-<year>-<month>-<day>-<time>.gz
  - example: kxust-event-log-archive-2016-11-18-140000.gz
- size



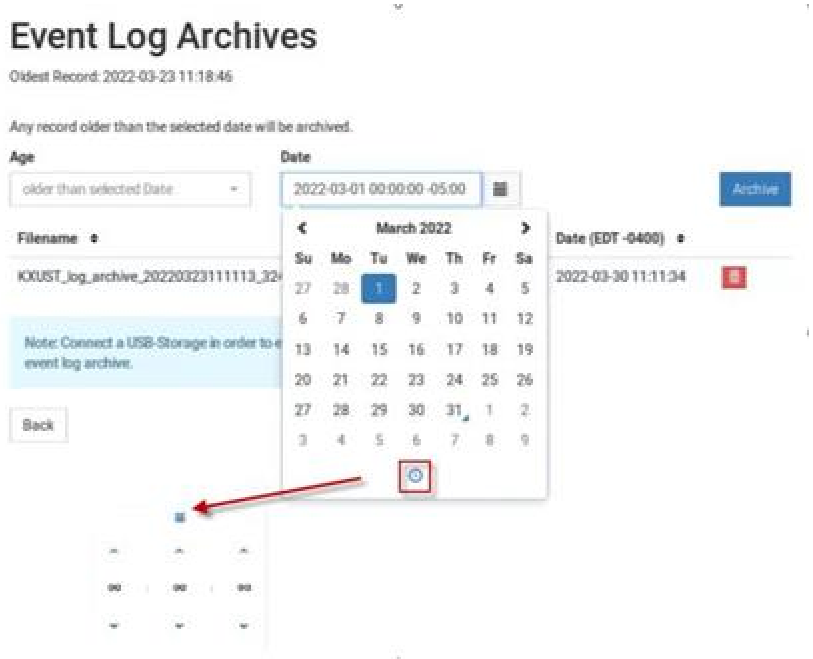
```
Date,Level,Type,Description
2022-03-07 22:39:32 UTC,Info,System Event,System started
2022-03-07 22:40:40 UTC,Info,Auth Event,Local user admin logged in
2022-03-07 22:42:28 UTC,Info,System Event,Bulk import by user admin: 5 KX/SX Devices were imported
2022-03-07 22:45:23 UTC,Info,System Event,KX/SX Device csv line 4 (kx4185.systemtestest2.local) was updated by user admin.
2022-03-07 22:46:23 UTC.Info.Svstem Event.CC-SG mode was enabled bv user admin with CC-SG cc224.svstemtestest2.local
```

You can create a manual archive at anytime. See Create an Archive (on page 227).

The Dominion User Station also automatically creates an archive if the total amount of event log records reaches a certain threshold. See Automatic Archives (on page 228).

Create an Archive

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Maintenance> Event Log. The Event Log page opens.
3. Click Archives. The Event Log Archives page opens.
4. Choose how records will be included in the archive: Age or Date
   - In the Age field: select a file age to include:
     - 1 week
     - 1 month
     - 2 months
     - 6 months
     - 1 year (default)
     - 2 years
     - 5 years
     - 10 years
   - Or, select "older than selected Date" to enable the Date field, and choose a specific Date in the calendar. To choose a specific time, use the clock icon on the calendar, as shown.
   - All events logged older than the selected Age, or older than the selected Date will be archived.
5. Click Archive.
6. Click OK in the confirmation dialog.



Event Log Archives

Oldest Record: 2022-03-23 11:18:46

Any record older than the selected date will be archived.

Age: older than selected Date

Date: 2022-03-01 00:00:00 -05:00

Filename	Date (EDT -0400)
KXUST_log_archive_20220323111113_324	2022-03-30 11:11:34

Note: Connect a USB-Storage in order to e event log archive.

Automatic Archives

Dominion User Station will automatically create archives in cases where the database has become full of too many records.

Automatic archives are implemented with two thresholds, Warning and Critical. The thresholds are checked once per day. If thresholds are met, an error message appears in the event log. The archive is created automatically when the Critical threshold is met.

► *Warning threshold:*

A warning message displays in the Event Log page when 2 million records has been reached:

There are more than 2 Million entries in event log. Please archive event log entries or auto-archiving will be started once event log grows above 3 Million entries.

► *Critical threshold:*

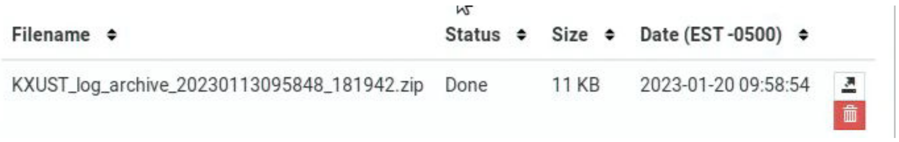
The critical threshold is 3 million records. An automactic archive is created, including all log entries above the warning threshold of 2 million records. Automatic archiving doesn't trigger immediately upon reaching 3 million entries, but will run once per day

The automatic archive creation is logged in the Event Log with user name <system>

Exporting Archive Files

To export an archive file, you must connect a USB flash drive or mount a network storage to the User Station first. When the User Station detects the connected USB drive, or network storage the export button appears next to it.

1. Click the Export icon of the file you want to export to USB or network storage



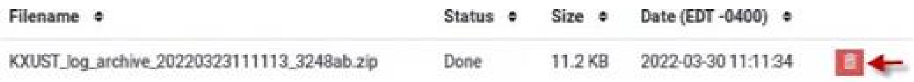
Filename ⇕	Status ⇕	Size ⇕	Date (EST -0500) ⇕	
KXUST_log_archive_20230113095848_181942.zip	Done	11 KB	2023-01-20 09:58:54	

2. The file is exported to the USB drive or network storage.

Deleting Archive Files

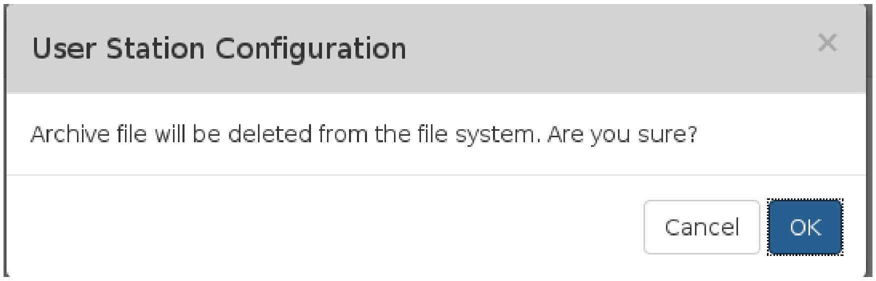
You can delete an archive file. If you want to save the file off the Dominion User Station before deleting it, see Exporting Archive Files (on page 229).

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Maintenance> Event Log. The Event Log page opens.
3. Click Archives. The Event Log Archives page opens.
4. All archive files are listed at the bottom of the page. Click the Delete icon next to the file you want to delete.



Filename ⇕	Status ⇕	Size ⇕	Date (EDT -0400) ⇕	
KXUST_log_archive_20220323111113_3248ab.zip	Done	11.2 KB	2022-03-30 11:11:34	

5. A confirmation message appears. Deleting cannot be undone. Click OK to delete the archive file.



User Station Configuration

Archive file will be deleted from the file system. Are you sure?

Archive File Storage

The amount of storage to keep Event Log archives inside Dominion User Station is limited. If no more storage is available, you will see an error message upon attempting to create a new archive.

The error message prompts you to delete old archive files.

You can export files to external storage before deleting, if needed. See Exporting Archive Files (on page 229).

You must delete archive files before you can create the new archive. See Deleting Archive Files (on page 229).

If the storage is full when an automatic archive must be created, the oldest archives are automatically deleted until there is enough space to write the new archive.

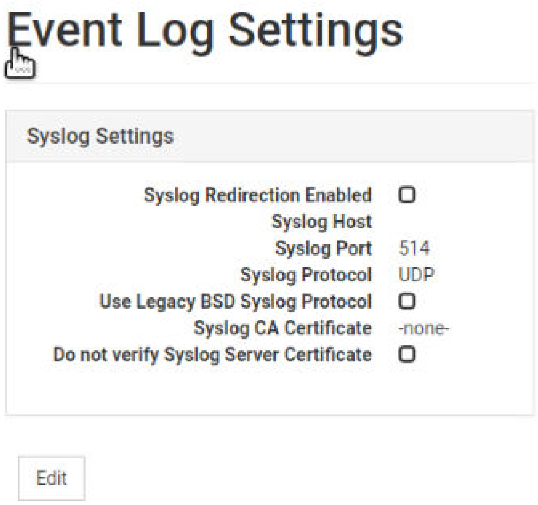
Deletion of each archive is logged into the Event Log

Event Log Settings

The Event Log Settings feature allows you to forward the Dominion User Station syslogs to an external server.

► *To set the Syslog Settings:*

1. Click Maintenance > Event Log > Settings.
2. Event Log Settings pages shows the details of Syslog Settings.

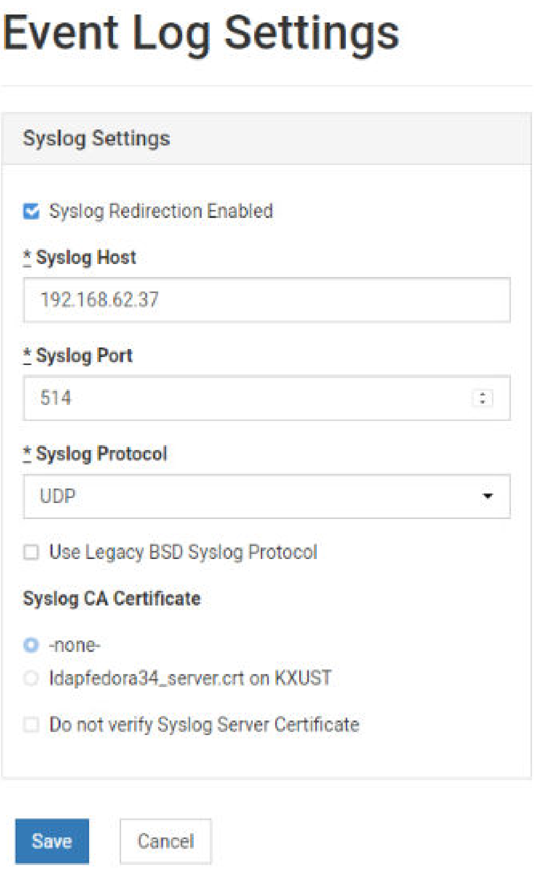


Event Log Settings

Syslog Settings

Syslog Redirection Enabled ☐
Syslog Host
Syslog Port 514
Syslog Protocol UDP
Use Legacy BSD Syslog Protocol ☐
Syslog CA Certificate -none-
Do not verify Syslog Server Certificate ☐

3. Click Edit



Event Log Settings

Syslog Settings

☑ Syslog Redirection Enabled

* Syslog Host

192.168.62.37

* Syslog Port

514

* Syslog Protocol

UDP

□ Use Legacy BSD Syslog Protocol

Syslog CA Certificate

● -none-

○ ldapfedora34_server.crt on KXUST

□ Do not verify Syslog Server Certificate

4. Select Syslog Redirection Enabled.
5. Enter the hostname or IP address of a Syslog server.
6. Enter the Syslog Port. The default port is 514.
7. Select UPD/TCP/TCP+TLS from the list of the Syslog Protocols.
8. Select the Syslog CA Certificate if applicable.
9. Click Save.

Backup and Restore

The User Station allows you to back up the latest settings and data with one click. By default, the backup files are stored in the User Station.

In case you have to restore to the previous settings and data, select the backup file you need and perform the restore command.

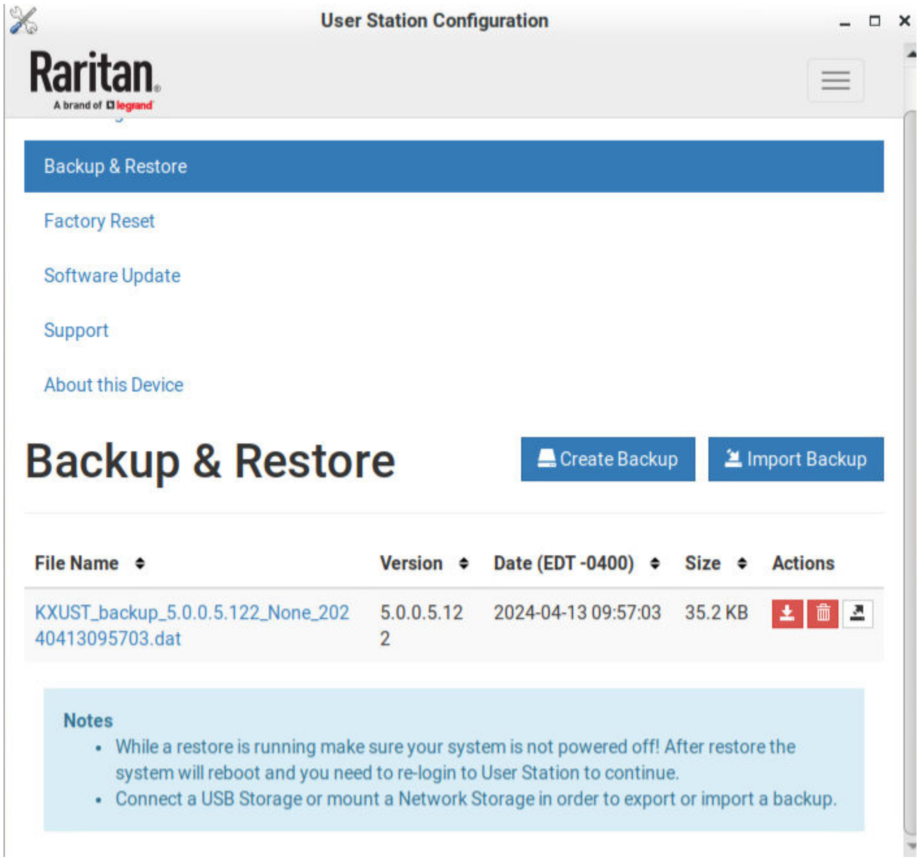
Note: Following system settings are NOT stored in the backup file so they CANNOT be restored.

- Network, see Network Connections - Ethernet (on page 32)
- Event Log Archives
- Backup Files

Tip: You can export or import backup files from a USB flash drive or network storage. See Exporting and Importing Backup Files (on page 233).

► *To back up the current settings and data:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Maintenance > Backup & Restore. The Backup & Restore page opens.
3. Click Create Backup.



File Name	Version	Date (EDT -0400)	Size	Actions
KXUST_backup_5.0.0.5.122_None_20240413095703.dat	5.0.0.5.122	2024-04-13 09:57:03	35.2 KB	

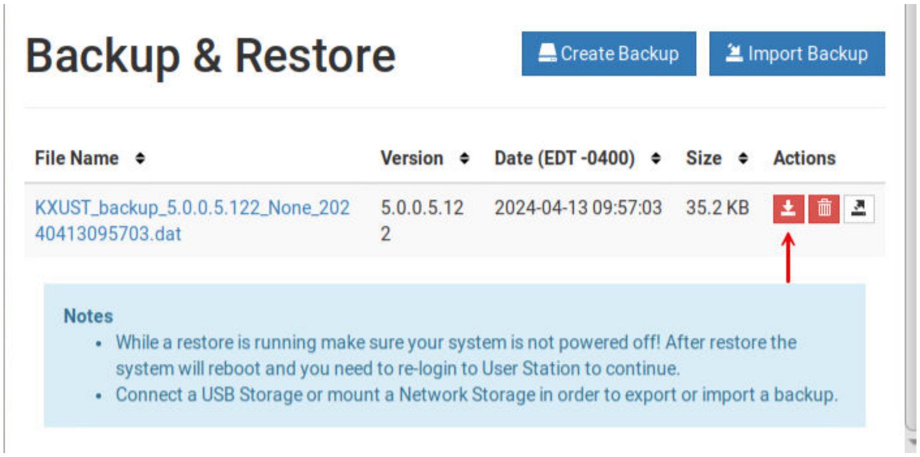
Notes

- While a restore is running make sure your system is not powered off! After restore the system will reboot and you need to re-login to User Station to continue.
- Connect a USB Storage or mount a Network Storage in order to export or import a backup.

4. Once completed, the Backup Archives page lists the backup file, with the filename, software version and file size shown on the screen.

► *To restore to the previous settings and data:*

1. If there are an existing backup files, the Backup Archives page lists all of them.



Backup & Restore

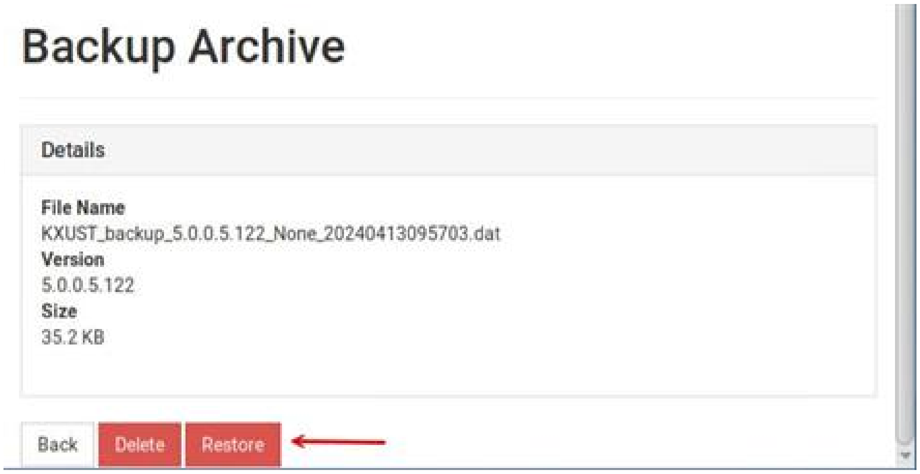
File Name	Version	Date (EDT -0400)	Size	Actions
KXUST_backup_5.0.0.5.122_None_20240413095703.dat	5.0.0.5.122	2024-04-13 09:57:03	35.2 KB	

Notes

- While a restore is running make sure your system is not powered off! After restore the system will reboot and you need to re-login to User Station to continue.
- Connect a USB Storage or mount a Network Storage in order to export or import a backup.

2. Determine the desired file and click the restore icon ⤓ button.

Or, click the filename link to view details, and click the Restore button in the details page.



Backup Archive

Details

File Name
KXUST_backup_5.0.0.5.122_None_20240413095703.dat
Version
5.0.0.5.122
Size
35.2 KB

3. Click OK on the confirmation message.
4. A text screen appears to show restore progress. When restore is completed, Dominion User Station restarts and opens the login page.

Exporting and Importing Backup Files

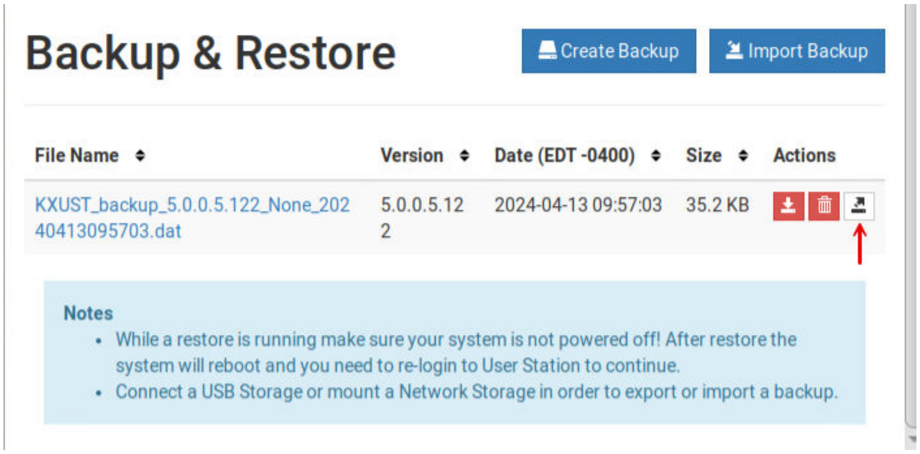
To export or import a backup file, you must connect a USB flash drive to the User Station or configure network storage first.

▶ *To export backup files:*

1. Connect a USB drive formatted with any of the following file system or configure network storage.

- VFAT (FAT16, FAT32)
- NTFS
- EXT2, EXT3, EXT4
- XFS

2. Click Maintenance > Backup & Restore. The Backup & Restore page opens. When the User Station detects the connected USB drive or network storage, the export button appears in the Actions column.



Backup & Restore

File Name	Version	Date (EDT -0400)	Size	Actions
KXUST_backup_5.0.0.5.122_None_20240413095703.dat	5.0.0.5.122	2024-04-13 09:57:03	35.2 KB	

Notes

- While a restore is running make sure your system is not powered off! After restore the system will reboot and you need to re-login to User Station to continue.
- Connect a USB Storage or mount a Network Storage in order to export or import a backup.

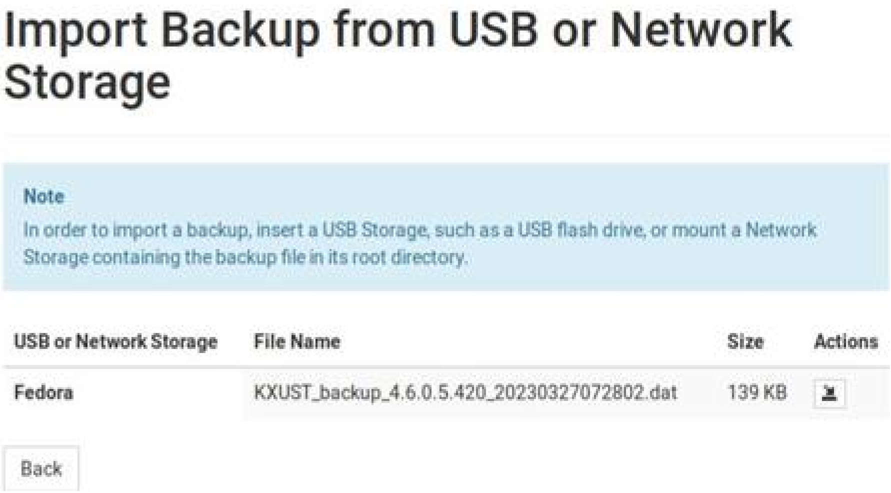
3. Click the button of the desired backup file.

The selected file is exported to the connected USB drive/network storage and therefore listed in the "Import backup from USB or Network Storage" section.

► *To import backup files:*

Make sure the connected USB drive or network storage contains backup files in its *root* directory.

1. Click Maintenance > Backup & Restore. The Backup & Restore page opens.
2. Click Import Backup. The Import Backup from USB or Network Storage page opens. All backup files detected are listed.



Import Backup from USB or Network Storage

Note
In order to import a backup, insert a USB Storage, such as a USB flash drive, or mount a Network Storage containing the backup file in its root directory.

USB or Network Storage	File Name	Size	Actions
Fedora	KXUST_backup_4.6.0.5.420_20230327072802.dat	139 KB	⤓

3. Click the import button of the desired backup file.

The selected file is imported and shown in the Backup & Restore page.

Deleting Backup Files

To check the creation date of a backup file before removing it:

The creation date and time stamp is included as the last set of numbers in the filename, after software version and sometimes serial number. The date is expressed in 8 digits.

► *Examples:*

Backup filename with version number and date/time stamp:

`KXUST_backup_4.6.0.5.320_20240429155444.dat`

The software version is `4.6.0.5.320`. The date is `20240429`, April 29, 2024.

Backup filename with version number, serial number, and date/time stamp:

`KXUST_backup_4.6.0.5.320_22U9700018_20240429155444.dat`

► *To remove a backup file:*

1. To show existing backup files, click Administration > Backup & Restore.
2. Click the 🗑 button of the desired file.
3. Click OK on the confirmation message.

Factory Reset

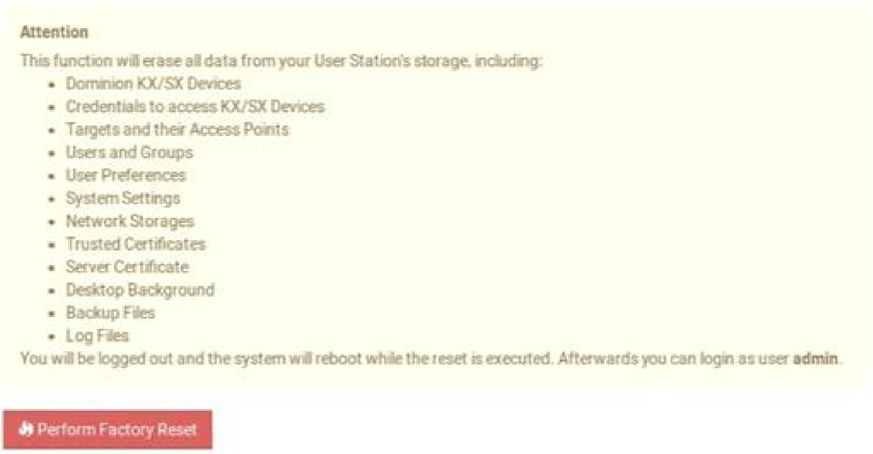
The factory reset feature resets all of your User Station's settings to the factory defaults. All other customized data is removed simultaneously, including:

- All KVM switches added to the User Station
- User credentials entered for each KVM switch
- All Targets and Access Points
- Users and Groups
- "admin" user profile is recreated with factory default settings
- Built-in user groups reset to factory default settings
- All user preferences settings
- System settings
- Network storages
- Trusted certificates
- Server certificates
- Desktop background
- Backup files
- Log files

Note: To perform factory reset at startup instead of using the User Station Configuration window, see Factory Reset at Startup (on page 267).

► *To perform the factory reset:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Maintenance > Factory Reset. The factory reset page opens. Read this page before proceeding to the next step.



Attention

This function will erase all data from your User Station's storage, including:

- Dominion KX/SX Devices
- Credentials to access KX/SX Devices
- Targets and their Access Points
- Users and Groups
- User Preferences
- System Settings
- Network Storages
- Trusted Certificates
- Server Certificate
- Desktop Background
- Backup Files
- Log Files

You will be logged out and the system will reboot while the reset is executed. Afterwards you can login as user **admin**.

3. Click Perform Factory Reset. A confirmation message appears.
4. Click OK to confirm the operation or Cancel to abort it.

Software Update

The software update feature only permits software UPGRADE, not downgrade.

Note: To perform software downgrade, contact Raritan Technical Support for help.

To perform the software update, you must meet the following requirements:

5.1 GA is the minimum required version to upgrade to 5.2.

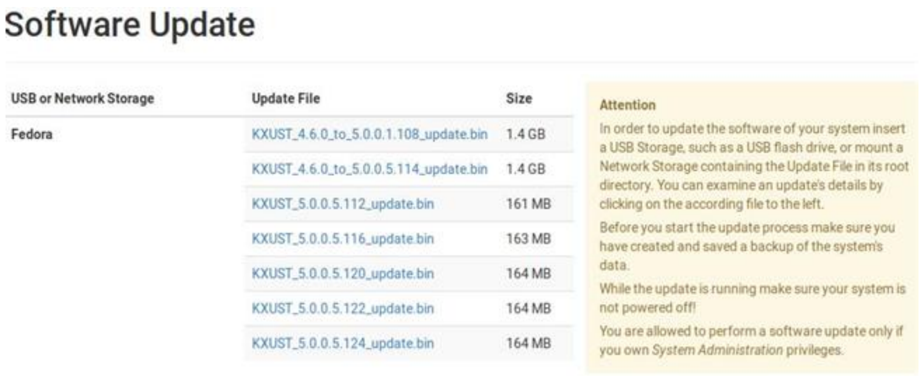
- You have a USB flash drive, or a USB/CD-ROM/DVD-ROM drive or Network Storage containing the software update file. Supported drive formats are:
  - VFAT (FAT16, FAT32)
  - NTFS
  - EXT2, EXT3, EXT4
  - XFS
- The version of the software which you will install is equal to or higher than the software version currently running on your User Station. See About this Device (on page 245).

Important: It is strongly recommended to back up all data and settings and export to a USB drive or network storage prior to the software update. See Backup and Restore (on page 231).

► *To perform the software UPGRADE:*

1. Use a computer to download the User Station software file from the Dominion User Station section of the Raritan website's Support page.
2. Connect the USB/CD/DVD drive or Mount the Network storage with the upgrade file.
3. On the User Station, log in as a user who has the System Administration privilege.
4. Launch the User Station Configuration window. See User Station Configuration (on page 81).

Click Maintenance > Software Update. The Software Updates page opens, with a list of software files found in the root directory of the USB/CD/DVD or Network Storage.



Software Update

USB or Network Storage	Update File	Size
Fedora	KXUST_4.6.0_to_5.0.0.1.108_update.bin	1.4 GB
	KXUST_4.6.0_to_5.0.0.5.114_update.bin	1.4 GB
	KXUST_5.0.0.5.112_update.bin	161 MB
	KXUST_5.0.0.5.116_update.bin	163 MB
	KXUST_5.0.0.5.120_update.bin	164 MB
	KXUST_5.0.0.5.122_update.bin	164 MB
	KXUST_5.0.0.5.124_update.bin	164 MB

Attention

In order to update the software of your system insert a USB Storage, such as a USB flash drive, or mount a Network Storage containing the Update File in its root directory. You can examine an update's details by clicking on the according file to the left.

Before you start the update process make sure you have created and saved a backup of the system's data.

While the update is running make sure your system is not powered off!

You are allowed to perform a software update only if you own *System Administration* privileges.

1. Click the desired file, and it will be analyzed. Verify the minimum required version and validity check results.
2. Click Start the Update Start the Update to perform the software upgrade.

Warning: Do NOT power off the User Station during the software upgrade.

---

3. Click OK on the confirmation message.
4. When the upgrade completes, the User Station reboots, and then the login screen is shown.

Support

The Support page provides two features that help Raritan Technical Support to troubleshoot your User Station issues.

- Support Login: This feature allows the Technical Support to remotely access your User Station.
- Log Level: This feature allows you to set the log level of the Diagnostic Log file. Note, this file is different from the Event Log.
- Diagnostic Log File: This feature downloads a diagnostic log file from your User Station, which is helpful for troubleshooting.

Support Login

The Support Login feature allows remote access from Raritan Technical Support.

By default, this feature is disabled for security.

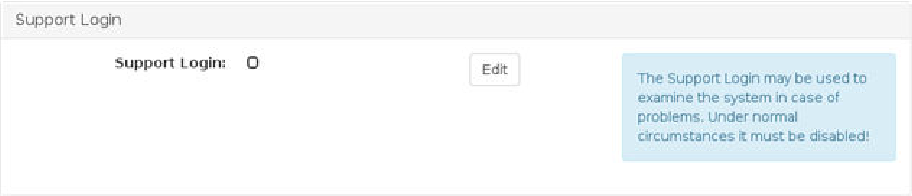
You *MUST NOT* enable this feature unless you are instructed by Raritan Technical Support to do so.

► *To permit remote access from Raritan Technical Support:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Maintenance > Support. The Support page opens.

In the Support Login section:

- ☑ indicates the setting is enabled.
- □ indicates the setting is disabled.



Support Login

Support Login: □

The Support Login may be used to examine the system in case of problems. Under normal circumstances it must be disabled!

3. Click Edit.

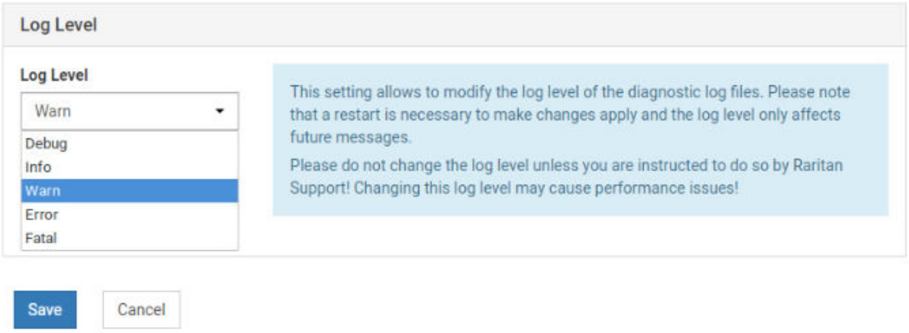
4. Select the Support Login checkbox.
5. Click Save.
6. Provide your User Station's IP address to Raritan Technical Support.
   - To retrieve the IP address(es), right-click the network icon in the Main Toolbar to select Connection Information. See Network Icon (on page 52).

Important: Disable this feature immediately after Raritan Technical Support finishes the troubleshooting task.

Log Level for Diagnostic Log Files

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Maintenance > Support. The Support page opens.
3. Click Edit.
4. In the Log Level section, select which logs to include in the diagnostic log file.

Note: Selecting Debug may affect system performance.



This setting allows to modify the log level of the diagnostic log files. Please note that a restart is necessary to make changes apply and the log level only affects future messages.

Please do not change the log level unless you are instructed to do so by Raritan Support! Changing this log level may cause performance issues!

5. Click Save. Click OK in the confirmation message to set the level and restart the Dominion User Station.

Diagnostic Log File

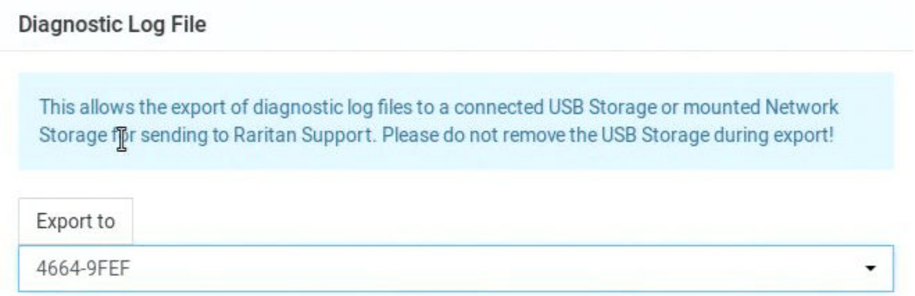
When the User Station does not work properly, you can export the User Station's diagnostic log file to a connected USB flash drive or to a mounted network storage, and send the file to the Raritan Technical Support for troubleshooting.

You must have the System Administration permission to perform this operation.

Note: The Diagnostic Log File is different from the Event Log. See Event Log.

► *To download the diagnostic log from the User Station:*

1. Make sure your User Station has a USB drive connected or network storage mounted.
2. In the User Station Configuration window, click Maintenance > Support.
3. Select the USB drive or network storage from the drop-down list, and click "Export to" to export the diagnostic log.



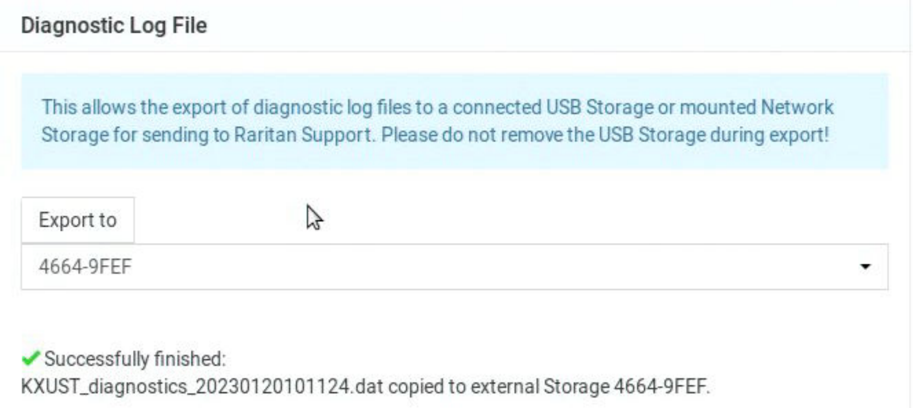
Diagnostic Log File

This allows the export of diagnostic log files to a connected USB Storage or mounted Network Storage for sending to Raritan Support. Please do not remove the USB Storage during export!

Export to

4664-9FEF

4. Wait until the User Station finishes the export, displaying the "Successfully finished" message as well as the filename of the diagnostic log.



Diagnostic Log File

This allows the export of diagnostic log files to a connected USB Storage or mounted Network Storage for sending to Raritan Support. Please do not remove the USB Storage during export!

Export to

4664-9FEF

✓ Successfully finished:
KXUST_diagnostics_20230120101124.dat copied to external Storage 4664-9FEF.

5. Send the file to Raritan Technical Support.

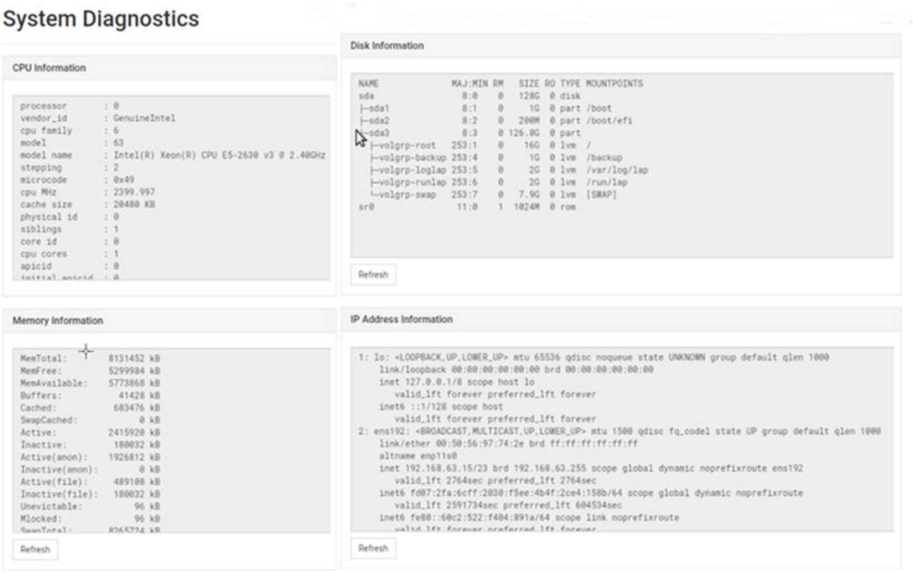
System Diagnostics

The System Diagnostic of Dominion User Station provides information about:

- CPU
- Memory
- Disk Information
- IP Address Information
- Filesystem Information
- Processes
- Network I/O
- Disk I/O
- Kernel Parameters
- Network Interface Settings

► *To view information about your system diagnostics:*

Choose Maintenance > System Diagnostics. The System Diagnostics page opens up providing all the above listed information.



System Diagnostics

CPU Information

```
processor       : 0
vendor_id       : GenuineIntel
cpu family      : 6
model           : 63
model name      : Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz
stepping        : 2
microcode       : 0x49
cpu MHz         : 2399.997
cache size      : 20480 KB
physical id     : 0
siblings        : 1
core id         : 0
cpu cores       : 1
apicid          : 0
initial apicid  : 0
```

Disk Information

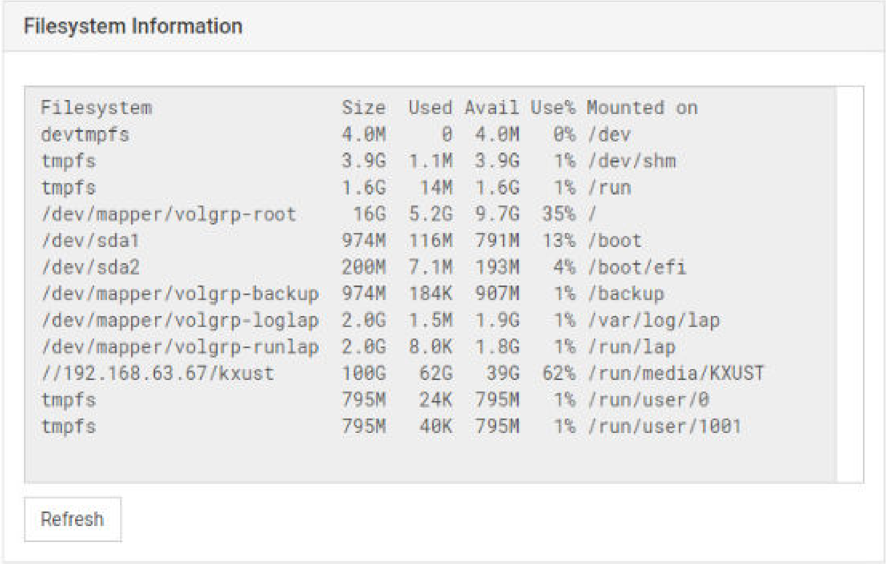
```
NAME             MAJ:MIN RM   SIZE RO TYPE MOUNTPOINTS
sda                8:0    0   128G  0 disk
├─sda1             8:1    0     1G  0 part /boot
├─sda2             8:2    0   200M  0 part /boot/efi
└─sda3             8:3    0 126.8G  0 part
  ├─volgrp-root   253:1   0    16G  0 lvm  /
  ├─volgrp-backup 253:4   0     1G  0 lvm  /backup
  ├─volgrp-loglap 253:5   0     2G  0 lvm  /var/log/lap
  ├─volgrp-runlap 253:6   0     2G  0 lvm  /run/lap
  └─volgrp-swap   253:7   0   7.9G  0 lvm  [SWAP]
sr0               11:0    1  1024M  0 rom
```

Memory Information

```
MemTotal:        8131452 kB
MemFree:         5299984 kB
MemAvailable:    5773868 kB
Buffers:           41428 kB
Cached:           683476 kB
SwapCached:            0 kB
Active:          2415920 kB
Inactive:         180032 kB
Active(anon):    1926812 kB
Inactive(anon):        0 kB
Active(file):     489108 kB
Inactive(file):   180032 kB
Unevictable:          96 kB
Mlocked:              96 kB
SwapTotal:       8265724 kB
```

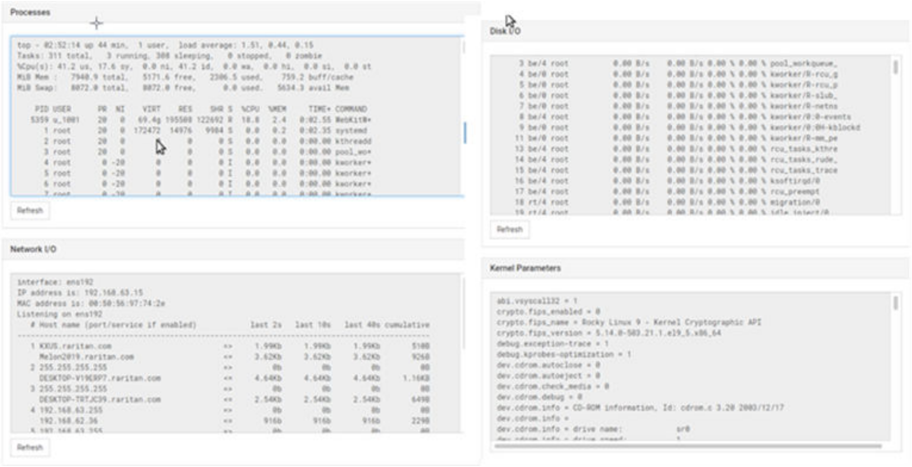
IP Address Information

```
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: ens192: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 00:50:56:97:74:2e brd ff:ff:ff:ff:ff:ff
    altname enp11s0
    inet 192.168.63.15/23 brd 192.168.63.255 scope global dynamic noprefixroute ens192
       valid_lft 2764sec preferred_lft 2764sec
    inet6 fd07:2fa:6cff:2030:f5ee:4b4f:2ce4:158b/64 scope global dynamic noprefixroute
       valid_lft 2591734sec preferred_lft 604534sec
    inet6 fe80::60c2:522:f404:891a/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
```



Filesystem Information

```
Filesystem                  Size  Used Avail Use% Mounted on
devtmpfs                    4.0M     0  4.0M   0% /dev
tmpfs                       3.9G  1.1M  3.9G   1% /dev/shm
tmpfs                       1.6G   14M  1.6G   1% /run
/dev/mapper/volgrp-root      16G  5.2G  9.7G  35% /
/dev/sda1                   974M  116M  791M  13% /boot
/dev/sda2                   200M  7.1M  193M   4% /boot/efi
/dev/mapper/volgrp-backup   974M  184K  907M   1% /backup
/dev/mapper/volgrp-loglap   2.0G  1.5M  1.9G   1% /var/log/lap
/dev/mapper/volgrp-runlap   2.0G  8.0K  1.8G   1% /run/lap
//192.168.63.67/kxust       100G   62G   39G  62% /run/media/KXUST
tmpfs                       795M   24K  795M   1% /run/user/0
tmpfs                       795M   40K  795M   1% /run/user/1001
```



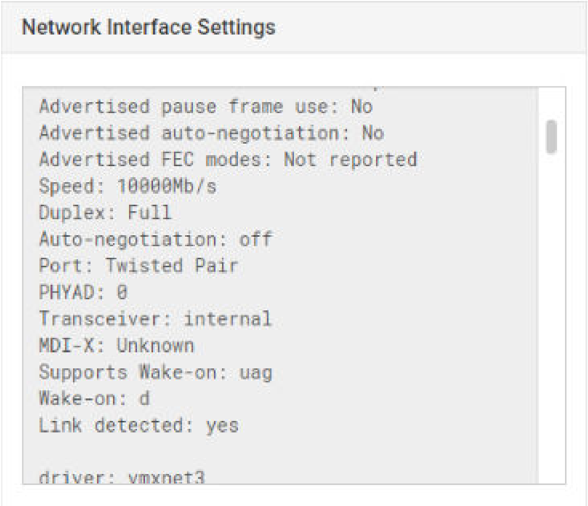
```
top - 02:52:14 up 44 min,  1 user,  load average: 1.51, 0.44, 0.15
Tasks: 311 total,   3 running, 308 sleeping,   0 stopped,   0 zombie
%Cpu(s): 41.2 us, 17.6 sy,  0.0 ni, 41.2 id,  0.0 wa,  0.0 hi,  0.0 si,  0.0 st
MiB Mem :   7940.9 total,   5171.6 free,   2306.5 used,    759.2 buff/cache
MiB Swap:   8072.0 total,   8072.0 free,      0.0 used.   5634.3 avail Mem

    PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
   5359 u_1001    20   0   69.4g 195508 122692 R  18.8   2.4   0:02.55 WebKitW+
      1 root      20   0  172472  14976   9984 S   0.0   0.2   0:02.35 systemd
      2 root      20   0       0      0      0 S   0.0   0.0   0:00.00 kthreadd
      3 root      20   0       0      0      0 S   0.0   0.0   0:00.00 pool_wo+
      4 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
      5 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
      6 root       0 -20       0      0      0 I   0.0   0.0   0:00.00 kworker+
```

```
      3 be/4 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % pool_workqueue_
      4 be/0 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % kworker/R-rcu_g
      5 be/0 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % kworker/R-rcu_p
      6 be/0 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % kworker/R-slub_
      7 be/0 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % kworker/R-netns
      8 be/4 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % kworker/0:0-events
      9 be/0 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % kworker/0:0H-kblockd
     11 be/0 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % kworker/R-mm_pe
     13 be/4 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % rcu_tasks_kthre
     14 be/4 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % rcu_tasks_rude_
     15 be/4 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % rcu_tasks_trace
     16 be/4 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % ksoftirqd/0
     17 be/4 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % rcu_preempt
     18 rt/4 root        0.00 B/s    0.00 B/s 0.00 % 0.00 % migration/0
```

```
interface: ens192
IP address is: 192.168.63.15
MAC address is: 00:50:56:97:74:2e
Listening on ens192
   # Host name (port/service if enabled)            last 2s   last 10s   last 40s cumulative
--------------------------------------------------------------------------------------------
   1 KXUS.raritan.com                         =>     1.99Kb     1.99Kb     1.99Kb       510B
     Melon2019.raritan.com                    <=     3.62Kb     3.62Kb     3.62Kb       926B
   2 255.255.255.255                          =>         0b         0b         0b         0B
     DESKTOP-V19ERP7.raritan.com              <=     4.64Kb     4.64Kb     4.64Kb     1.16KB
   3 255.255.255.255                          =>         0b         0b         0b         0B
     DESKTOP-TRTJC39.raritan.com              <=     2.54Kb     2.54Kb     2.54Kb       649B
   4 192.168.63.255                           =>         0b         0b         0b         0B
     192.168.62.36                            <=       916b       916b       916b       229B
```

```
abi.vsyscall32 = 1
crypto.fips_enabled = 0
crypto.fips_name = Rocky Linux 9 - Kernel Cryptographic API
crypto.fips_version = 5.14.0-503.21.1.el9_5.x86_64
debug.exception-trace = 1
debug.kprobes-optimization = 1
dev.cdrom.autoclose = 0
dev.cdrom.autoeject = 0
dev.cdrom.check_media = 0
dev.cdrom.debug = 0
dev.cdrom.info = CD-ROM information, Id: cdrom.c 3.20 2003/12/17
dev.cdrom.info =
dev.cdrom.info = drive name:             sr0
```



```
Advertised pause frame use: No
Advertised auto-negotiation: No
Advertised FEC modes: Not reported
Speed: 10000Mb/s
Duplex: Full
Auto-negotiation: off
Port: Twisted Pair
PHYAD: 0
Transceiver: internal
MDI-X: Unknown
Supports Wake-on: uag
Wake-on: d
Link detected: yes

driver: vmxnet3
```

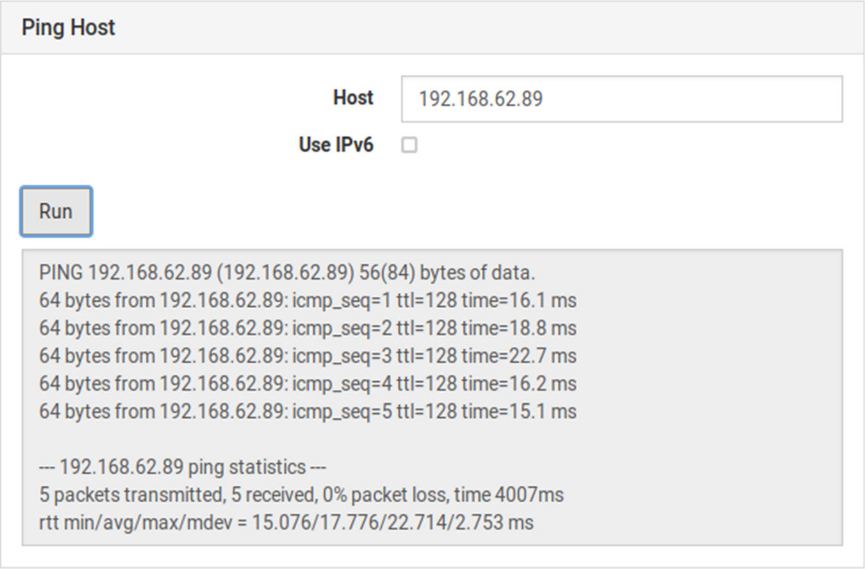
Network Diagnostics

The Dominion User Station provides information about the status of your network interfaces. To get specifics of one of the interfaces you can ping, trace route or perform a DNS inquiry as follows:

► *To view information about your network interface:*

Ping Host:

1. Choose Maintenance > Network Diagnostics. The Network Diagnostics page opens.
2. Enter Host name or ipaddress.
3. Select "Use IPV6" option if want to use IPv6.
4. Click Run. The relevant information is displayed as shown below:

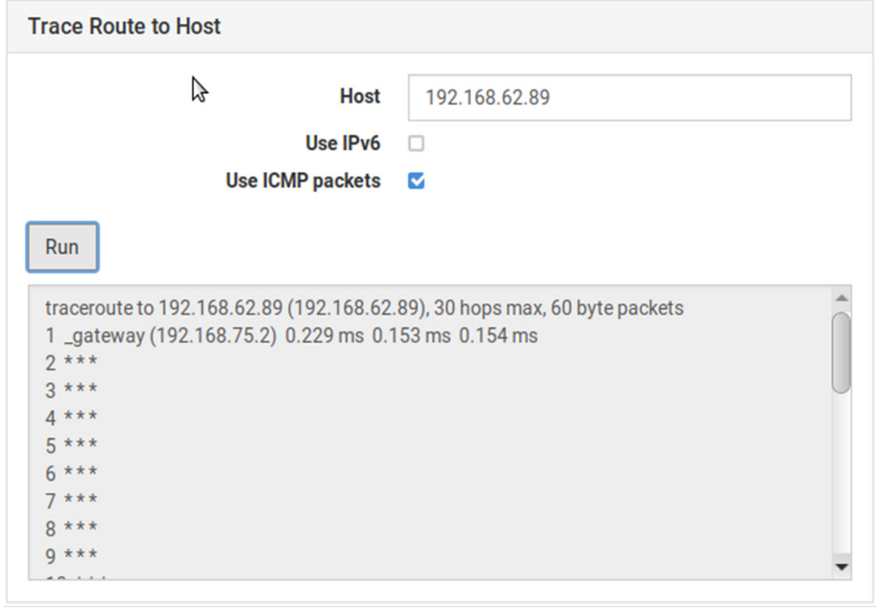


```
PING 192.168.62.89 (192.168.62.89) 56(84) bytes of data.
64 bytes from 192.168.62.89: icmp_seq=1 ttl=128 time=16.1 ms
64 bytes from 192.168.62.89: icmp_seq=2 ttl=128 time=18.8 ms
64 bytes from 192.168.62.89: icmp_seq=3 ttl=128 time=22.7 ms
64 bytes from 192.168.62.89: icmp_seq=4 ttl=128 time=16.2 ms
64 bytes from 192.168.62.89: icmp_seq=5 ttl=128 time=15.1 ms

--- 192.168.62.89 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4007ms
rtt min/avg/max/mdev = 15.076/17.776/22.714/2.753 ms
```

Trace Route to Host:

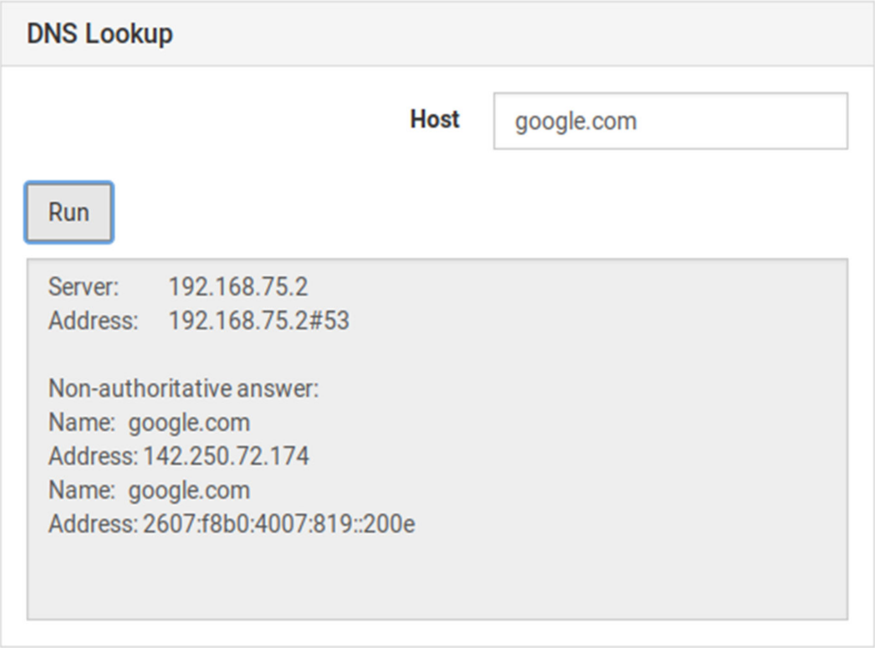
1. Choose Maintenance > Network Diagnostics. The Network Diagnostics page opens.
2. Enter Host name or ipaddress.
3. Select "Use IPV6" option if want to use IPv6.
4. Select "Use ICMP packets" if you want to see ICMP format.
5. Click Run. The relevant information is displayed as shown below:



```
traceroute to 192.168.62.89 (192.168.62.89), 30 hops max, 60 byte packets
1  _gateway (192.168.75.2)  0.229 ms  0.153 ms  0.154 ms
2 * * *
3 * * *
4 * * *
5 * * *
6 * * *
7 * * *
8 * * *
9 * * *
```

DNS Lookup:

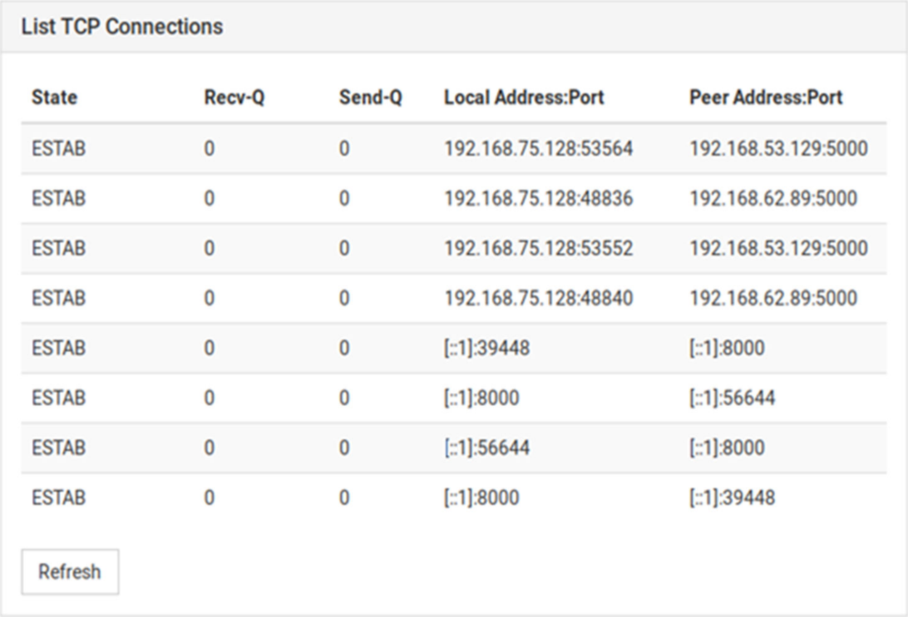
1. Choose Maintenance > Network Diagnostics. The Network Diagnostics page opens.
2. Enter Host name or ipaddress.
3. Click Run. The relevant information is displayed as shown below:



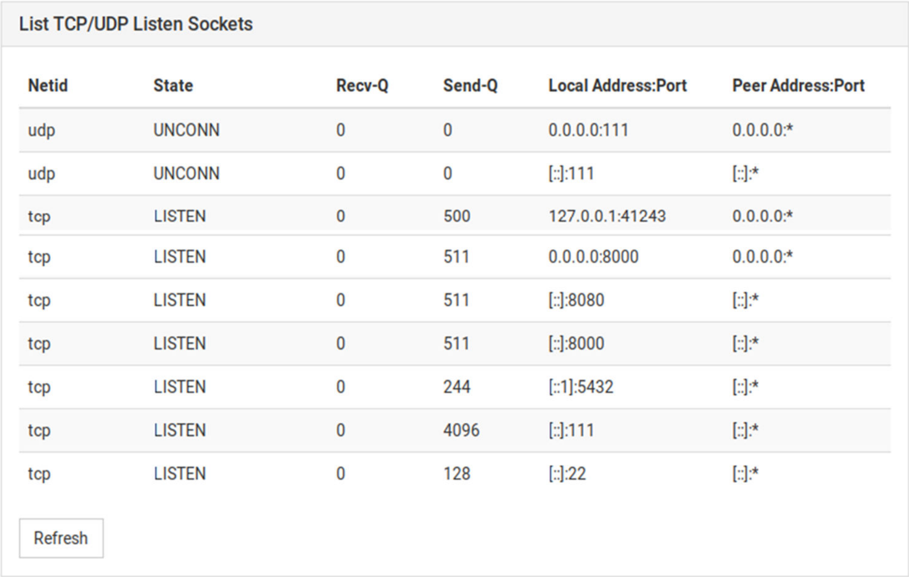
```
Server:     192.168.75.2
Address:    192.168.75.2#53

Non-authoritative answer:
Name:  google.com
Address: 142.250.72.174
Name:  google.com
Address: 2607:f8b0:4007:819::200e
```

Network Diagnostics also list the current TCP connections and TCP/UDP listen Sockets, which can be refreshed by clicking the Refresh button.



State	Recv-Q	Send-Q	Local Address:Port	Peer Address:Port
ESTAB	0	0	192.168.75.128:53564	192.168.53.129:5000
ESTAB	0	0	192.168.75.128:48836	192.168.62.89:5000
ESTAB	0	0	192.168.75.128:53552	192.168.53.129:5000
ESTAB	0	0	192.168.75.128:48840	192.168.62.89:5000
ESTAB	0	0	[::1]:39448	[::1]:8000
ESTAB	0	0	[::1]:8000	[::1]:56644
ESTAB	0	0	[::1]:56644	[::1]:8000
ESTAB	0	0	[::1]:8000	[::1]:39448



List TCP/UDP Listen Sockets

Netid	State	Recv-Q	Send-Q	Local Address:Port	Peer Address:Port
udp	UNCONN	0	0	0.0.0.0:111	0.0.0.0:*
udp	UNCONN	0	0	[::]:111	[::]:*
tcp	LISTEN	0	500	127.0.0.1:41243	0.0.0.0:*
tcp	LISTEN	0	511	0.0.0.0:8000	0.0.0.0:*
tcp	LISTEN	0	511	[::]:8080	[::]:*
tcp	LISTEN	0	511	[::]:8000	[::]:*
tcp	LISTEN	0	244	[::1]:5432	[::]:*
tcp	LISTEN	0	4096	[::]:111	[::]:*
tcp	LISTEN	0	128	[::]:22	[::]:*

About this Device

The "About this Device" page shows the firmware version i, Model number, and Mac Addresses. You can access this page from the Main Menu or the User Station Configuration window.

- In the User Station Configuration window, click Maintenance > About this Device.
- In the Main Menu, choose Help > About this Device.

Specification

Specification DKX3-UST, DKX4-UST, DKX3-EUST

Chassis design	Slim 1.3 liter metal chassis, black
Dimension (LxWxH)	190 x 165 x 43 mm
Operating temperature	0 to 40 degrees Celsius
Humidity	non-condensing: 10~90%
VESA mount	• 75 x 75 mm • 100 x 100 mm
Video	• 1 x HDMI • 2 x DisplayPort • Support video resolutions up to 3840 x 2160 up to 60 Hz
I/O ports	• 1 x SD card reader (available only on some devices. DKX3-EUST and some DKX3-UST devices have no SD card slot) • 2 x Audio (Line out, mic) • 4 x USB front and 4 x USB rear • 2 x Gigabit LAN (RJ-45), supports WOL, PXE • 2 x COM ports (RS-232 + RS-232/RS-422/RS-485)
Power supply	External 90W fanless power adapter

Specification DKX4-EUST:

Chassis design	Slim 0.6 liter metal chassis, black
Dimension (LxWxH)	130mm x 109.25mm x 40mm
Operating temperature	-4°F ~ 140°F (-20°C ~ 40°C), according to IEC68-2 with 0.5 m/s AirFlow (w/ Industrial wide Temp. SSD/RAM)
Humidity	5 ~ 95% @ 40C, non-condensing
VESA mount	• 75 x 75 mm • 100 x 100 mm
Video	• 1 x HDMI • 1 x DisplayPort • 2 x USB-C • Support video resolutions up to 3840 x 2160 up to 60 Hz

I/O ports	• 1 x Line out and can have USB and Monitor audio also Front: • 2 x USB 3.2 Gen2 (Type A) • 2 x USB 3.2 Gen2 (Type C, Supports DP1.2a display output) Back: • 2 x USB 2.0 • 1x 1 GBit and 1x 2.5 GBit Ethernet
Power supply	65W, ADAPTER

API

In This Chapter

Session Management

Session Creation and Login

In order to use the API, users need to authenticate and create a session. The first step is always a POST to /session/login with the user credentials.

Parameters

- user name: The login name of the user. Required.
- password: The user's password. Required.
- user type: The type of the user. Optional. May be one of
  - "local" (users existing in the User Station only)
  - "ldap" (LDAP authenticated users) or
  - "ccsg" (CC-SG users).
  - If not specified, local user is assumed.

Response

- result: The result of the authentication process. One of:
  - success: The authentication was successful and the user is logged in. The session can be used immediately for further operations.
  - failed: The authentication failed. Either the given credentials are incorrect, or the user type is incorrect (for example, ccsg is specified, but CC-SG mode is not enabled).
- in_progress: The authentication was successful, but the user is not logged in immediately. Instead, the login process is started and takes some time. There is another responsevalue "auth_id" which can be used to wait for the login process to finish. Use a POST to the URL /session/progress to query the login process's status.

NOTE: You cannot use this session for further requests until the login process is finished *and* you requested this finished state via /session/progress.

- auth_id: The ID of the login process. Only used if "result" is "in_progress" and needs to be used for /session/progress to query the login process's progress.

Login Progress

If the login proces is started asynchronously and the /session/login call returned "in_progress" and result, it is required to wait until the login process in finished before making any further API calls. It is required to request the status of the login process until it is signalled to be finished. Use the /session/progress call to get the status.

Parameters

- auth_id: The authentication ID returned by a call to /session/login.

Response

- progress: The current status/progress of the login process. One of:
  - unknown: The auth_id is invalid, or the login process was not able to start correctly.
  - initializing: The login process is about to start.
  - started: The login process has started, but is not finished yet.
  - done: The login process is finished. From now on, you may use this session for further API requests.

Session Close / Logout

When the remote API session is not needed anymore, it should be closed. When the session is closed, the user is logged out of the User Station. Use a request to `/session/logout` to achieve this.

Parameters

- none

Response

- result: A boolean value. True is the logout was successful, false otherwise (e.g. the user was already logged out of other reasons).
- error: Optional. An error if the result is false.

Example

- First, start the login process:

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d '{ "user name":"admin",
"password":"raritan", "user_type": "local"}' https://192.168.3.175:8443/api/v1/session/login
```

```
{"result":"in_progress","auth_id":"4dc950f2-2f8b-424b-ba31-d6fb33f943b7"}
```

- Wait for the login process to end:

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d
'{ "auth_id":"4dc950f2-2f8b-424b-ba31-d6fb33f943b7"}' https://192.168.3.175:8443/api/v1/session/
progress
```

```
{"progress":"started"}
```

- Now wait some seconds

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d
'{ "auth_id":"4dc950f2-2f8b-424b-ba31-d6fb33f943b7"}' https://192.168.3.175:8443/api/v1/session/
progress
```

```
{"progress":"done"}
```

- Now, use the session for further request.
- Close the session and logout:

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/session/logout
```

{"result":true}

- The user is loged out, the session is closed.

Access Functionality

Get Devices and Targets

The User Station supports two views on target systems:

- Access Device centric view: There are access devices, each device has one or more ports to connect to the target systems.
- Targets view: There are targets, each of them has one or more ways (access points) to access it.

For both views, there are ways to enumerate the access methods.

Get Devices and Ports

In order to get all access devices with their ports, send a GET request to the /access/items URL. The result is an array of items (access devices) with all ports of the device. Some of the ports may not be accessible (either due to missing permissions, or if a port is unsupported). Also, a device may have multi-monitor port groups. In that case, the single ports are not accessible, but the port groups are.

Each of the items has the following members:

- id: The ID of the item.
- name: The name of the item.
- ports: An array of ports (see below)
- port_groups: An array of multi-monitor port groups (see below)

Each of the ports in the ports array has the following properties:

- id: The ID of the port
- name: The name of the port
- port_type: The type (KVM, Serial or unsupported port type)
- status: The port status of the port associated with this access point (KVM access points only)
- availability: The availability status s of the port associated with this access point (KVM access points only)
- access_id: The ID of the access point, belonging to this port. Use the ID to create an access session to this access point of this port. If this port is not accessible, the this property is missing.

Each of the port groups in the port_groups array has the following properties:

- id: The ID of the port group
- name: The name of the port group
- port_ids: an array of port IDs forming this port group
- access_id: The ID of the access point, belonging to this port group. Use the ID to create an access session to this access point of this port group. If this port group is not accessible, the this property is missing.

► *Example*

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/access/items
```

```
{

"items": [

{

"id":1,

"name":"thre-KX3",

"ports": [

{"id":6,"name":"thre-Mac-mini","status":"up","availability":"idle","port_type":"kvm","access_id":5},

{"id":1,"name":"Local Port (DVI)","status":"up","availability":"idle","port_type":"kvm","access_id":2},

{"id":2,"name":"Windows Box (Dual-
VM)","status":"up","availability":"idle","port_type":"kvm","access_id":777},

{"id":833,"name":"DSAM4 Port
1","status":"down","availability":"idle","port_type":"serial","access_id":1255},

{"id":834,"name":"DSAM4 Port
2","status":"down","availability":"idle","port_type":"serial","access_id":1256},

{"id":8,"name":"thre-KX3UST","status":"up","availability":"idle","port_type":"kvm","access_id":7},

{"id":7,"name":"thre-KX4UST","status":"up","availability":"idle","port_type":"kvm","access_id":6},

{"id":3,"name":"Windows Box Multi-Monitor 1","status":"up","availability":"idle","port_type":"kvm"},

{"id":4,"name":"Windows Box Multi-Monitor 2","status":"up","availability":"idle","port_type":"kvm"},

{"id":5,"name":"Windows Box PS/2","status":"up","availability":"idle","port_type":"kvm","access_id":4}

],

"port_groups": [

{"id":1,"name":"Windows Box Dual","port_ids":[3,4],"access_id":8}

]

},

{
```

```
"id":594,

"name":"DKX4-101",

"ports": [

{"id":472,"name":"Dominion_KX4_Port1","status":"up","availability":"idle","port_type":"kvm","access_id":770}

],

"port_groups": []

}

]

}
```

Get Targets and Access Points

In order to get all targets and their access points, send a GET request to the /access/targets URL. You will retrieve an array of targets. Each target has an ID, a name and an array of Access Points. Each of the Access Points have an access ID (required to launch a target connection to this access point) and a type (KVM, Serial, SSH, VNC, etc.). The KVM and Serial targets which represent a port of a access device also have a status (up or down?) and an availability setting.

The call returns an array of targets. Each target has the following members:

- id: The ID of the target.
- name: The name of the target.
- access: An array of access points to this target (see below).

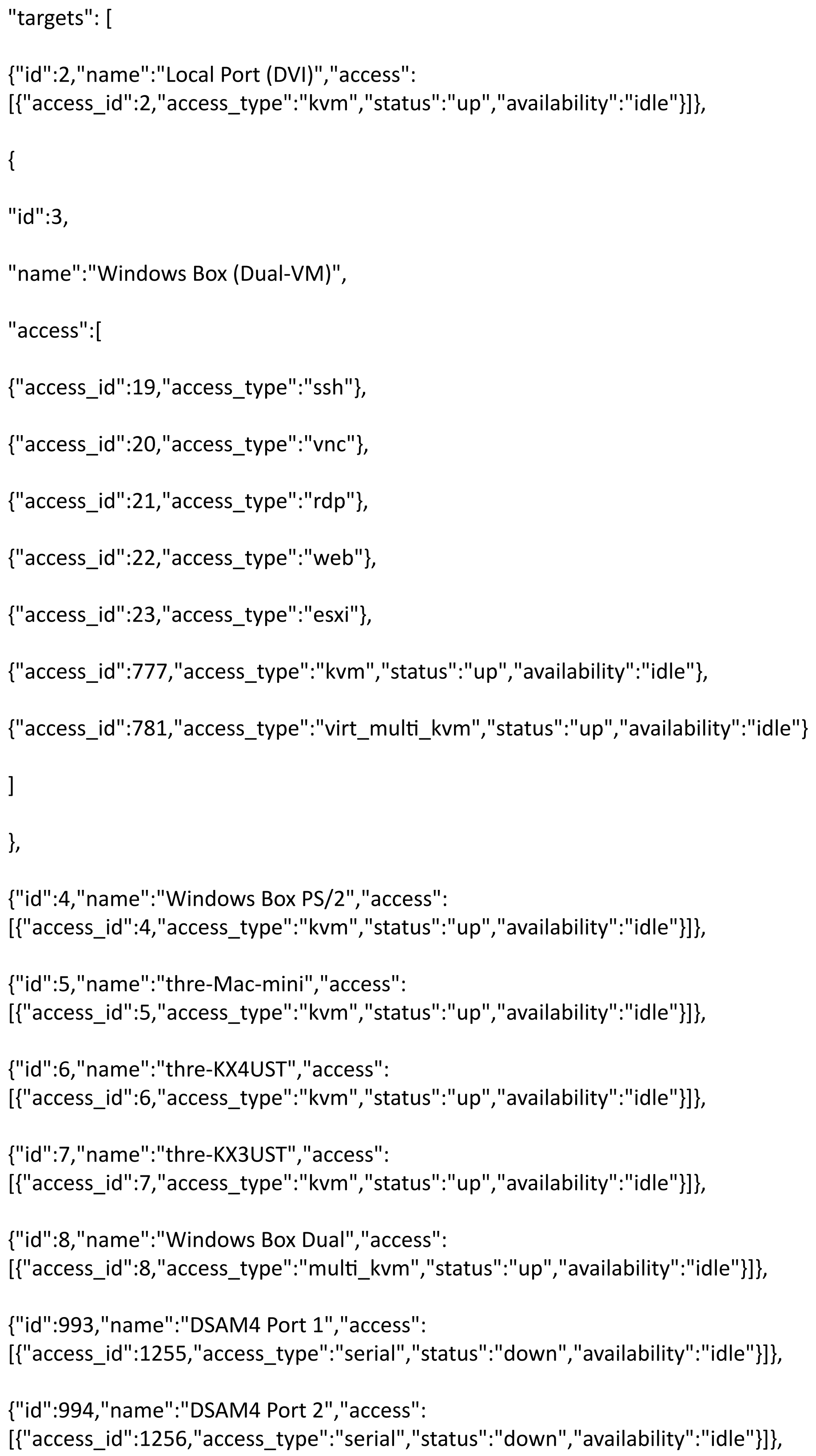
Each of the access points has the following members:

- access_id: The ID of this access point. Use the ID to create an access session to this access point of this target.
- access_type: The type of this access point (KVM, Serial, RDP, VNC, etc.). The "multi_kvm" type refers to a pre-configured multi monitor target on the access device, "virt_multi_kvm" is a virtual multi monitor target configured on the User Station.
- status: The port status of the port associated with this access point (KVM access points only)
- availability: The availability status s of the port associated with this access point (KVM access points only)

► *Example*

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/access/targets

{
```



```
"targets": [

{"id":2,"name":"Local Port (DVI)","access":
[{"access_id":2,"access_type":"kvm","status":"up","availability":"idle"}]},

{

"id":3,

"name":"Windows Box (Dual-VM)",

"access":[

{"access_id":19,"access_type":"ssh"},

{"access_id":20,"access_type":"vnc"},

{"access_id":21,"access_type":"rdp"},

{"access_id":22,"access_type":"web"},

{"access_id":23,"access_type":"esxi"},

{"access_id":777,"access_type":"kvm","status":"up","availability":"idle"},

{"access_id":781,"access_type":"virt_multi_kvm","status":"up","availability":"idle"}

]

},

{"id":4,"name":"Windows Box PS/2","access":
[{"access_id":4,"access_type":"kvm","status":"up","availability":"idle"}]},

{"id":5,"name":"thre-Mac-mini","access":
[{"access_id":5,"access_type":"kvm","status":"up","availability":"idle"}]},

{"id":6,"name":"thre-KX4UST","access":
[{"access_id":6,"access_type":"kvm","status":"up","availability":"idle"}]},

{"id":7,"name":"thre-KX3UST","access":
[{"access_id":7,"access_type":"kvm","status":"up","availability":"idle"}]},

{"id":8,"name":"Windows Box Dual","access":
[{"access_id":8,"access_type":"multi_kvm","status":"up","availability":"idle"}]},

{"id":993,"name":"DSAM4 Port 1","access":
[{"access_id":1255,"access_type":"serial","status":"down","availability":"idle"}]},

{"id":994,"name":"DSAM4 Port 2","access":
[{"access_id":1256,"access_type":"serial","status":"down","availability":"idle"}]},
{"id":595,"name":"Dominion_KX4_Port1","access":
[{"access_id":770,"access_type":"kvm","status":"up","availability":"idle"}]},

]

}
```

Handling of Access Client Sessions

Create Access Client Sessions

Access Clients (KVM, VNC, RDP, SSH, etc.) can be opened and closed via API.

To open an Access Client session, POST to the /access/open_client URL. This call has the following parameters:

- access_id (required): The Access Poinjt ID. In order to get the ID, see above (Get Devices and Targets).
- options (optional): An array of key/value pairs to configure the session. See the API description for a list of available options.
- audit_message (optional): A message for the audit log. Currently used for CC-SG connections only.

▶ *Examples*

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d '{ "access_id": 2 }' https://
192.168.3.175:8443/api/v1/access/open_client

{"result":true}

curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d '{ "access_id": 2, "options":
[ { "key": "current", "value": "true" } ] }' https://192.168.3.175:8443/api/v1/access/open_client

{"result":true}

curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d '{ "access_id": 2, "options":
[ { "key": "fullscreen", "value": "false" }, { "key": "x", "value": "1200" }, { "key": "y", "value": "800" },
{ "key": "width", "value": "300" }, { "key": "height", "value": "200" }, { "key": "scale", "value": "true" } ] }'
https://192.168.3.175:8443/api/v1/access/open_client

{"result":true}
```

Close Access Client

In order to close an Access Client session, POST to the /access/close_client URL. This call has one parameter: the Access Point ID. In order to get the ID, see above (Get Devices and Targets).

▶ *Example*

```
curl -c cookies.txt -b cookies.txt --H "Content-Type: application/json" -d '{ "access_id": 2 }' https://
192.168.3.175:8443/api/v1/access/close_client
```

```
{"result":true}
```

Named Scenes (aka Window Layouts)

Named Scenes (or Window Layouts) are collections of Access Client windows which can saved and restored with all their positions and sizes. With the API, users can currently get a list of available scenes, and they can restore (or open) a scene. It is not possible to create new scenes or overwrite existing scenes currently.

► *Get a list of scenes*

To get a list of scenes, use a GET request to the /access/scenes URL. The API will return an array of scenes. Each scene has an ID (member "id") and a "name". One of the scenes may be the active one (the "is_active" member is true for this scene).

► *Example*

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/access/scenes

{"named_scenes":[{"id":22,"name":"Window Layout 1","is_active":false},{"id":23,"name":"Window
Layout 2","is_active":true}]}
```

Restore a Named Scene

To restore a Named Scene, POST to the /access/open_scene URL. This request has 2 parameters:

- scene_id (required): The ID of the scene. To get the ID of a scene, see above (Get a list of scenes).
- audit_message (optional): A message for the audit log. Currently used for CC-SG connections only.

► *Example*

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d '{ "scene_id": 23 }' https://
192.168.3.175:8443/api/v1/access/open_scene

{"result":true}
```

Window Management

The User Station API allows some special Window Management functions to arrange or close Access Client windows. To perform such an operation, POST to the /access/window_management URL. This call has one parameter: the operation to perform. This may be one of the following:

- tile: Arrange the windows in tiles.
- untile: Un-do the latest "tile" operation.
- minimize: Minimize all windows
- unminimize: Restore the windows
- close: Close all client windows

► *Example*

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d '{ "operation": "close" }' https://
192.168.3.175:8443/api/v1/access/window_management

{"result":true}
```

Maintenance

The User Station supports some basic maintenance functions via the API. It currently has functions for identity, firmware information and update and settings backup/restore.

Note: The firmware update and backup/restore functionality requires System Administration privileges.

Identity Information

In order to get some basic identity information, use a GET request to the /maintenance/identity URL. You will get the product code, the vendor, the device's serial number and the MAC addresses.

► *Example*

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/identity

{"product":"DKX4-UST","vendor":"Raritan Inc.","serial":"12345","mac":
["80:EE:73:E2:31:45","80:EE:73:E2:31:46"]}
```

Firmware Operations

► *Software Versions*

To retrieve some informations about the firmware versions, send a GET request to the /maintenance/firmware URL. The resulting object contains the versions of the installed firmware, the underlying operating system and the Linux kernel version.

► *Example*

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/firmware

{"firmware_version":"4.4.0.5.85.20210323123034","base_os_version":"CentOS Linux release 7.9.2009
(Core)","kernel_version":"Linux 3.10.0-1160.6.1.el7.x86_64"}
```

Firmware Update

To perform a software upgrade, use a POST request to the /firmware/upgrade URL. This request has one parameter: the URI of the firmware file. The User Station will download this firmware upgrade file and apply it, if it is a valid update image. This call returns a boolean result, whether the update was initiated successfully or not. In case of an error, an error string is also returned.

Note: Importing the firmware upgrade is done synchronously. Especially the download, but also the unpacking, will take some seconds to complete. Also, this API call just initiates the upgrade. Once the import is complete and the upgrade file is valid, this API function returns and the actual upgrade is done in background. API users have no control over the actual upgrade process. When the upgrade process is done, the User Station will automatically reboot.

► *Example*

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d '{ "uri":"https://192.168.2.101/
KXUST_4.4.0.1.50_update.bin" }' https://192.168.3.175:8443/api/v1/maintenance/firmware/upgrade
```

```
{"result":false,"error":"The provided software version is too old! It must be equal or newer than the
current version."}
```

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d '{ "uri":"https://192.168.2.101/
KXUST_4.4.0.1.98_update.bin" }' https://192.168.3.175:8443/api/v1/maintenance/firmware/upgrade
```

```
{"result":true}
```

Backup/Restore

With the User Station Remote API, you can access system backup files. You can list all backups available in the system, you can download or upload them, you can restore or delete backups.

► *Get all backups in the system*

In order to get a list of all backup files currently available in the system, use a GET request to the / maintenance/backups URL.

The response is an array "backups" with all backups in the system. Each entry has the following members:

- id: The ID of the backup.
- filename: The name of the file internally representing this backup.
- status: The current status of the update. Since updates are created asynchronously, the creation of a backup may not be finished yet when you retrieve it. The following values are possible:
- initialized: The backup has just been started. It is not created yet.
- working: The backup process has started, but is not finished yet.
- complete: The backup is finished and can be used.

► *Get one backup in the system (metadata only)*

If you are interested in one backup only (e.g. if you are waiting for the backup process to finish), you don't have to query the whole list of backups. When you know the ID of a backup, you can GET this backup's metadata only by sending a GET request to the /maintenance/backups/ <id_of_the_backup> URL.

The response is similar to the list above, but only one backup is returned.

► *Get the content of one backup file*

To get the binary file data of a backup file, use a GET request to the /maintenance/backups/<id_of_the_backup>/content URL. this call returns the data in form of a Base64 encoded string (or an error in case something went wrong).

► *Delete a backup in the system*

To delete a backup in the system, use a GET request to the /maintenance/backups/<id_of_the_backup>/destroy URL. The call returns the result of the operation and an error string in case there was an error.

► *Create a new backup*

If you want to create a new backup of the system at the state it is currently in, then use a GET request to the /maintenance/backups/new URL. This returns the result (success or fail), the ID of the new backup (if successful) or an error string if something went wrong.

You can use the ID returned by this call for later use of the backup, e.g. you can downlaod it later. Please note that the backup is created in the background and cannot be used immediately. Please request the details of this backup until the state property changes to "complete".

► *Import a backup file*

There is also the possibility to upload or import backups into the system. Use a POST request to the /api/v1/maintenance/backups/import URL.

You can either upload the file directly (using a Base64 encoded string) (use the "content" parameter), or an URL can be specified (use the "uri" parameter), where the User Station downloads the backup file from. This returns the result (success or fail), the ID of the new backup (if successful) or an error string if something went wrong.

Please note that you cannot have the same backup file more than once in the system. Uploading a backup which already exists will fail.

► *Restore a backup*

To restore a backup, use a GET request to the /maintenance/backups/<id_of_the_backup>/restore URL. This returns the result (success or fail) and an error message in case of failure.

Please note that this call only initiates the resrore process. The main work of restoring a backup is done in background, with shut down web services. It is not possible to see the progress or status of the restore process. When this call returns "success", this means the restore was successfully started. But it does not mean, the backup was successfully restored.

► *Example*

- First, get a list of all backups in the system.

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups

{

"backups": [

{ "id":11,"filename":"KXUST_backup_4.4.0.5.85.20210324092030_12345_20210325104406.dat","status":"complete" },

{ "id":10,"filename":"KXUST_backup_4.4.0.5.85.20210324092030_12345_20210325104402.dat","status":"complete" }

]

}
```

- Delete the existing backups.

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups/10/destroy

{"result":true}

curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups/11/destroy

{"result":true}
```

- Get the list again, which is now empty.

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups

{"backups":[]}
```

- Create a new backup

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups/new

{"result":true,"backup_id":12}
```

- Now query the state of this backup

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups/12
```

```
{"backup":
{"id":12,"filename":"KXUST_backup_4.4.0.5.85.20210324092030_12345_20210325104912.dat","status":"working"}}
```

- The backup is not finished yet (status is "working"), wait some time and try again.

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups/12
```

```
{"backup":
{"id":12,"filename":"KXUST_backup_4.4.0.5.85.20210324092030_12345_20210325104912.dat","status":"complete"}}
```

- The backup is now complete. Download it to a file.

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups/12/content > backup.txt
```

```
{"content":{"[...]"}}
```

- Delete the backup.

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups/12/destroy
```

```
{"result":true}
```

- Upload the backup again.

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d "@backup.txt" https://
192.168.3.175:8443/api/v1/maintenance/backups/import
```

```
{"result":true,"backup_id":13}
```

- Wait until the status of this backup is "complete".

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups/13
```

```
{"backup":
{"id":12,"filename":"KXUST_backup_4.4.0.5.85.20210324092030_20210325104912.dat","status":"complete"}}
```

- Or: Import the backup using an URL.

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" -d '{ "uri":"http://192.168.2.101/
backup.bin" }' https://192.168.3.175:8443/api/v1/maintenance/backups/import
```

```
{"result":true,"backup_id":13}
```

- Now restore this backup.

```
curl -c cookies.txt -b cookies.txt -H "Content-Type: application/json" https://
192.168.3.175:8443/api/v1/maintenance/backups/13/restore
```

```
{"result":true}
```

- The backup is restored in background. The User Station reboots when finished.

BIOS Settings

A reduced number of BIOS settings are available in Dominion User Station, compared to a regular PC. A few settings may be changed to allow for troubleshooting (boot order), power management, and security.

Entering the BIOS

► *To enter the BIOS:*

1. Reboot or Power On the Dominion User Station.
2. In the first Raritan screen, press the Del key.

BIOS Settings

► *Main*

Includes an overview about the installed hardware: Processor, RAM, BIOS version.

System date and time can be changed.

Advanced Settings

► *Power Management*

- Suspend Mode: Not Supported.
- Wake Up by USB: Not Supported.

- EuP Function: Enable automatic energy management.
  - Enabled: Maximum energy savings.
  - Disabled: Custom energy settings can be set.

The following settings can only be changed if EuP is disabled.

- Power-On after Power-Fail: Choose the power state to be applied after power loss (on, of, last state).
- Wake Up by Ring: Allow waking up the User Station via modem. Not supported on DKX4-UST models.
  - See https://en.wikipedia.org/wiki/Wake-on-ring for details.
- Wake Up by LAN: Allow waking up the User Station via LAN.
  - https://en.wikipedia.org/wiki/Wake-on-LAN
- PowerOn by RTC Alarm: Configure a time (hour, minute, second) at which the User Station is powered on automatically.

▶ *Boot*

Boot Settings are used for troubleshooting only, such as if a new OS installation is required.

You can change the boot order, including hard drive priority and USB drive priority.

Default is to boot from the internal disk only

▶ *Security*

- Set or clear a BIOS password. This is useful to prevent users from entering the BIOS.

It is recommended to set a BIOS password!

Important: Do not forget the BIOS password!!!

- Flash Write Protection: Do not change this. Used for BIOS updates.

▶ *Save & Exit*

Save or discard the changed BIOS settings.

Load default BIOS values.

Authentication of User Stations and KVM/Serial Switches

User credentials you use to log in to the Dominion User Station can be different or identical to the user credentials you enter for accessing the port information of any KX III KVM or SX Serial switch.

▶ *User Station's user credentials:*

User credentials for logging in to the User Station determine the tasks/permissions you are allowed to perform on the User Station, but not the tasks/permissions you can perform on KVM/Serial switches and KVM/Serial ports.

For example, user credentials of the User Station determine whether you can add or remove the data of KVM/Serial switches, or whether you can back up and restore the User Station settings.

For detailed information on what you can do on a User Station, see Privileges (on page 166).

▶ *KVM/Serial Switch's user credentials:*

User credentials entered for KVM/Serial switches determine the tasks/permissions you are allowed to perform while accessing computer devices connected to KVM ports (that is, target servers).

For example, user credentials for the KVM/Serial switch determine whether you can access all KVM/Serial ports on this KVM/Serial switch, or whether you can perform the virtual media or power control function on a KVM/Serial port/target server.

This is why users of the User Station CANNOT share user credentials of KVM/Serial switches, and each user must enter and save his or her own user credentials for KVM/Serial switches respectively. See Editing KVM and Serial Switches (on page 85). However, if LDAP is enabled, and you can add your KVM/Serial switches with a special setting that makes single sign-on possible. See Adding KVM and Serial Switches (on page 82), and also check the LDAP help for more details. See LDAP (on page 170).

For detailed information on what you can do with a KVM/Serial port/target server, see the user documentation for KX III KVM or SX Serial switches, which is accessible from the KVM/Serial switch's application or KX III/SX section of Raritan website's Support page.

► *Examples:*

The following table illustrates different combinations of user credentials for User Stations and KVM switches.

User account for the User Station	Tasks you can do on the User Station	User account for the KVM switch	Tasks you can do on a KVM port/ target server
admin	You can do anything, including: • System administration, such as backup or software update. • Device administration, such as adding KVM switches. • Device access, such as access to the data of all KVM switches and KVM ports.	user-A	Limited privileges are granted: • Port access permitted. • No virtual media access permitted. • No power control permitted.
user-1	Limited privileges are granted: • Device access permitted. • No device administration permitted. • No system administration permitted	admin	You can do anything, including: • Port access. • Virtual media access. • Power control permitted.
admin	You can do anything. See above.	admin	You can do anything. See above.

Appendix A Appendices

In This Chapter

Open Ports Recommendations

► *Listening Ports:*

By default, the User Station does not have any listening ports opened unless the following settings are enabled:

- 80 (HTTP) commonly used internet protocol
- 443 (HTTPS) if Remote Control is enabled
- 22 (SSH) if Support Login is enabled
- 24800 if Keyboard/Mouse sharing is enabled
- 8443 for Remote API

► *Outgoing TCP Ports:*

- 5000 and 443 for the communication to the KX4 (configurable)
- 5900 for VNC targets (configurable; some VNC clients may use other ports)
- 3389 for RDP targets (configurable)
- 22 for SSH targets (configurable)
- 80 and 443 for web targets (configurable)
- 24800 for Keyboard/Mouse sharing
- LDAP uses ports 389 or 636 (if TLS is used; both are configurable).
- Communication to CCSG uses port 443 (HTTPS).

Mouse Mode Support for Dual Video Port Groups and M-KVM Targets

Based on your operating system, choose the best mouse mode for Dual Video port group or M-KVM targets.

► *Mouse Mode behavior on different OS:*

Windows Operating Systems:

RECOMMENDATION: Intelligent Mode works best provided "Enhanced Pointer Precision" is unticked on the target (Control Panel/Mouse/Pointer Options) and mouse speed is 50%.

- Standard Mode also works provided "Enhanced Pointer Precision" is unticked and mouse speed is 50%.
- Mouse does not sync correctly in Absolute Mouse Mode on latest Windows Operating Systems. You will have two mice, one for the client and one for the operating system. They do not sync together and allow for one continuous display across all monitors.

Note: The display resolution must not be scaled or have black borders

Linux Operating Systems:

- Absolute mouse mode works best.

Apple Operating Systems:

RECOMMENDATION: Single Mouse mode should be used as the mouse does not sync on any mode for M-KVM/Dual Video Port Apple Mac targets.

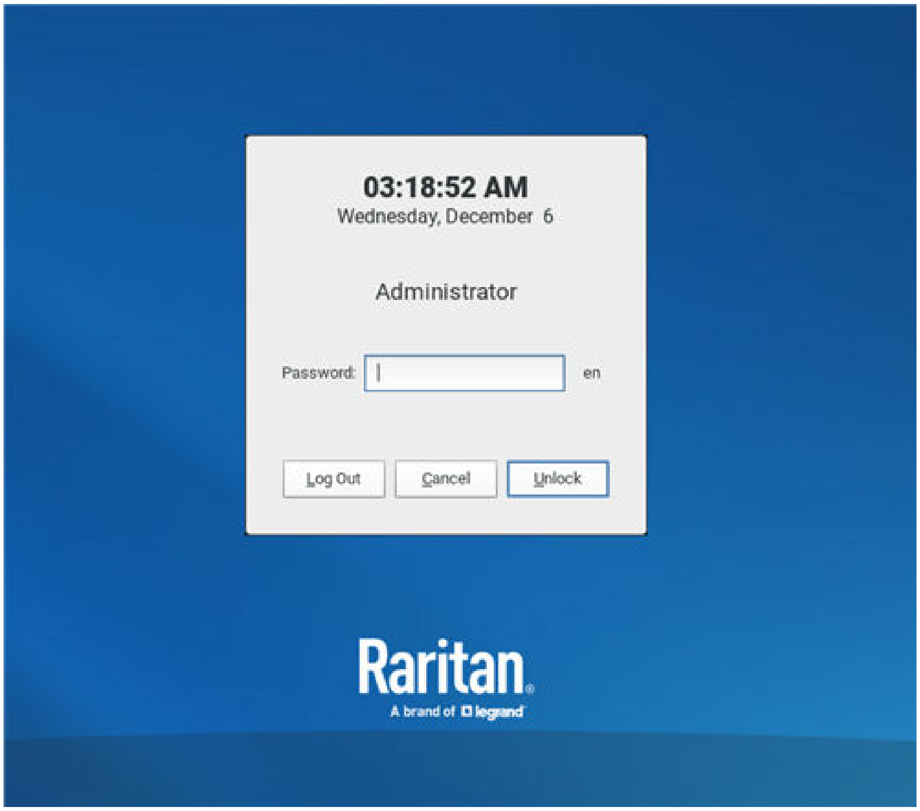
Additional Features

Screen Unlocking

When the User Station screen is locked, no data is displayed onscreen.

Note: See Desktop Settings for details on screen locking.

When you attempt to unlock the screen, a password prompt appears. Only the user who locked the screen can unlock the User Station. Other users must log out and then log in to the User Station if intending to operate it.



► *To unlock the User Station:*

1. Press any key on the keyboard.
2. A password prompt displays.
3. Enter the password of the user who triggered the screen-locking mode.
4. Click Unlock.

► *To log out of the User Station:*

1. At the password prompt, click Log Out. NO password is needed.
2. The Login Screen displays, and any user can log in.

Factory Reset at Startup

In addition to the factory reset feature in the User Station Configuration window, you can reset the User Station to factory defaults by performing the factory reset during the device boot.

Only the admin user can perform the factory reset at startup. Note that the factory reset removes all customized data. See Factory Reset (on page 235).

► *To perform factory reset when the device boots up:*

1. Restart or boot up the User Station.
2. When a blinking text cursor displays on the top-left corner of the screen after the initial BIOS image, press Esc within a second.
3. A menu with the two options below is shown.
   - `Boot Dominion User Station`
   - `Reset Dominion User Station to Factory Defaults`
4. Select `Reset Dominion User Station to Factory Defaults.`
   - To abandon the factory reset, select the other option.
5. When the system prompts you to enter user credentials, type the admin credentials -- "admin" user and the current admin password.
   - The default admin password is "raritan"
6. If the admin credentials are correct, the User Station performs the factory reset and then reboots. If the credentials are incorrect, the User Station returns back to the menu.

Take a Screenshot

To take a screenshot, you must be in a user group with the Take Screenshot privilege and a privilege such as Device Access that allows you to login. See Privileges (on page 166).

A hotkey must be configured for the function.

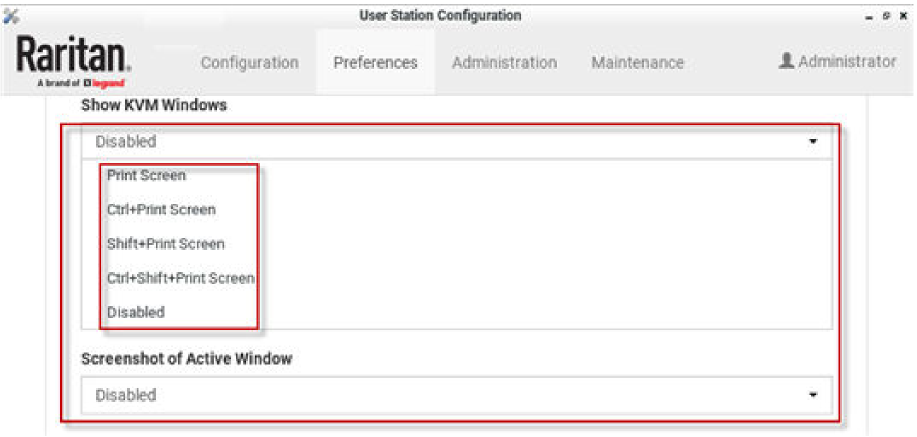
Your screenshot is saved to a connected USB storage device or mounted Network Storage. The preferred storage can be configured under Preferences > Screenshots. If more than one USB storage is detected, the first device by alphabetical device name is chosen.

Note: Active RDP sessions may affect the screenshot commands. When an RDP session is open, make sure to click in the Dominion User Station desktop before taking a screenshot.

► *To enable the hotkey for taking a screenshot:*

1. Open User Station Configuration, then choose Preferences > Hotkeys and Gestures.
2. Scroll down to "Screenshot of Desktop" and "Screenshot of Active Window". If the functions are enabled, use the hotkey displayed. If the functions are disabled, click Edit, then select a hotkey for the function and click Save.

See Hotkeys and Gestures (on page 145).



Show KVM Windows

Disabled

Screenshot of Active Window

Disabled

Enabling CC-SG Integration

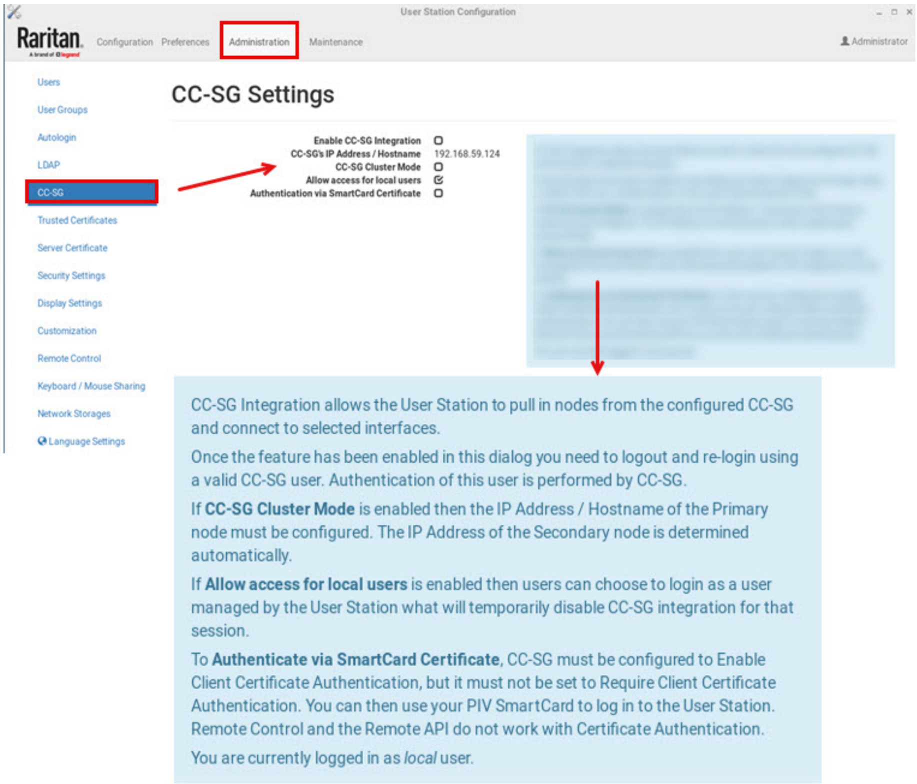
Enable CC-SG integration in the Administration settings.

When the feature is enabled or disabled, you must logout of Dominion User Station, and then log back in so that the authentication can take effect.

If you have local users and CC-SG users, make sure "Allow access for local users" is checked. This setting adds a local users option to the login page, so that all of your users can access. Using a local login disables the CC-SG integration access for the current session. Local users will not see any CC-SG devices.

► *To enable CC-SG integration:*

1. If not displayed, launch the User Station Configuration window. See User Station Configuration (on page 81).
2. Click Administration > CC-SG.



CC-SG Settings

Enable CC-SG Integration □

CC-SG's IP Address / Hostname 192.168.59.124

CC-SG Cluster Mode □

Allow access for local users ☑

Authentication via SmartCard Certificate □

CC-SG Integration allows the User Station to pull in nodes from the configured CC-SG and connect to selected interfaces.

Once the feature has been enabled in this dialog you need to logout and re-login using a valid CC-SG user. Authentication of this user is performed by CC-SG.

If **CC-SG Cluster Mode** is enabled then the IP Address / Hostname of the Primary node must be configured. The IP Address of the Secondary node is determined automatically.

If **Allow access for local users** is enabled then users can choose to login as a user managed by the User Station what will temporarily disable CC-SG integration for that session.

To **Authenticate via SmartCard Certificate**, CC-SG must be configured to Enable Client Certificate Authentication, but it must not be set to Require Client Certificate Authentication. You can then use your PIV SmartCard to log in to the User Station. Remote Control and the Remote API do not work with Certificate Authentication.

You are currently logged in as *local* user.

3. In the Edit CC-SG Settings page, select the options for your CC-SG integration:
   a. Enable CC-SG Integration: select the checkbox, then add the CC-SG IP Address/Hostname.
   b. Select CC-SG Cluster Mode if you have Primary and Secondary CC-SG units in a cluster configuration. Make sure the IP address of the Primary node is entered here.
   c. Allow access for local users: select this option to allow local users to access even when CC-SG integration is enabled. When enabled, an additional checkbox appears on the Dominion User Station login page for users to select when they need to login locally.
   d. Select Authentication via SmartCard Certificate to allow user to use SmartCard authentication method.
   e. Select Allow launch of CC-SG Admin Client to access the CC-SG Admin Client.
4. For the setting to take effect, you must log out of Dominion User Station, then login again with your CC-SG credentials. See Logging in with CC-SG Integration (on page 184).
5. The CC-SG user group by default has "Device Access, Change Preferences, and Launch the Port Scanner" permissions, but these can be modified by the admin user. "Take Screenshot" and "Record Scanner Snapshots" privileges can be added to this user group.

Index