## Release Notes for Raritan PX Firmware Version 2.4.1 (firmware version will be displayed as 02.04.01 in the GUI after an upgrade)

Version: DPX 2.4.1 Build 39763 Release Notes, Version 1
Date: April 1, 2013

**Effective:** Immediately.

**Applicability:**

This firmware release is for General Availability ("GA") on new models, and it has been tested all PX2-based model(s) listed in the PX2.4.0 Supported Model List on the Raritan website. There is a new User Guide for PX2.4. Some custom engineered models may not be supported by this release. Please check with Raritan Support if you are unsure of the model number of your unit; it is typically viewable from the GUI *Device Information* page, or a label on the PDU.

**Please do NOT upgrade ANY other Raritan PX model(s) to PX 2.4.0 because the unit may have been built after this release entered System Test, and it may result in the unit becoming non-functional.**

**Please do NOT downgrade your PX2-based model to any prior release, as these models may not be supported in previous firmware versions.**

**Due to significant internal enhancements in PX 2.4.1, you cannot downgrade from Release 2.4.1 build** 39763 **to ANY prior release. Please contact Raritan Support with any questions.**

**Release Status:** General Availability (GA) only on specific models with part numbers beginning with PX2-nnnn, BCM-2nnn, and PXE-nnnn for factory shipments.

**Release 2.4.1 contains all enhancements and fixes which are listed below:**

A) Support for new models (if any) – See PX2.4.0 Supported Model list posted on the Raritan website.

B) [AMS] incorrect rackUnitPosition in log table after initial connect. This is fixed [46425]

C) Starting with firmware 2.4.0 there is a new way to initiate a reset to factory reset without knowing the admin password. This was necessary

because the existing way (hitting 'esc' after power-up to enter u-boot) does not work for PXO-5800J or PXE. [48157]

D) On some switched PX2 units (part numbers PX2-2nnn, and PX2-5nnn only) it is possible that a high current load and high-inrush may cause the relays to become sticky and not respond to a state change - on to off. A firmware fix is available in this release (PX2.4.0 and higher) that may prevent this issue from occurring. An additional enhancement is available - with directions from Raritan Support only – that may resolve most field issues. Please contact Raritan Support for further information. [47387]

E) Support for SNMP INFORMs has been added – SNMP INFORMs are like SNMP TRAPs, except that INFORMs are acknowledged asynchronously. SNMP INFORMs were introduced in SNMPv2.

F) Support for Raritan WIFI (a/b/g/n) WIFI stick.

G) SSH access to eventlog has been added.

H) Added CLI command to check default user preferences.

I) The "Time between Snapshots" has been changed from 0-60s to 0-600 second range for the Action "Send Snapshots via SMTP".

J) Password ageing is now <u>disabled</u> by default, instead of Enabled.

K) Vulnerability ID 58183 - Dropbear SSH Server Channel Concurrency Use-after-free Remote Code Execution, has been fixed.

L) Temperature readings now display correctly to -10C. Previously values below 0C were reporting incorrectly.

M) Fixed: removing the serial cable did not automatically terminate the user login session.

N) Fixed: The NTP client could potentially go into a mode where it continuously sending out NTP requests, but only waits a fraction of a second for an answer - this fraction varies.

O) Fixed:  Handling of outlet switch commands-specifically SPOFF and SNMPON with and without additional parameters. (BSNMP mode only)

P) SNMP is enabled by factory default

Q) FIXED: For dual-input units (part numbers include X2 for dual-input) if an inlet is not plugged in the OCP would alarm as CBE with the buzzer sounding an alarm; in 2.3.6 or higher, this will not happen. The relay boards may show red REDs, but this is simply to show that the

control path to the relays has power from the iPDU controller. Current (Amperage) cannot be drawn from these outlets which were powered by that inlet. The CB will show current as 0.0. Triple inlet models (X3) will function differently when one or more inlets are not plugged in; this is normal). [44682]

Additional Logitech UVC-compliant webcam models have been tested. See the PX2.4 User Guide for more detail. While not tested officially yet, customers have reported success with the Logitech C210 and C270 models (both are UVC-compliant). More details on UVC-compliant webcams can be found below. Raritan tests and supports only Logitech UVC-compliant webcams. Although, we do NOT test or claim support for the hundreds of cameras that are UVC-compliant, many may work: http://www.ideasonboard.org/uvc/

R) With a webcam or USB stick high rate of transfer may cause certain sensors- plugged into the Sensor port, to display errors temporarily. This will be fixed in an upcoming release.[47787, 49205]

Consult the PX2.4 User Guide for more information on these firmware features: http://www.raritan.com/support/dominion-px2/

**Raritan PX Documentation:**

The User Guide for PX2.4 (PDF format) should be used with this release. The SNMP MIBs- PDU, Asset Management Sensor (AMS) - are retrievable from the unit itself. An updated USB serial driver (v2.0) is posted on the Raritan website under *Support-Other Files* (scroll down to see the *Other Files*): http://www.raritan.com/support/dominion-px2/

**Not Supported with PX 2.4.1:**

ALL PX2 models not listed in the PX2.4.0 Supported Model List have NOT been tested with this release.

If your model is NOT the one listed here, then please consult Raritan Support to confirm if your PX2 model is supported in this release.

**Upgrade Matrix (path for upgrades):**

This release is intended as an upgrade to previous releases; it is also for factory shipments.

## Release compatibility information:

Support for a new models only (if any).

## Important Notes and Information:

Enable Javascript in your browser before logging into the unit to start the upgrade process.

## Known Issues with this Release:

1. When power is removed from the unit, it should remain OFF for a minimum of 10 seconds; otherwise – on startup-the outlet state may be inaccurate. [27008]

2. After a firmware upgrade using the Mozilla Firefox browser, close all browser windows, then access the unit again. Using the "Back" button on the browser may cause the session to hang. [33768, 26531]

3. Power Factor (PF) is displayed only when apparent power is >= 10 VA - otherwise "no reading" is shown [34422]

4. For certain sensor types, when using the CLI command "show sensor externalsensor #", the contact sensor state under Threshold is not displaying the correct state for Contact Closure, Smoke, Water, and Vibration sensors. The CLI command "show externalsensor" works correctly; in addition, the SNMP and GUI show the correct state. [37693]

5. With Windows Vista, when using the USB-B port as a console port, resetting the PX2 unit may cause the console port not to be accessible. The workaround is to unplug the USB-B cable and plug it back in; or, in Windows Vista, Disable and Enable the COM port in use. [37711]

6. The ETO model PX2-4293PR-F5N1A0 physically has no feature port, but displays one in the GUI. [43487]

7. When using the webcam, for resolutions equal to - and higher than - 640x360, under certain conditions, it is possible that part of the Live Preview image may be truncated.[43417]

8. The sample rate and the number of samples for Data logging for asset Management objects differs from other SNMP data logging objects and the Data logging settings for an asset management (Asset Strip) are always enabled and are not viewable through the GUI.[43271]

9. A maximum of five (5) simultaneous web GUI sessions are supported.[43170]

10. The PX2 DHCPv6 and DNSv6 addresses are not re-acquired if the PX2 Ethernet LAN connection is temporarily disrupted and then re-established. Workaround is to Reset the unit of or power cycle it. This will be fixed in a later release.[47844]

11. Sensor log values may be incorrect for "wrapped" sensor ranges. Also, define ranges explicitly. Will be fixed in PX2.5 [48115]

12. When the PX2 is configured to use IPv4-only networking and the server monitor is configured to monitor a host name which resolves to both IPv4 and IPv6 addresses the server monitor will choose the IPv6 address and subsequently fail to reach the host. A workaround is to enable both IPv4 and IPv6 networking, set the DNS Resolver Preference to IPv4. This will be fixed in PX2.5. [47843]

13. On certain PX2 units with older controller cards (specifically V4), the webcam detection may not be reliable. Workaround is to unplug the webcam and plug it back in. Contact support if the problem persists.[46396]

14. On some switched PX2 units (part numbers PX2-2nnn, and PX2-5nnn only) it is possible that a high current load and high-inrush may cause the relays to become sticky and not respond to a state change - on to off. A firmware fix is available in this release (PX2.4.0) that may prevent this issue from occurring. An additional enhancement is available - with directions from Raritan Support only – that may resolve most field issues. Please contact Raritan Support for further information. [47387]

15. With a webcam or USB stick high rate of transfer may cause certain sensors-plugged into the Sensor port, to display errors temporarily. This will be fixed in an upcoming release.

### Release Package Details:

The Release 2.4.1 package has the following components. Note that IF the release status is Generally Available (GA) the binary file is posted as a Zip file under firmware upgrades on Raritan's website.

Some releases ("LA", for limited availability, meaning not tested on all products like GA releases are) are **not** posted on the website, 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 Raritan unit:

"PX2ReleaseNotes2_4_1v1" – this file
A firmware release (binary):
pdu-px2-2.4.1.5.39763.bin

## Firmware Upgrade Pre-requisites:

If you have any questions, or cannot follow the instructions in the User Guide, 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): Follow instructions in the User Guide.