

Raritan® PX Firmware Version 1.5.4 (firmware version will be displayed as 01.05.07 in the GUI after an upgrade; build number on the *Device Information* page will be 10916)

Version: DPX 1.5.4- Build 10916 Release Notes, Revision 1

Date: March 4, 2013

Effective: Immediately.

Applicability:

This firmware release is the General Availability (GA) release for the listed in the Supported Models List posted on the Raritan website. It is only to be used as a Fence release (refer to Upgrade Matrix section below) to prepare for an upgrade to PX1.5.7 (release notes posted separately. Additional models may be tested after this release is available.

A PRE-REQUISITE for upgrading to PX1.5.7 is to be running PX1.5.4 or PX1.5.5. Therefore for firmware upgrades for all customers running releases prior to 1.5.5, this is a two-step upgrade, i.e., first upgrade to 1.5.4 (Fence release, this release) and then to 1.5.7.

If your Raritan PX is already running PX1.5.5 firmware, you do not need to PX1.5.4 – go directly to PX1.5.7.

Release 1.5.4 is an intermediate step in the upgrade to PX1.5.7; it is referred to as a Fence release in the Upgrade Matrix (see section below). Release 1.5.4 is only used to get to release PX1.5.7, it is NOT intended that customers will upgrade to 1.5.4 and stop.

Also, getting to the 1.5.x firmware (from 1.3.n or 1.4.n) codebase is a very significant upgrade to the internal firmware components, so it may take as long as 30 minutes. Read the detailed firmware upgrade instructions (below) before starting the upgrade process.

It is recommended that ALL customers upgrade to PX1.5.7.

Due to significant internal enhancements in PX 1.5.4, you cannot downgrade from Release 1.5.4 to ANY prior release. After upgrading to 1.5.4, please upgrade to PX1.5.7.

For customers using CC-SG 5.0-5.2; note restrictions in Known Issues with Release 1.5.4 section below.

Release Status: General Availability (GA) only as a Fence release on the models listed in the Supported Models list on the Raritan website; this release will be posted on Raritan's website. **A PRE-REQUISITE for upgrading to PX1.5.7 is to be running PX1.5.4/1.5.5. You cannot upgrade to PX1.5.7 until you are running PX1.5.4. See the Upgrade Matrix below.**

Raritan PX Overview:

Raritan/Dominion PX refers to Raritan’s family of intelligent power distribution units (iPDUs).

Please refer to the PX1.5.7 release notes posted on the Raritan website.

Consult the PX 1.5 User Guide posted on the Raritan website for more information on these PX features.

Raritan PX Documentation:

The following user documentation is available for the Raritan PX:

The latest English language User Guide for PX1.5 (PDF format) should be used with this release; it is available from Raritan’s website via a hyperlink from the GUI.

Not Supported with the Raritan PX 1.5.4:

ALL PX models with part number beginning with PX2-nnnn, and all PX-1000, PX-2000, and PXE series models are NOT supported by this release. See the PX2.n release for these models.

Some custom PX models may not be supported by this release. Please contact Raritan Support to see if your Custom model is supported in this release.

See “Dominion PX Release Compatibility Information” or Known Issues (below) for restrictions.

Upgrade Matrix (path for upgrades):

Note: 1.5.4 is a Fence (or intermediate) release only, to get to PX1.5.7.

ONLY PX units running 1.5.4 or 1.5.5 can directly upgrade to PX1.5.7. Please note caution about sensor alerts (See Compatibility section below).

Upgrade paths to PX firmware release 1.5.4 (bold lettering below) and 1.5.7.

Starting firmware release	Upgrade to Fence Release	Upgrade to Final release	Comments
Pre - 1.3.5 (examples: 1.3.1, 1.3.0)	See comments	See comments	Contact Raritan Support
1.3.X (where X>=5); examples 1.3.5, 1.3.12, etc.)	1.5.4	1.5.7	No need to disconnect serial port.
1.4.1	1.5.4	1.5.7	No need to disconnect serial port.

1.5.0	1.5.4	1.5.7	Must disconnect anything plugged into the serial port
1.5.2	1.5.4	1.5.7	Must disconnect anything plugged into the serial port
1.5.4	Not applicable	1.5.7	No need to disconnect serial port.
1.5.5	Not applicable	1.5.7	Must disconnect anything plugged into the serial port

Raritan PX Release 1.5.4 Compatibility Information:

1. KSX (G1) units do not support the DPX.
2. Upgrade Matrix: See IMPORTANT note under Upgrade Matrix above BEFORE upgrading firmware on any unit.
3. KX2-101 does not support the PX-3370. [26152]
4. For customers who have configured alerts when using environmental sensors with any previous PX release (release number less than 1.4.0), when upgrading to PX1.5.0 or higher, the sensor alerts must be deleted, and then re-entered AFTER the PX1.5.n firmware upgrade- otherwise the wrong alerts will be sent, because IPMI sensor numbers are changed internally.[32228]
5. When operating in FIPS Mode (an option available in PX1.5.5 or higher only), CC-SG versions lower than 5.3 cannot support the PX. Removing this restriction will require a new CC-SG Release (version 5.3 or higher).[41866, 41965]

Important Notes and Information:

- A) Enable Javascript in your browser before logging into the unit to start the upgrade process.
- B) When the firmware upgrade is complete, check the firmware version on the Home page in the left panel – it should show “Firmware 01.05.04” after the upgrade. This is the displayed designation for the Dominion PX firmware release 1.5.4. Then immediately upgrade to PX1.5.7. Refer to Upgrade Matrix (above).
- C) When a customer wants to restart or upgrade a PX device from Command Center Secure Gateway (CC-SG) the following steps must be followed for proper operation:
 - a. Pause managing the device.
 - b. Restart/Upgrade PX.
 - c. When PX is fully booted, resume managing the device. [FCR15440, 12777, 12807]
- D) For customers who have configured alerts when using environmental sensors with any previous PX release (release number lower than 1.4.0), when upgrading to PX1.5.x, the

sensor alerts must be deleted, and then re-entered AFTER the PX1.5.x firmware upgrade- otherwise the wrong alerts will be sent, because IPMI sensor numbers are changed internally.[32228]

- E) When upgrading non-switched units, part numbers PX-4nnn, there may be virtual device event in the event log, however the unit will upgrade and perform correctly.

Known Issues with DPX Release 1.5.4:

For a comprehensive list-please refer to the PX1.5.7 Release Notes on the Raritan website.

1. For customers who have configured alerts when using environmental sensors with any previous PX release (release number less than 1.4.0, e.g., 1.3.5), when upgrading to PX1.5.x, the sensor alerts must be deleted, and then re-entered AFTER the PX1.5.x firmware upgrade- otherwise the wrong alerts will be sent, because IPMI sensor numbers are changed internally.[32228]
2. The webserver security certificate on the PX expired on 14 November, a 2011. A new certificate is included in the PX 1.5.2 and higher releases. (41133)

Release Package Details:

The Release 1.5.4 package for the Dominion PX series has the following components. Some releases are not posted and are intended for specific new models only. If posted, the file is zipped and must be unzipped before it can be installed on the Dominion PX unit:

“DPXReleaseNotes1_5_4v1” – this file

A firmware release (binary):

fw-kira-rpc-pdu-raritan_010504-10916-WUB.bin

Firmware Upgrade Pre-requisites:

If you have any questions, or cannot follow the instructions below, please STOP and contact Raritan Technical Support for further instructions. Please read the entire instructions (this document) before proceeding.

PX1.5.4 is only a fence (intermediate step) release to get to PX1.5.7.

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

1. Ensure no users are logged in; nor are there any active sessions – besides the current admin session.
2. The user upgrading the PX device must be a member of the default Admin Group to have sufficient administrator-level privileges to update the Dominion PX unit.

3. Five to ten minutes are required for the complete update procedure for most units; however, in some cases, with older firmware, [the upgrade may take up to 30 minutes](#). The update and subsequent reboot time will vary according to the number of outlets in the unit.
4. Upgrade the PX unit using a wired network only. Loss of packets/dropouts over a wireless network may result in a failed upgrade.
5. If doing the firmware upgrade over a VPN, ensure that the connection is stable and that no inactivity timeouts have been set.
6. The detailed, step-by-step instructions to perform the upgrade are given below.
7. 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.
8. **Enable Javascript in your browser.**
9. Save the firmware upgrade file on a local or network accessible directory. Unzip the file and save it in an accessible directory.
10. Should you experience any difficulties with the upgrade, call Raritan Technical Support for assistance.

Step-by-Step Upgrade Instructions:

Unless otherwise instructed, PowerIQ customers should follow instructions that come with PowerIQ to upgrade PX units.

1. Please ensure that no users are logged into the unit. Note that the upgrade will not interrupt power to the outlets; nor will it change the state of the outlet – outlets that are “on” will remain “on”; similarly, outlets that are “off” will remain “off” – both during the firmware upgrade and following the (software) reset to load the new firmware into the unit.
2. In Mozilla Firefox, Internet Explorer (or other supported web browser), type in the IP address of your Dominion PX unit, and wait for the web-based interface to load.
3. Logon as an administrative user “admin” (or other member of the Admin Group with firmware upgrade privilege enabled).
4. **Click on the “Unit Reset” command under the “Maintenance” tab. This will free used internal memory, and clear internal debug log files to ensure a smooth upgrade. The delay between a Unit Reset, and a firmware upgrade, should be kept to less than 10 minutes. Failure to follow this instruction may result in an upgrade failure on some units. Note that this step is not required for PowerIQ Release 1.3.1 or higher.**

5. **Note that this step is not required for PowerIQ Release 1.3.1 or higher.** When asked to confirm with a “Reset Device” prompt, click on the “Reset” button. Another prompt to “Really reset” will be presented, click on the “Reset” button. Once the device resets – this will take about one (1) minute – and you will be logged out and taken to the Login page. Login again, with your admin username and password. Note that the Reset will NOT change any outlet states – outlets will maintain their previous state; outlets that are ON will remain ON, and outlets that are OFF, will remain OFF.

6. Click on the “Update Firmware” command under the “Maintenance” tab.

7. Browse to locate the .bin file containing the update: **fw-kira-rpc-pdu-raritan_010504-nnnn-WUB.bin** (Note: this has to be an UNzipped file; nnnn is a 4- or 5-digit number).

The full path name might look as in the example below (the file path on your system may differ):

“C:\Documents and Settings\user\My Documents\My Downloads\fw-kira-rpc-pdu-raritan_010504-nnnn-WUB.bin” (where nnnn is a 4- or 5-digit number).

Click the “Upload” button.

The current firmware, and future (after the upgrade) firmware versions, will be displayed. Click the “Upgrade” button **ONCE** to start the upgrade.

8. The firmware upgrade will then proceed:

a. Other users cannot operate the PX during the upgrade; however, power is NOT interrupted to any outlets.

b. This upgrade step will take 4-30 minutes, depending on how many outlets are in the unit. A unit with more outlets will take longer than a unit with fewer outlets.

DO NOT REBOOT, RESET, OR POWER CYCLE THE PX DURING THE UPGRADE OR THE CONSEQUENT RESTART!

c. When the upgrade is completed, the admin user will be logged off.

9. The Raritan PX unit will now reboot and reset, which may take up 4-5 minutes.

10. The user will be taken back to the Login page when the upgrade is completed. IF, and only if, you are not seeing the login page after more than 30 minutes, close ALL web browser sessions, and log back in after the reset completes. (Hint: You may have Javascript disabled; please enable it). In firmware version less than 1.5.4, when the system reboots after firmware upgrade, you will see a “page not found” error before the login page shows up.

Please do not reset the unit when webpage error shows up because the firmware update is still in progress. Allow 30 minutes for firmware upgrade to complete and the login page to appear.

If the unit does not respond even after 60 minutes after firmware update is initiated, please reset the unit via the pinhole reset button (a paper clip will work, do NOT use a pencil or pen). This may recover the unit.

11. When the firmware upgrade is complete, check the firmware version on the Home page in the left panel – it should show “Firmware 01.05.nn” after the upgrade – where nn is a two-digit number. Immediately UPGRADE to PX1.5.7.

12. Due to improvements in PX 1.5.4, you cannot downgrade the firmware from Release 1.5.4 to any previous release.

13. Also, due to internal enhancements in PX 1.5.4, you cannot downgrade the new models (not previously supported) from Release 1.5.4 to any previous release.

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

DPX 1.5.4 Build 10916 Release Notes, Revision 1

March 4, 2013

This note is intended for Raritan customers only; its use, in whole or part, for any other purpose without the express written permission from Raritan, Inc. is prohibited.

Copyright ©2013 Raritan, Inc. CommandCenter, Dominion, and the Raritan company logo are trademarks or registered trademarks of Raritan, Inc. All rights reserved. Solaris and Java are trademarks of Oracle, Inc. Windows and Windows Vista are trademarks or registered trademarks of Microsoft Corporation. Mac and Safari are trademarks or registered trademarks of Apple, Inc. All other marks are the property of their respective owners.