Dominion® KX II-101 V2 – Release 3.5

Firmware Release:　　　　　　　*3.5*
Release Notes Version:　　　　　*2.0*
Release Notes Date:　　　　　　*September 19, 2012*

Congratulations on your purchase of the Dominion® KX II-101 V2, the economical, full-featured, single-port digital KVM-over-IP device. These Release Notes provide an overview of the compatibility, features, notes, and upgrade instructions.

Applicability

The 3.5 Release is applicable to the new Dominion KX II-101 V2. Release 3.5 is <u>not</u> applicable to the previous generation Dominion KX II-101 devices, which have recently been announced as end-of-life.

Release Status

General Availability.

Release 3.5 Overview

Release 3.5 is the latest release for the Dominion KX II-101 V2 device.   Release 3.5 brings many new and exciting features previously available on the multi-port Dominion KX II models.

Dominion KX II-101-V2 Documentation

The following documentation is available for the Dominion KX II-101 V2:

- **Dominion KX II-101 V2 User Guide** – user guide to the KX II-101 V2's remote browser based user interfaces and also for general usage.

- **KVM and Serial Access Clients User Guide** – see this user guide for additional information on the Raritan KVM Client software

- **Dominion KX II-101-V2 Quick Setup Guide** –reference for installation and configuration of the KX II-101 V2.

The Dominion KX II-101 V2 documentation is available from the Raritan website: www.raritan.com. Please go to the Support section, go to Firmware and Documentation and then select Dominion KX II-101. Click on the appropriate release.

Dominion KX II-101 V2 Online Help

An online help system is available from the KX II-101 V2's user interface. Click on "Online Help" in the left hand information panel to launch the Online Help System. You can browse to the appropriate topic via the Contents, Index and Search tabs. The entire Dominion KX II-101 V2 User Guide is available, including text and images, with an extensive set of links.

Online help for the Raritan products is available on: http://www.raritan.com/support/online-help/

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Release 3.5 Compatibility Information

Raritan CommandCenter® Secure Gateway

- The Dominion KX II-101 V2 and Release 3.5 have been certified for use with CommandCenter Secure Gateway (CC-SG) Release 5.3 (current release) and 5.4 (future release).

- Customers running previous CC-SG Releases must upgrade to CC-SG 5.3 or later release.

- Some new Release 3.5 features will require the use of the future CC-SG 5.4 Release:

  - Local language support through CC-SG for Japanese, Simplified and Traditional Chinese.

  - Configurable TCP-IP port numbers.

  - KX2-101-V2 direct access while under CC-SG management.

- The current CC-SG 5.3 Release:

  - Does not contain the new KX2-101-V2 Release 3.5 firmware. The 3.5 firmware must be uploaded to CC-SG to update existing Dominion KX2-101-V2 devices.

  - Has an older version of MPC.

  - Will display a compatibility warning message when used with the KX2-101-V2.

Raritan Virtual KVM Client (VKC) v3.0.2.5.3

- The 3.0.2 version of the Java-based Virtual KVM Client is included in Release 3.5. This new version provides additional features and enhancements.

Raritan Multi-Platform Client (MPC) v7.0.2.5.2

- The Java-based, standalone Multi-Platform Client with traditional Raritan user interface can be used with the KX II-101 V2.

Raritan Active KVM Client (AKC)

The Windows-based AKC is <u>not</u> currently supported for use with the KX2-101-V2.
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Sun Java™ Runtime Environment (JRE)

1. SUN Java™ Runtime Environment (JRE) version 1.6 is now the minimum version. JRE 1.7 (Java 7) is also supported. The certified JRE 1.6 builds are JRE 1.6.0_10 through 1.6.0_31. For Java 7, versions through 1.7.0_5.

2. SUN Java™ Runtime Environment (JRE) versions 1.4.x and 1.5.x are <u>not</u> supported !

3. If the client does not have a JRE associated with the Browser or if the JRE version is below 1.6, then a message will be displayed, and the user will be directed to install the latest version from the SUN Java website.

4. For best results, we recommend that Java Plug-in Caching is not enabled.

5. The above JRE version information applies to the Dominion KX II-101 V2 when used standalone. When used with CC-SG, please consult the CC-SG Release Notes and Compatibility Matrix.

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. Use the pre-defined macros created for the Japanese Kana Key and the R-ALT-KANA key, as these keys are not consistently received from the JRE.

Release 3.5 Features

1. **Dual stack IPv6 and IPv4 support.** The Dominion KX II-101-V2 provides dual stack IP networking with simultaneous support of IPv4 and IPv6. Supports IPv6 with CC-SG 5.3 and above.

2. **Display and Logoff Users by Port.** Users can view a list of connected users by port, and administrators can logoff users by port or completely. Supports locally and remotely (LDAP, Radius, etc.) authenticated users.

3. **Asian Languages – Japanese and Simplified/Traditional Chinese.** The Dominion KX II's remote HTML User Interface and the KVM Clients now support the Japanese, Simplified Chinese and Traditional Chinese languages. This is available standalone as well as through CC-SG 5.4 and higher.

4. **Mobile KVM Client.** Mobile KVM access for iPhone and iPad. Users can now access and control servers connected to the Dominion KX II via their Apple iPhones and iPads. This provides emergency 24x7 out-of-hours access, as well as convenient everyday access for iPad enthusiasts. CC-SG Release 5.2 or later is required for this capability.

5. **Security Banner.** For government, military and other security conscious customers requiring a security message before user login, the KX II-101-V2 can display a user-configurable banner message and require acceptance before user login.

6. **FIPS 140-2 encryption module.** For government, military and other high security applications, the Dominion KX II-101-V2 is the first device in its class to use a validated FIPS 140-2 Cryptographic Module for enhanced encryption. Modules tested and validated as conforming to FIPS 140-2 are accepted by federal agencies of the U.S. and Canada for the protection of sensitive information.

7. **SNMPv3.** This more secure version of SNMP is now supported.

8. **Customer can upload their own SSL Certificate.** Customers can upload to the Dominion KX II-101-V2 digital certificates (self-signed or certificate authority provided) for enhanced authentication and secure communication

9. **1920x1080 & wide screen video resolutions**. The Dominion KX II-101-V2 supports High Definition (HD), 1080p remote video resolution. In addition, popular widescreen formats are supported including 1600x1200, 1680x1050 and 1440x900, so remote users can work with today's higher resolution monitors.

10. **Configurable TCP/IP port numbers (Stealth Mode).** For customers wishing to increase security by avoiding the standard TCP/IP port numbers, the Dominion KX II-101-V2 allows the administrator to configure alternate port numbers.

11. **Option for KX2-101-V2 direct access while under CC-SG management**. Like other Dominion switches, you now have the option to directly access the KX2-101-V2, even when it is under CC-SG management.

12. **Virtual Media for Linux and Mac.** Expands the benefits of virtual media to Linux and Mac clients. Previously, Mac and Linux clients could only mount ISO images from a local drive or remote server. Now Linux and Mac Clients can now mount USB drives, PC hard drives, CDs, DVDs and ISO images.

13. **Raritan's VeriSign code signing and Raritan provided SSL certificates updated.**

14. **Online help system access.** Access on-line help from the KX2-101-V2's user interface.

15. **Dominion KX II Release 2.4 & 2.5 fixes and improvements.**

The following Dominion KX II features are <u>not</u> currently supported:

1. Digital Audio.
2. Blade Servers.
3. Connect/Disconnect Scripts.
4. Active KVM Client (Microsoft .NET Framework).
5. Smart Card/CAC authentication.
6. KX2-101-V2 as a front-end to the Raritan Paragon II system.

Important Notes and Information

1. Apple Mac clients can not open a direct port access connection (CR#12918)

2. 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.

3. For reliable network communication, configure the KX II-101 V2 and LAN Switch to the same LAN Interface Speed and Duplex. For example, configure both the KX II-101 V2 and LAN Switch to Autodetect (recommended) or set both to a fixed-speed/duplex such as 100Mbps/Full.

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. As of Release 3.5, Mac® and Linux clients can now mount these types of media also, subject to the notes above. 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" option on the Port Configuration page. 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. 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.

8. 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.

9. Be careful of the web browser refresh or reload function/button, which can close a VKC session.

10. To attach the KX II-101 V2 to a Raritan PX rack PDU, the DKX2-101-V2-PDU adapter must be separately purchased and used with a Cat5 cable. It is not included with the power strip. The DKX2-101-SPDUC cable used by the previous version of KX II-101 should <u>not</u> be used.

11. Raritan PX rack PDU's with 8, 12 and 20 outlets are supported. PX devices with more outlets should be connected to one of the multi-user Dominion KX II or KSX II devices.

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. A subset of the KX II-101 V2 administration functions is available from CC-SG. To access all functions, use the Pause Management feature in CC-SG to remove the KX II-101 V2 device temporarily from CC-SG management. Then you can access the additional administrative functions via the KX II-101 V2 remote console.

14. The Power over Ethernet option is not available for the KX II-101 V2. Customers requiring this feature should continue to purchase the previous generation KX II-101.

15. Although PS2 based servers can be remotely controlled by the KX II-101 V2, PS2 local port access would require a PS2 to USB adapter (customer supplied).

16. The "Alternate Radius Authentication" option on the "Authentication Settings" page has been removed.

17. You may notice that the "KVM Cable" jack on the V2 unit looks like an HDMI style connector. But this does not use the HDMI video protocols; you should not connect this to an HDMI video output on a server or PC.

General Upgrade Instructions

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 section and click on Firmware Upgrades and then "Dominion KX II-101 & KX II-101 V2" in the left navigation panel, or go directly to:

http://www.raritan.com/support/Dominion-KX-II-101/

Locate the entry for the new firmware release. Release Notes are available with: (a) brief descriptions of new features/enhancements, (b) important operating instructions, and (c) firmware upgrade instructions. Follow the Release Notes instructions to upgrade the device.

Consult the documentation for information on how to apply firmware upgrades to the KX2-101-V2. For Release 3.3, check out the "Upgrading Firmware" section:

http://web1.raritan.adxstudio.com/help/kx-ii-101-v2/v1.0.0/en/index.htm#5755

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