# Release Notes for Dominion® KX III & IV User Stations Version 4.3
## January 2021

**Supported User Station Models:  DKX3-UST and DKX4-UST**

**Supported Dominion KX Models:**
> DKX3-108,  DKX3-116,  DKX3-132,  DKX3-216,  DKX3-232
> DKX3-416,  DKX3-432,  DKX3-464,  DKX3-808,  DKX3-816, DKX3-832,  DKX-864
> DKX2-101-V2 (End-of-Sales June 2019)
> DKX4-101

**Compatibility Overview:**

- To upgrade, the User Station must be running the Release 4.2 or 4.2.1 firmware
- Release 3.6 (or above) required on the Dominion KX III multi-port models.
- To integrate with CommandCenter, we recommend CC-SG firmware version 9.0 or 9.5

## User Station Overview

The Dominion KX III & IV User Stations are self-contained appliances that provides users with high-performance IP access to remote servers and workstations connected to the KX III & KX IV KVM-over-IP switches, with optional CommandCenter integration.  Additional access methods now supported:  VMware virtual machines, limited web browser links and access via RDP, VNC & SSH.  The User Stations have a powerful desktop user interface that is flexible and productive.  Supporting multiple KVM-over-IP sessions over 1 to 3 monitors (DKX4-UST), users can simultaneously access, view and control 8 or more servers.

The **Dominion KX IV User Station** is a new, more powerful hardware version of the KX III User Station.  It provides users with high-performance IP access to remote servers and workstations connected to the KX III & KX IV KVM-over-IP switches, with optional CommandCenter integration.  The KX IV User Station is up to 3 times more powerful than the KX III User Station, supporting up to three connected monitors.  It is recommended for customers using the DKX4-101, 4K video sessions, multiple KVM-over-IP sessions and three connected monitors.

## Firmware Overview

User Station Release 4.3 (based on Release 4.2) supports new features and enhancements for the Dominion KX III and IV User Stations as described below.   All features of the previous User Station Releases are supported.

## Dominion KX User Station Release 4.3 Major Features

- **Dual Video with Two Dominion KX IV-101's.**  Create and launch dual video port groups consisting of two DKX4-101's connected to a dual-head computer with extended desktop.  Absolute mouse synchronization is supported.

- **Restore Window Layouts across Shared User Stations.**  New setting to instantly change multiple Window Layouts across multiple User Stations with a shared keyboard/mouse, using Window Layouts saved on each User Station.  A Window Layout is a configuration of KVM and other session Windows that can be saved and restored.

- **Automatic Operation of Shared User Stations**.  User Stations sharing a common keyboard/mouse can optionally be automatically logged in, logged out, shutdown or rebooted when one User Station performs one of these operations.

- **Window Management & Layout Enhancements**.  RDP, SSH, Serial, Web and ESXi  windows are now supported by these functions.   Window's scroll position(s) are now saved as part of a Window Layout, which allows specific areas of a computer's display screen to be saved/restored.

- **Virtual Media Disk Images.**  Support a wider range of ISO/Disk Images for Virtual Media with the DKX3-xxx and DKX4-101 switches.

- **Enhanced Audio Features**.  Mute/unmute audio buttons in the KVM Client.  Option to automatically mute and unmute audio when the mouse moves between different KVM Windows.

- **Port Scanner Video Snapshot Recording**.  The Port Scanner can now save snapshots of KVM sessions to a USB drive connected to the User Station, if enabled by the administrator.  Useful for logging, auditing and training.

- **Custom Branding**.  Limited ability to custom brand the User Interface of the User Station, including desktop background, application logo and the login screen's logo, heading and message.

- **Strong Passwords and User Blocking**.  New security features for strong User Station passwords and to block a user with too many failed login attempts.

- **OpenVPN Virtual Private Network Connections**.  User Station has an embedded OpenVPN Client which can connect over an OpenVPN VPN, if enabled by the administrator.  Useful for working from home or across sites.

- **Restricted Service Agreement (Login Banner)**.  Option to display a message at login screen and optionally force the user to click to agree before logging in.

- **DKX4-101 Terminal Block Pulse Action.**  The ability, via the DKX4-101's Terminal Block, to send a pre-configured pulse to the power pins on a connected motherboard to turn on/off that computer.

- **Ethernet Interface Bonding.**  Administrators can bind together the Ethernet Interfaces of the User Station into a single, bonded channel, enabling the network interfaces to act as one.

- **Dominion KX Ports**.  The  HTTPS/Discovery port number of KX devices is now configurable.

- **Various fixes, OS & security updates, enhancements and documentation updates**.

**Documentation:**

The following user documentation is available for the Dominion KX User Stations:

**Dominion KX User Station Guide –** guide to the User Station's user and administrative features.

**Dominion KX User Station Quick Setup Guide –** initial setup of the KX User Stations

The User Station documentation is available from the Raritan.com website:  www.raritan.com.  Please go to the Support page, and then select "Dominion User Station" in the "Choose a Product" box.  The User Station documentation is shown by release, so click on the appropriate release.

**Online Help**

An Online Help System is available. On the User Station Desktop, click on Main Menu > Help > User Manual and the Online Help system will launch. You can browse to the appropriate topic via the Contents, Index and Search. The entire Dominion KX User Station guide is available, including text and images, with an extensive set of links.

Online help is also available from raritan.com in the Support section for the Dominion User Stations, as described above.

**Compatibility Information**

1. To upgrade to Release 4.3, the User Station must be running User Station Release 4.2 or 4.2.1.

2. This Release is certified to work with (1) Dominion KX IV - 101 switches, (2) the Dominion KX III switches. It also works with the single port, single user DKX2-101-V2 (end-of-sales June 30, 2019) KVM-over-IP switches.

3. The User Station does not work with the Dominion KX, KX II, LX, LX II, KSX II or other Raritan IP switches.

4. The User Station integrates with Raritan's CommandCenter Secure Gateway versions 9.0 or 9.5 (preferred).

**Important Notes and Information**

Please be aware of the following important information about the KX User Stations.

1. **CC-SG Integration**.

   a. Not all CC-SG interface methods are supported at this time. Currently KVM interfaces for servers connected to Dominion KX IV, KX III and KX2-101-V2 switches, as well as VMware virtual machines (new), RDP, VNC and SSH nodes are supported.

   b. CC-SG proxy mode is not supported for VNC, RDP or SSH interfaces. Connections to VNC, RDP or SSH interfaces is not logged by CC-SG.

2. **Ultra HD 4K Video.** 4K video has four times the number of pixels as high definition video (1080p)! For the best 4K performance, utilize the new KX IV User Station (DKX4-UST). For 4K video on the KX III User Station, for best video performance, connect to the monitor(s) using a DisplayPort cable, not HDMI.

3. **Web Browser Access**. Web access is an initial, simple and limited capability focused on the User Station Remote Control feature and access of administrative user interfaces of devices such as Dominion KX III and KX IV. Many modern web features are not supported: certificate checking, file downloads/uploads, audio, videos, Java, plugins, popups, etc. The feature is disabled by default; the administrator must enable the feature. Check the documentation for more information.

4. **VNC/RDP/SSH Interfaces**. In the Navigator, targets with multiple access interfaces of RDP/SSH do not show the menu options of "open in current". VNC does. If no credentials are provided for an RDP target, then no RDP window will launch when selected from the Navigator.

5. **Port Scanner**. When running the Port Scanner on the secondary monitor for very long periods of time, if the scanner pauses, then close and re-open the scanner or click on the Pause button and then click on the Play button.

6. **Default Admin Password**. It is now mandatory to change the default password upon initial login.

7. **Two Types of User Credentials**. There are two types of user credentials (login/password) used by the User Station: **(a)** credentials to log into the User Station, and **(b)** credentials for the KX III switches to be accessed.

   User Station credentials allow entry to the User Station and also determine the permissions for User Station administrative tasks. These credentials are created by the KX User Station Administrator.

User credentials entered for KX III switches determine which servers connected to the KX III you can access, as well as the associated permissions such as virtual media and remote power control.

When using CC-SG integration, login credentials and credential for the KX III switches come from the user's CC-SG credentials.  These need not be configured on the User Station.

If the LDAP Single Sign-On feature is being used, then LDAP is used for the KX III credentials.

8. **User Credentials Per User**.  KX III user credentials are saved on a per-user basis.  Unless CC-SG or LDAP Single-Sign-On is used, each user must enter and save their own KX III user credentials for each KX III switch to be used.

9. **FIPS 140-2 Mode.**  If you are enabling the FIPS 140-2 encryption module, please be aware of the following:

    a.  You must install the trusted device or root-certificate of each KX III KVM switch on the User Station to connect to servers on those KX III switches.

    b.  LDAPS connections, which use encrypted LDAP connections, do NOT use the FIPS 140-2 cryptographic module in this release.

    c.  Cannot connect to a server on KX3 if only TLSv1.2 is selected.

10. **User Blocking Feature.**  If you enter incorrect user credentials for a KX III switch, and the "User Blocking" feature has been enabled on the KX III, you will be automatically blocked by that switch because the User Station will try the connection multiple times.  Contact the administrator of the KX III switch if this occurs.

11. **Don't Pull the Plug!**  Do NOT turn off the User Station by pressing the Power button on the User Station or unplugging the power cord, because such operations could possibly corrupt the User Station database.

12. **Video Notes.**  While there are three video ports on older versions of the KX III User Station, only one or two monitors can be connected to the User Station.  KX IV User Stations supports up to 3 monitors.  DisplayPort and HDMI transmit both video and audio signals.  Your monitor must support the audio transmission if audio is wanted.

13. **Audio Notes.**  If you do NOT select the "Auto Connect Audio" checkbox, you can manually establish the audio connection after accessing a KVM port.

14. **Networking Notes.**  The User Station's default network configuration is set to Automatic (DHCP).  If static addressing is wanted, then you must manually configure the network settings prior to adding KX III KVM switches.

15. **Dual LAN Ports.**  You can connect the two LAN ports of the User Station to the same or different subnets.  If you have connected both LAN ports to the network(s) when turning on or restarting the User Station, the User Station 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.

16. **Ctrl+Alt+Del.**  If you physically press Ctrl+Alt+Del using the keyboard connected to the User Station, the command is first intercepted on the User Station, instead of sending the key sequence to the target server.  To send to the target server, use the Ctrl+Alt+Del macro button on the KVM Client Window or modify the hotkey for Shutdown in the Desktop Settings.

17. **Virtual Media.**  It is highly recommended to first "safely remove" or "eject" the virtual media drive that you want to disconnect from the target server. If you have enabled the read/write mode, it may result in data loss if you do not perform this operation.

18. **Software Downgrades.**  The software update feature only permits software upgrade, not downgrade.  If a software downgrade is required, please contact Raritan Technical Support.  It is strongly recommended to back up all data prior to a software update.  Do not power off the User Station during the software upgrade.

19. **Tiering and Blade Servers.** The User Station does not currently support blade server or tiered ports on the KX III switch.

20. **Serial Ports.** These hardware ports on the User Station are currently not used.

21. **Online Help.** The three buttons for email this page, send feedback and print this page are for use on the Raritan website and do not operate on the User Station.

### Firmware Upgrades

Raritan provides new firmware upgrade releases that contain software enhancements, new features, and improvements. These upgrades are available on the Raritan Website: www.raritan.com. Please go to the Support page and click on Dominion User Station in the "Choose a Product" button.

Locate the latest KX User Station entry for the new firmware release and download it.

Consult the KX User Station User Guide for firmware upgrade instructions.

Please read the Release Notes of the new firmware release before proceeding with the update.

If you have any questions, please contact Raritan Technical Support for assistance.