Power IQ® Version 4.2.1

These release notes contain important information regarding the release of this product, so please read them carefully. We strongly recommend you read the entire document.

Applicability:

This firmware release is applicable for both the Power IQ virtual appliance and the hardware appliance and we recommend all customers upgrade to this release due to security updates included.

Release Status:

Power IQ Release 4.2.1 is a General Availability (GA) release.

Very Important Notes:

- **dcTrack customers must upgrade to dcTrack 3.2 before they upgrade to Power IQ 4.2.1**
- **Power IQ release 4.0.x systems with LDAP configured must have a valid email address for each user account prior to upgrading to R4.2.1.**
- **This release adds a floor map and a rack threshold feature that will consume memory and CPU resources. Please see the new recommended memory and CPU specifications below and upgrade your platform to meet the new specifications before you upgrade to release 4.2.1 The rack threshold feature is disabled by default. You can choose to enable it or disable it at any time**.

Number of PDUS	RAM (GB)	CPU (Cores)	Datastore (GB)	OS	VMWare
Up to 50	4	4	160 or more	CentOS 64-Bit	ESX/ESXi
51 to 100	8	4	160 or more	CentOS 64-Bit	ESX/ESXi
101 to 500	8	6	160 or more	CentOS 64-Bit	ESX/ESXi
501 to 1000	8	8	160 or more	CentOS 64-Bit	ESX/ESXi
1001 to 1500	16	8	160 or more	CentOS 64-Bit	ESX/ESXi
More than 1500	24	8	160 or more	CentOS 64-Bit	ESX/ESXi

Raritan suggests the following practice to minimize the risk of data loss and system downtime:

- If running a VM:

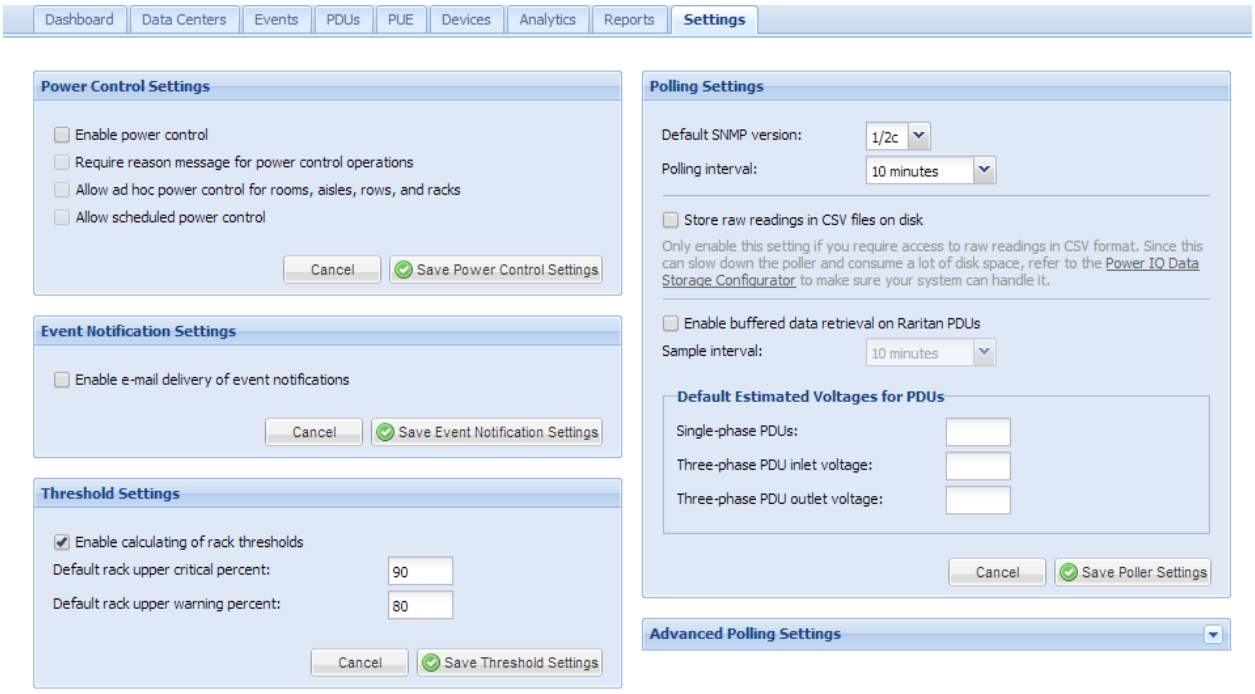
  - Ask your VM administrator if your instance is backed up by them. If so, check the back-up frequency and retention duration.

- If you are running a HW appliance or you don't want to rely on your VM instance backup, we recommend:
  - Set up to have your nightly backups automatically moved to an ftp server; or manually move to a local computer each day.
  - Restore backups to a "cold standby system" at your desired frequency. Important note: set the polling interval on "cold standby system" to 1 hour and **make sure "stored buffer data retrieval" is not enabled.**
  - Spot check the "cold standby system".
  - Note: your license permits you to have a cold standby system.

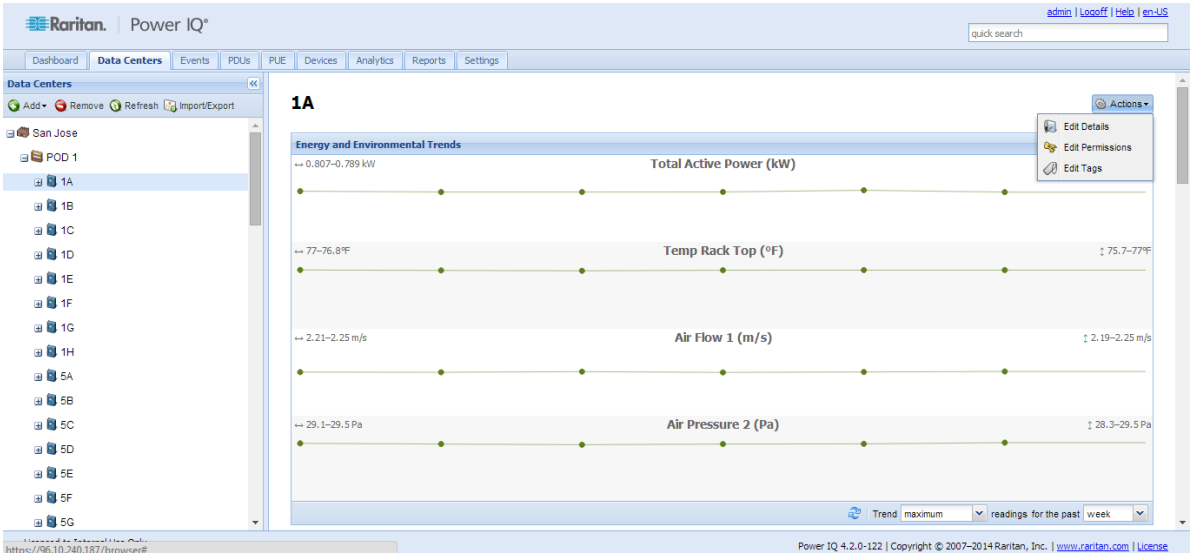
Power IQ 4.2.1 contains the following improvements from release 4.1.2:

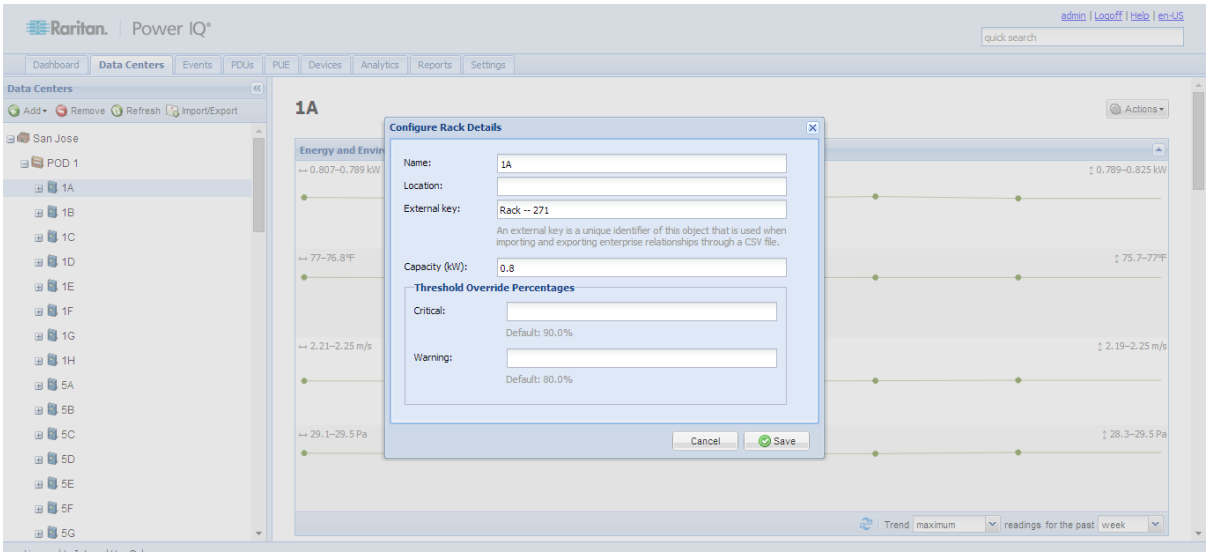
- Real-time Data Center Health Floor Map provides a color coded bird's eye view of key data including active power, current & capacity, temperature, humidity, and rack events per cabinet for intelligent insight on hot spots, SLA violations, and threshold violations
- Rack level thresholds, event and alert notification warns of potential issues, sends alerts, and increases uptime and availability
- Cabinet Inspector with instant rack level details with a single click. Drill down from the data center health floormap and see specific rack level details to instantly pinpoint the source for threshold alerts and events as well as rack power and environment metrics.
- Customizable Tabular Reporting: Allows you to build formatted, custom reports fast with auto create, schedule, and email distribution functionality. Examples: energy bill-back reports by customer, ghost servers and power hogs, and monthly peak power reports.
- Unlimited Tag Groups and Tags
- Support for recently launched Raritan Transfer Switches, plus APC Rack Transfer Switch
- Import and Export Dynamic Plugins
- Enhanced Power Cycle

Rack Active Power Thresholds – You can Enable or Disable feature from the Power IQ Settings selection on Settings tab; as well as set the default thresholds for all racks.

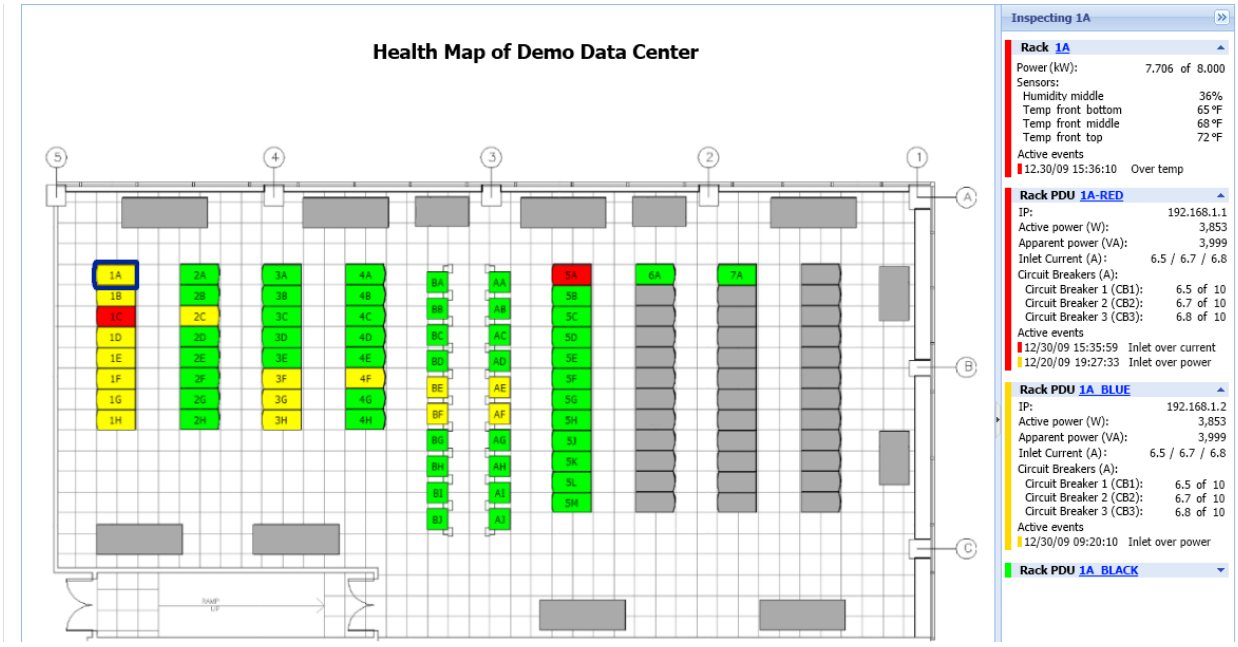


To set rack capacity and override default thresholds via the GUI from smart rack page, click Actions and Edit Details or in bulk via CSV import.

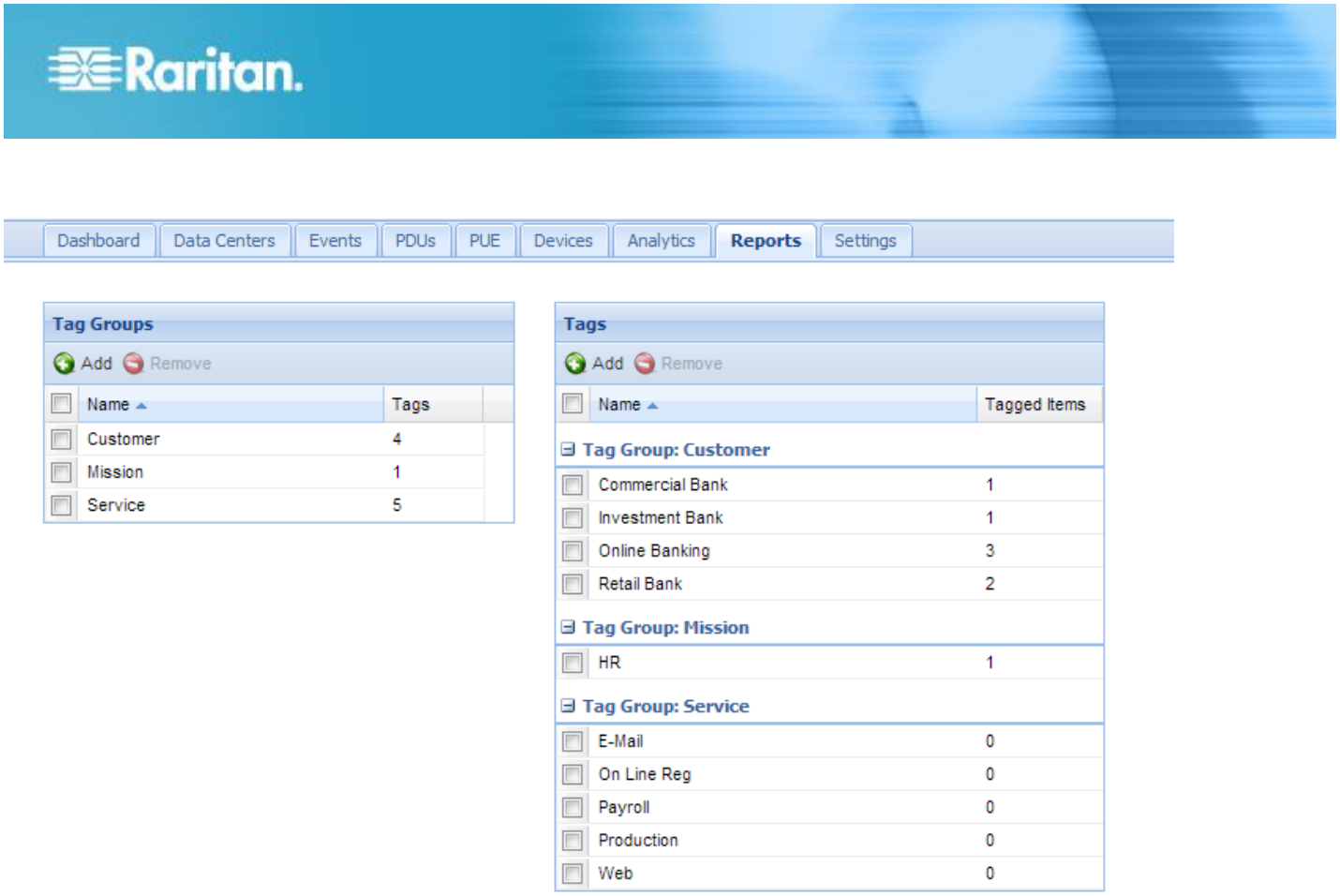




Floor Maps - The health and capacity floor map is a dashboard widget that displays color status for racks based upon rack PDU traps and Power IQ Rack Active Power Threshold



New Tabular Reports with Tag Groups and Tags. Note you can click to migrate existing standard and custom fields and data into Tag groups and Tags. See online help for full details.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Investment Bank
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Online Banking
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Retail Bank
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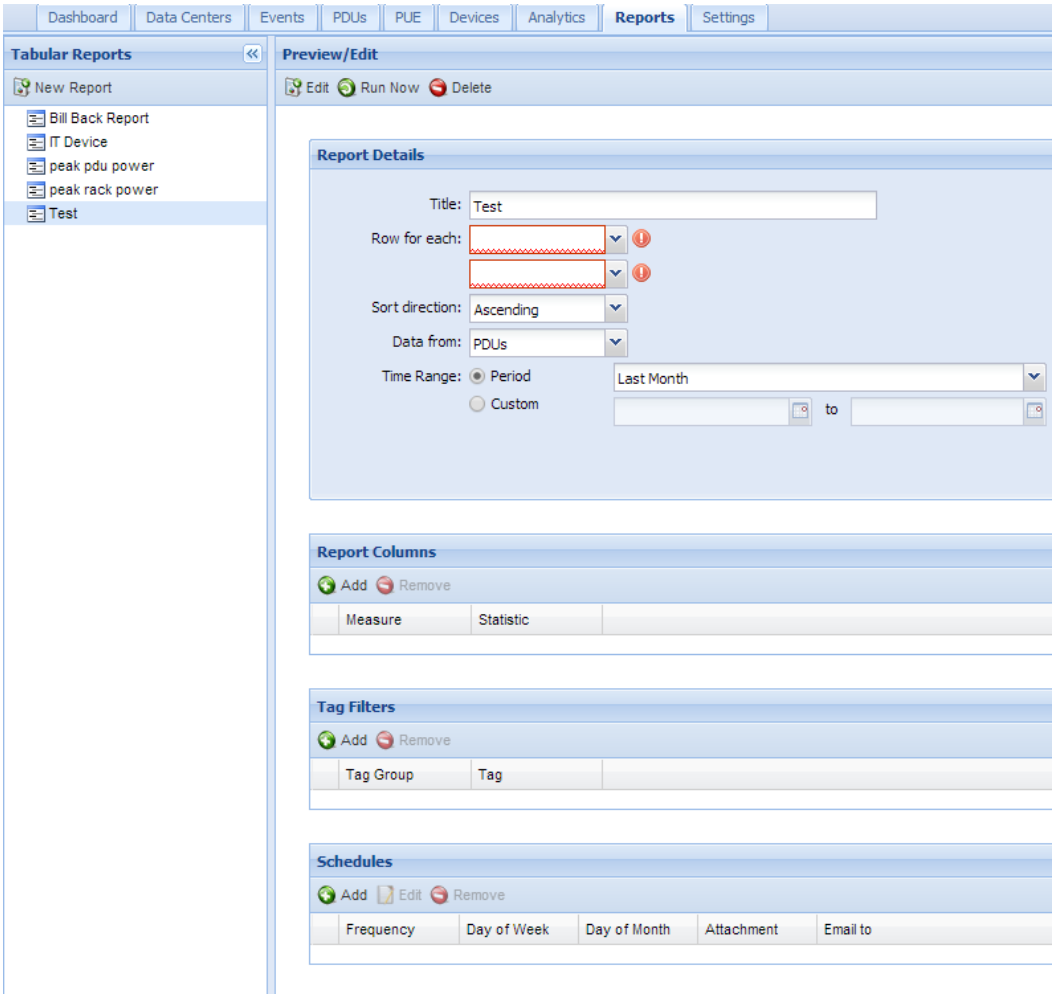
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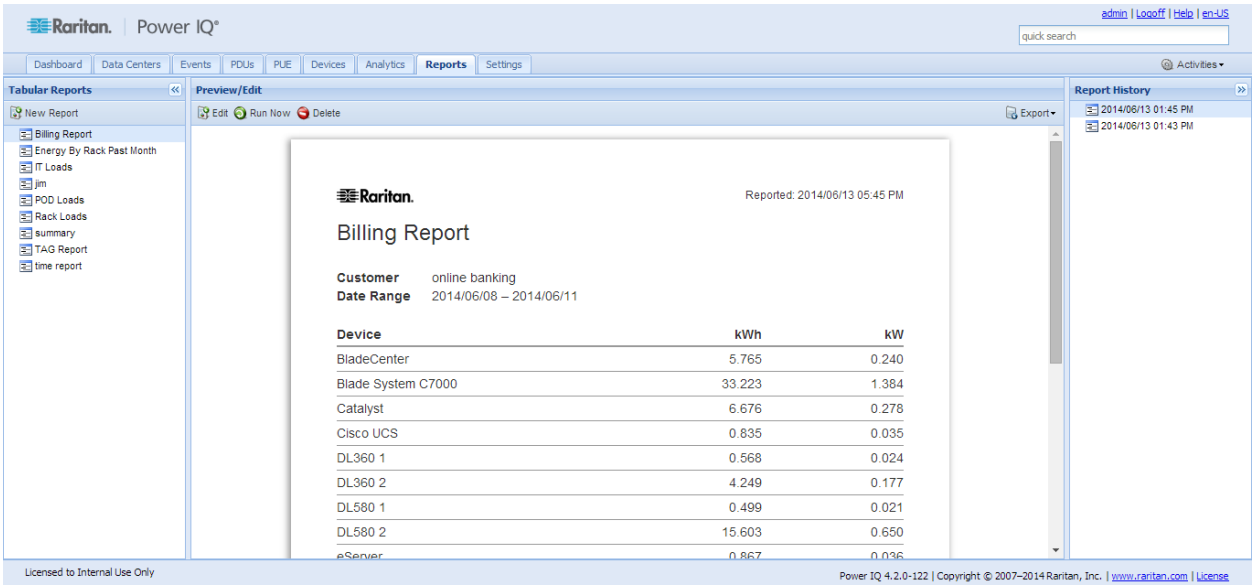

Power IQ 4.2.1 contains the following software updates

57389 - Poller JVM services timing out trying to get database connection from JDBC pool
57391 - Events grid with saved configuration shows no events
57392 - Tags don't apply for the descendants of tagged objects
57393 -Tabular Reports: Incorrect avg power value when report covers more than a day
57401 - Sensors not being removed from DB when they should be
57459 – Last month report off by a day for certain time zones

Power IQ 4.2.0 contains the following software updates based on customer reported items:

56556 Voltage and environmental sensors correction for APC
55158 Can't remove a device from a device group from the device page
54469 An application error is displayed when the custom dynamic plugin uses a constant value instead of an OID which returns a value.
48899 Add unresponsive PDU 'interval check' and 'grace period' settings to 'Advanced Poller Settings' section in UI
55222 Bug found with Power IQ Schedule Tasks List Sorting
54335 When APC has no sensor attached, software reports the temp as 31.8 deg Fahrenheit
53507 Change "Model" field label to "Model Filter" on Dynamic Plugin create/edit form
55271 Internal Error (ISE 500) when accessing PIQ 4.1.0-69 Expired Eval Lic
54312 Dynamic plugin: Issue with missing 'circuit_index' mapping

Power IQ 4.2.0 Contains the Following Security Updates:

Issue ID	Summary
49369	Upgrade OS
52924	Nessus scan reveals low vulnerability for RSA key less than 2048 bits
54671	Appliance OS Update -- CentOS 6.5 2014-02-05
54775	Critical Flaw in Java 1.7.0; Update Required
55257	Nessus vulnerability for SSH Server CBC Mode Ciphers Enabled
55258	Nessus vulnerability for SSH Weak MAC Algorithms Enabled
55470	Upgrade SQL Database
52924	Nessus scan reveals low vulnerability for RSA key less than 2048 bits
55991	While previous releases of Power IQ weren't vulnerable to the Heartbleed bug (CVE-2014-0160), Power IQ has been updated to use the latest version of OpenSSL.
57019	While the components used in Power IQ were not known to be vulnerable to CCS Injection OpenSSL (CVE-2014-0224) and GNUtils (CVE-2014-3468) vulnerabilities, we've followed the recommendations of the advisory and updated the components.

Existing Power IQ 4.0.0, 4.0.1, 4.0.2, 4.1.0, 4.1.2 and 4.2.0 Customers:

The upgrade is free for customers with a valid software maintenance agreement. Download the Power IQ 4.2.1-4 software upgrade bin file named power-iq-v4.2.1-4.bin from http://www.raritan.com/support/power-iq/. The upgrade bin file can be installed via the Power IQ web client. In the Settings tab, click Software Upgrades, then click Browse to upload the upgrade bin file. Contact tech@raritan.com if you have any questions. Contact your reseller or sales@raritan.com to buy a contract if yours has expired.

Existing Power IQ 2.0.1, 2.1.0, 2.1.1 3.0.0, 3.0.1, 3.1, 3.1.1, 3.1.2 & 3.1.3 Customers:

Release 4.2.0 requires a new install due to the upgrade of CentOS and a change in the file structure. Your current Configuration and Data can be backed up (use an unencrypted back-up) and restored to the new 4.2.0 system. This upgrade should take less than 30 minutes. The upgrade is free for customers with a valid software maintenance agreement. Click http://www.raritan.com/support/power-iq/ Then login to the customer portal (at the top right of this support page) to gain access to the Release 4.2.0 upgrade material. Access is limited to customers covered by a valid software maintenance agreement. Contact customer service

at customerservice@raritan.com if you have problems with login. Contact tech@raritan.com if you have any technical questions. Contact your reseller or sales@raritan.com to buy a contract if yours has expired.

Existing Customers with Releases Prior to 2.0.1:

Your system must first be upgraded to 2.0.1. Please see the release upgrade path - **http://www.raritan.com/support/power-iq/**. Then read the appropriate release notes. Contact **tech@raritan.com** if you have any questions.

Five Device Evaluation Versions

Cannot be upgraded. You must download the new release and configure a new virtual appliance. You can back-up your system and restore it to the new system.

Browser Compatibility:

- Chrome 35
- Mozilla Firefox v7 – v29
- Internet Explorer v8, v9 and v10
- Safari v7.0.4

PX Compatibility:

- PX1 – Release 1.3.5 or higher
- PX2 – Release 2.0 or higher

CC-SG Compatibility:

- Release 5.2, 5.3, 5.4 & 6.0 - Vendor Agnostic Power Control with Configuration Sync

dcTrack Compatibility:

- **dcTrack customers must upgrade to dcTrack 3.2 before they upgrade to Power IQ 4.2.1**

Important Notes:

- The cooling chart export feature requires Flash 12 or earlier to function properly
- 55455 - The Daily Rollup will not occur the night after Daylight Savings kicks in
- 55591 - When a rack has a mix of Raritan PX's running in data buffered mode and PDU's that are not running in data buffered mode (generally non-Raritan PDU's), the Rack Power Spark line charts in the Smart view may only show partial power values.
- 55874 – The state of a sensor no longer impacts the state of the rack PDU it is physically attached to. The state of the sensor impacts the sensor status and the EDM object it is associated with such as a rack or a room.
- 56121 - If you click on a sensor that's not been associated with a EDM object such as a rack. (generally meaning the PDU it's attached to hasn't been placed in a rack) you'll get a message saying no object found.
- 56375 - User may need to issue a rescan in order to see latest transfer switch readings and active/preferred inlet state if it switched since the last poll.
- 56479 - User may need to manually clear some events after a rack transfer switch loses power while in Standby mode.

July 10, 2014

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