

Release Notes for Dominion® KX II Software Version 2.0.1

Version: DKX II 2.0.1 Release Notes, Revision 1.0

Date: July 31, 2007

Effective: Immediately.

Applicability:

New Dominion KX II models:

- DKX2-116, DKX2-132, DKX2-216, DKX2-232, DKX2-416, DKX2-432.

Note: the existing Dominion KX models will be referred to as Dominion KX I.

KX Release 2.0.1 is **not** applicable to the existing Dominion KX I models:

- DKX116, DKX132, DKX216, DKX232, DKX416, DKX432 and DKX464

Release Status: General Availability.

Dominion KX II Overview:

Dominion KX II is Raritan's new family of next-generation, digital KVM switches with dual power supplies and dual gigabit Ethernet ports. KX II has a new user interface supporting advanced features such as virtual media, absolute mouse synchronization and 1600x1200 remote video resolution.

Release 2.0.1 Overview:

Release 2.0.1 is a small firmware release for the new Dominion KX II switches consisting of improvements and minor enhancements. The Release 2.0.1 firmware does **not** run on the existing KX I switches.

Dominion KX II Documentation:

The following additional documentation is available for the Dominion KX II:

- **Dominion KX II User Guide** – user guide to the KX II's local and remote browser based user interfaces and general KX II usage.
- **MPC/RRC User Guide** – see this user guide for MPC usage for KX II.
- **Dominion KX II Quick Setup Guide** –reference for the quick setup of the KX II.

The Dominion KX II documentation is contained on the CDROM included in the Dominion KX II package and on the Raritan Website: www.raritan.com. Please

go to the Support section and click on “Product Documentation” in the left navigation pane, or go directly to:

<http://www.raritan.com/support/productdocumentation>

Scroll down to the “Dominion KX II” heading to locate the documentation in PDF format. Future documentation updates will also be provided via Raritan’s website.

The most current version of the KX II User Guide is now available from the KX II User Interface (remote console in the left hand information panel).

Computer Interface Module (CIM) Overview:

Dominion KX II can use following CIMs:

- **KX I DCIMs:** DCIM-PS2, DCIM-USB, DCIM-SUSB and DCIM-SUN.
- **New D2CIM-VUSB:** high speed, USB virtual media CIM, required for the virtual media and absolute mouse synchronization features.
- **New D2CIM-PWR:** required to connect a remote power strip to the KX II.
- **Select Paragon CIMS:** P2CIM-AUSB, P2CIM-PS2, P2CIM-USB, P2CIM-SUSB, P2CIM-SUN, UKVMPD, UUSBPD, UKVMC and USKVMPD.
- **P2CIM-SER,** when loaded with firmware V2.63, has been certified for use with KX II units.

Release 2.0 Compatibility Information:

1. All Dominion KX II models and Release 2.0.1 have been certified for use with CommandCenter[®] Secure Gateway (CC-SG) 3.1.1. CC-SG Release 3.1.1 is the first release to support the new KX II models. Customers running previous CC-SG Releases (e.g. 2.3, 3.0 and 3.1) must upgrade to CC-SG 3.1.1.
2. KX II devices can be remotely accessed by two Java-based remote clients:

REMOTE CLIENT	DESCRIPTION	VERSION
Virtual KVM Client (VKC)	New Java-based client invoked from the browser-based remote user interface. KX II switches only.	Version 2.0.1
Multi-Platform Client (MPC)	Upgraded Java-based MPC with traditional Raritan user interface. KX I and KX II switches.	Version 5.0.1
Raritan Remote Client (RRC)	RRC does not support KX II devices.	N/A



3. If using CC-SG in Proxy mode, change the default in the Default Application tab in Application manager to Virtual KVM Client. MPC is not supported in Proxy mode.
4. SUN Java™ Runtime Environment (JRE) versions 1.4.2, 1.5 and 1.6 are supported. SUN Java Runtime Environment (JRE) 1.4.2_05 or higher build number (e.g. 1.4.2_06 or 1.4.2_07, etc.) is required. SUN Java Runtime Environment JRE 1.5 is recommended for Windows platforms and 1.4.2_x is recommended for Solaris and Linux platforms. JRE version 1.5.0_02 is explicitly not supported. For best results, we recommend that Java Plug-in Caching is not enabled.
5. If the client does not have a JRE associated with the Browser or if the JRE version is below 1.4.2_05, then a message will be displayed, and the user will be directed to install the latest version from the SUN Java website.
6. The JRE installation requires the multi language option to be enabled for Korean and other non-English language support. For a "Custom" JRE installation, must ensure that "Support for Additional Languages" is included during the installation process.
7. An SNMP MIB is available for KX 2.0 and KX 2.0.1 on the Raritan website in the firmware upgrade section. This should be loaded into your SNMP management system if you are enabling SNMP traps from your KX II switch.

Dominion KX Release 2.0.1 Improvements:

Dominion KX Release 2.0.1 includes the following improvements:

1. The "Logout Idle Users" feature on the "Security Settings" page now always logs out the user when the VKC is active.
2. Lower bandwidth DSL connections are now fully supported.
3. The Virtual KVM Client now fully supports French, German, Korean and UK keyboard layouts. Keyboard mapping issues fixed.
4. P2CIM-SER, when loaded with firmware V2.63, has been certified for use with KX II units.
5. Japanese language keys and input methods on the local port now supported on IBM AIX systems.
6. A more informative message is displayed when no signal is detected from the target server.
7. The mouse synchronization button is now disabled when in Absolute Mouse Synchronization Mode.
8. The full set of mouse modes is now more apparent when under CC-SG control.
9. The Tab key is now enabled for use in panels and dialogs in MPC when launched from the KX II device.



10. Users are now logged out of the KX II when the browser is closed without using the Logout command.
11. Power Strip status is now available in CC-SG after a KX II reboot.
12. Entries in MPC's Window menu are no longer created for KX II Administration sessions. MPC target menu and tool bar controls are no longer grayed out after connecting to an Administrative sessions. The MPC pop-up menu now supports both lower and upper case hotkeys
13. USB mouse movement on the local port is now more steady and smooth for certain mice. Improvements for simultaneous mouse and keyboard control.
14. The Ctrl key can now be held for an indefinite amount of time to make multiple selections on the local port.
15. New factory reset message with a more accurate time estimate for updates from KX 2.0.1.
16. Keyboard control and keyboard focus on Fedora Core Linux through MPC via Firefox has been made more reliable with a wider variety of JRE versions.
17. Improved user message for firmware upgrade function when no CIMs are connected. The estimates for CIM upgrade times are now more accurate.
18. Due to improvements in KX 2.0.1, you cannot downgrade from Release 2.0.1 to Release 2.0.
19. Improvements to the backup and restore protected mode when in DHCP mode.
20. The KX II User Guide has been updated.

Consult the Dominion KX II Documentation for more information on the KX II features.

Important Notes and Information:

1. The Dominion KX II's default configuration is for two power supplies. If only one power input is plugged in, then the front panel LED will light red. Configure it for a single power input using the "Power Supply Setup" function on the "Device Settings" menu.
2. For reliable network communication, configure the KX II and LAN Switch to the same LAN Interface Speed and Duplex. For example, configure both the KX II and LAN Switch to Autodetect (recommended) or set both to a fixed speed/duplex such as 100Mbps/Full.
3. There are several prerequisites for Virtual Media: (1) the D2CIM-VUSB must be connected to the server's USB port, (2) the operating system (OS) must support USB connected drives, and (3) the user must have the required administrator permissions on the client, target and the KX II.
4. Not all servers and operating systems support all virtual media options. In general, modern Windows® OS' do, including Windows Vista™, 2003 Server, XP and Windows 2000 with the latest patches. Target Servers running Linux and



Mac OS', when accessed from a Windows client, will generally mount CD/DVD drives, USB drives and ISO images. Mac®, Linux and Solaris™ clients can only mount ISO images from a local or remote drive. Other UNIX based OS' generally do not support virtual media.

5. When connecting to the BIOS with a virtual media drive mapped, should the BIOS not support high speed USB, then you should enable the "Use Full Speed for Virtual Media CIM" option on the Port Configuration page for that particular port and reboot the target server.
6. In general, due to varying BIOS implementations of the USB 2.0 standard, it is not always possible to boot from a virtual media drive at the BIOS level.
7. For Windows OS', do not use the "Safely Remove Hardware" function in the system tray on the target server to disconnect a mounted virtual media drive. Disconnect using the "Disconnect" command on the virtual media menu.
8. Absolute Mouse Synchronization requires support from the OS. Windows and Mac OS' generally support it. Linux and Unix based OS' (AIX, HP-UX, Solaris) generally do not.
9. When a panel is opened in the Virtual KVM Client (VKC), the client, as well as related browser tabs and windows, will wait for user input until the panel is closed.
10. Be careful of the web browser refresh or reload function/button, which has the side-effect of closing VKC sessions.
11. D2CIM-PWR must be separately ordered. It is not included with the powerstrip.
12. To use AES encryption, first ensure that your web browser supports this stronger encryption – not all browsers do. For AES, set the "Encryption mode" on the "Security Settings" panel to "AES," not "Auto" which generally results in RC4 encryption.
13. For the best possible video quality, adhere to these distance guidelines from the CIM to the KX II:

Server Video Resolution	Distance
1024x768 (and below)	150 feet
1280x1024	100 feet
1600x1200	50 feet

14. To further minimize network bandwidth for lower bandwidth situations, set the "Noise Filter" on the "Video Settings" panel in the remote clients above the default value of 2 - values of 3 or 4 are recommended.
15. Modem access is not supported in KX Release 2.0.1. It will be available via firmware upgrade in the near future.



16. In general, most administrative functions are available on the remote and local consoles. But some functions, by their nature, are only available on one console. For example, “Factory Reset” and the “Local Port Settings” are available on the local port. Firmware Update, Backup and Restore, and the KX Diagnostics are available from the remote client.
17. When changing the various user management, device and security settings, please remember to click the “OK” button at the end of the page to save and activate your changes.
18. A subset of the KX II administration functions is available from CC-SG. To access all functions, use the Pause Management feature in CC-SG to remove the KX II device temporarily from CC-SG management. Then you can access the additional administrative functions via the KX II local or remote consoles.
19. SUN Backgrounds: Some of the SUN background screens may not center precisely on certain SUN servers, i.e. those backgrounds with dark borders (e.g. NoBackDrop). Use another background or place a light colored icon in the upper left hand corner.
20. For Mac OS, the Safari™ browser is certified for use in KX Release 2.0.1. Absolute Mouse Synchronization is required for Mac servers. The “Absolute mouse scaling for MAC server” option must be enabled for the specific port on the Port Configurations page.

Release Package Details:

The Release 2.0.1 package for the Dominion KX series has the following components:

“DominionKXIIReleaseNotes2.0.1.pdf” – this file

“DominionKXIIFirmware2.0.1rfp” – Raritan firmware distribution file for this upgrade

Firmware Upgrade Prerequisites:

If you have any questions, or do not meet the pre-requisites listed below, please STOP and contact Raritan Technical Support for further instructions. Please read the entire instructions (this document) before proceeding.



General Upgrade Instructions (standalone upgrade from the browser based user interface):

1. **Note: for best results, the KX II device should be re-booted before the firmware upgrade is applied.** This will ensure no users are logged in or sessions active.
2. The user upgrading the KX II device must be a member of the default Admin Group to have sufficient administrator-level privileges to update the Dominion KX II unit.
3. Up to 20 minutes are required for the complete update procedure. The update and subsequent reboot time will vary according to the number and type of CIMs connected to the KX II.
4. The system provides an estimated time for the firmware upgrade to complete. It may possibly take more time to do the update based on networking conditions and other factors.
5. We recommend backing up the KX II using the “Backup / Restore” function on the Maintenance menu on the Remote Console.
6. Close any remote or local KX II sessions to all devices connected to the Dominion KX II unit – servers, power strips, and serial devices.
7. This procedure can only be done from the (Web-browser) interface. If doing the firmware upgrade over a VPN, ensure that the connection is stable and that no inactivity timeouts have been set.
8. The detailed, step-by-step instructions to perform the upgrade are given below.
9. The software upgrades are written to flash memory, and this takes time to complete. Please do not power-off the unit, or disconnect the Ethernet connection while the upgrade is going on.
10. Should you experience any difficulties with the upgrade, call Raritan Technical Support for assistance.



Step-by-Step Upgrade Instructions:

1. **Note: for best results, the KX II device should be re-booted before the firmware upgrade is applied.** This will ensure no users are logged in or sessions active.
2. In Internet Explorer (or other supported web browser), type in the IP Address of your Dominion KX II unit, and wait as the Remote Console loads.
3. Logon as an administrative user “admin” (or other member of the Admin Group).
4. Click on the “Firmware Upgrade” command on the “Maintenance” menu.
5. Browse to locate the .rfp file containing the update: “DominionKXIIFirmware2.0.1.rfp”. Click the “Upload” button.

The current and future versions will be displayed. Click the “Upgrade” button to start the upgrade.

6. The firmware upgrade will then proceed:
 - a. You cannot operate the KX II during the upgrade.
 - b. The upgrade panel will inform you of the progress of the upgrade. This upgrade step will take up to 15 minutes or more.
DO NOT REBOOT OR POWER CYCLE THE KX DURING THE UPGRADE OR THE REBOOT!
 - c. You will see a completion message when the upgrade completes.
7. The device will now reboot and reset, which may take up to 5 minutes.
8. Close your web browser session and log back in after the reboot completes.
9. The KX II will beep when the upgrade is complete and the login screen will appear on the local console port.
10. Log back in via web browser or the local port. Use the “Upgrade Report” on the “Maintenance” menu to check the upgrade status.



11. Any KX II CIMs (D2CIM-VUSB and D2CIM-PWR) connected to the KX II at the time of the upgrade will be upgraded also.

12. Use the “CIM Firmware Upgrade” menu on the “Maintenance” menu to check the CIM version(s) and to upgrade any additional KX II CIMs connected to the KX after the upgrade.

13. Due to improvements in KX 2.0.1, you cannot downgrade from Release 2.0.1 to Release 2.0.

14. If you have any questions or issues during the update, call Raritan Technical Support for assistance.

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