Release Notes
Rack Power Distribution Unit
with Network Management Card 2

Revised: May 2018
Release Notes for: AP7xxxB and AP8xxx series Rack PDUs and AP71xxB Inline Current Meters

Affected Revision Levels

Component	File	Details
APC Operating System	apc_hw05_aos_656.bin	Network Management Card (NMC) Operating System & TCP/IP Stack for Hardware Platform v05.
rpdu2g Application	apc_hw05_rpdu2g_656.bin	Rack Power Distribution Unit Application
PowerNet® Application	powernet426.mib	PowerNet SNMP Management Information Base (MIB)

For details on upgrading the firmware for your Rack PDU, see the User Guide on the website, www.apc.com.

Device IP Configuration Wizard

The Device IP Configuration Wizard is a Windows application designed specifically to remotely configure the basic TCP/IP settings of Network Management Cards. The Wizard runs on Windows® 2000, Windows Server 2003, Windows Server 2012, and, on 32- and 64-bit versions of Windows Vista, Windows XP, Windows Server 2008, Windows 7, Windows 8, and Windows 10 operating systems. This utility supports cards that have firmware version 3.X.X or higher and is for IPv4 only.

The Wizard is available as a free download from the APC by Schneider Electric website at www.apc.com:

1. Go to www.apc.com/tools/download and select '**Software Upgrades - Wizards and Configurators**' from the '**Filter by Software/Firmware**' drop-down list

2. Click '**Submit**' to view the list of utilities available for download.

3. Click on the '**Download**' button to download the **'Network Management Device IP Configuration Wizard'**.

Table of Contents

New Features

APC Operating System (apc_hw05_aos_656.bin)

- Improved overall system performance.

rpdu2g Application (apc_hw05_rpdu2g_656.bin)

- Added new CLI commands for temperature status (tempStatus) and humidity status (humStatus).

- Added new feature to signal just one configuration change event instead of numerous events when more than one outlet, phase, or bank are selected at the same time.

Fixed Issues

APC Operating System (apc_hw05_aos_656.bin)

- Access to the SNMPv3 interface through different Access Control profiles configured to use the same SNMPv3 User Profile is no longer dependent on the first configured profile in the list.

- Browser cookies have been updated to improve session security.

rpdu2g Application (apc_hw05_rpdu2g_656.bin)

- AP7xxB only: Fixed SNMP to report values for legacy OIDs rPDUIdentDevicePowerWatts and rPDUIdentDevicePowerVA.

- For interface consistency, removed device, phase, and bank items from the web Status menu for users with only outlet user access.

- Fixed CLI error responses to return "command failure" response for unsupported CLI commands when accessing guest PDUs in a Network Port Sharing (NPS) group.

- Fixed CLI error response to return "no response" when temperature/humidity sensors are not connected.

- Fixed errant "RF Tag Communications established" event that sometimes was signaled when controlling multiple outlets.

Known Issues

The NMC Upgrade utility supports ASCII characters only for username and password.
The following fields do not accept UTF-8 characters (they accept ASCII only): • any numeric field (only Arabic numbers are accepted) • the Datalog FTP Server name
The following warning events do NOT cause the NMC to send an SNMP trap: • System: Detected an unauthorized user attempting to access the FTP interface • System: Password Changed
The user privileges in the CLI are not consistent with the user privileges in the Web UI.
In the Web UI, the Primary and Secondary RADIUS servers accept invalid IP address values.
In the Config.ini, the SystemDateTime Server keys return unusable data values when long strings are applied.
There are different Date Formats on the NMC General/About page.
The Config.ini keywords "LinkDisplay" and "LinkName" in the [SystemLinks] section accept a NULL value.
The Trap receiver NMS settings incorrectly allow for a NULL entry.
The SNMP v1 and v3 Community Access Addresses incorrectly allow for a NULL entry.
The SNMP v1 Trap Community Name incorrectly accepts values greater than the max of 15 and NULL.
The Syslog Server address incorrectly accepts a NULL entry.
The Network Interface may reboot during periods of heavy network activity.
Configuring a fourth email recipient may cause the following event: "System: Email: Could not mail, queue full."
File transfers using SCP do not work properly with WinSCP client.
Certain SSL certificates generated by third party Certificate Authorities do not import or upload to the NMC. A possible solution is to use the APC Security Wizard to create both the CA and SSL certificate or use the NMC self-signed certificate. This will be fixed in a future version. Contact technical support for other possible options.
Firewall rules configured through the Web interface are active even when the firewall is not enabled.
RMS may not receive any data & alarms from the unit when the device name and location are configured in full length from NMC.
SNMP Trap Recipients are activated only after a previous Trap recipient can send Traps.
SNMP operations fail when a network specified with CIDR notation in the NMS IP/Hostname field.
SNMP traps do not work for some AOS events.
Several issues have been identified when upgrading the AOS from v5.x.x to v6.x.x. It is important to review FA176047 available in Frequently Asked Questions (FAQ) on the website prior to upgrading Rack PDUs.

Should a user attempt to configure a phase's Overload Alarm with a value that is above the maximum load value, configuration errors in Near Overload and Low Load Warning values to obtain environmental sensor status (if connected) will not be reported on the screen. These entries will be rejected along with the Overload Alarm entry, but notification will not be put on the screen for those fields.

AP8XXX only: In a Network Port Sharing group, if a unit has an active alarm upon startup and the unit changes its display ID, the alarm may remain in the active alarm list even after the alarm condition clears.

If a breaker is tripped on an AP84xx or AP86xx SKU with two outlet banks (AP8441, AP8453, AP8641, AP8653), outlets 9 through 16 may report incorrect measurements.

AP8XXX only: A complete config.ini upload to a Rack PDU in a Network Port Sharing group may take a long time. For example, for a Rack PDU in a Network Port Sharing group with three other Rack PDUs, it may take 30 minutes to complete.

AP8XXX only: A unit in a Network Port Sharing group with a letter in the seventh or eighth positions of its serial numbers may generate a communication lost alarm upon upgrading from 6.1.0 or earlier to 6.3.3 or later. This alarm may be cleared and should not repeat in future upgrades.

A unit with over 24 switched outlets (such as AP8965X671) may show a load reading on phase L1, even with no load connected on outlets. This is due to the number of outlet relays drawing power from the input phase.

AP8XXX only: In Network Port Sharing configuration, StruxureWare Data Center Expert may take more than 4 minutes to discover a Rack PDU.

AP8XXX only: In Network Port Sharing configuration, firmware may not be updated to match the host Rack PDU firmware version.

AP8XXX only: In Network Port Sharing configuration, "Firmware Mismatch" warning messages may not be cleared until the Network Management Card is rebooted.

AP8XXX only: The Environmental alarms displayed on the Environmental Configuration page of the Web UI is mismanaged in Network Port Sharing configuration.

Miscellaneous

Recovering from a Lost Password

See the User Guide on the website, www.apc.com for instructions on how to recover from a lost password.

Event Support List

To obtain the event names and event codes for all events supported by a currently connected APC by Schneider Electric device, first retrieve the config.ini file from the Network Management Card.
To use FTP to retrieve config.ini from a configured Network Management Card:

1. Open a connection to the NMC, using its IP Address:
   ```
   ftp > open <ip_address>
   ```

2. Log on using the Administrator user name and password.

3. Retrieve the config.ini file containing the settings of the Network Management Card:
   ```
   ftp > get config.ini
   ```

The file is written to the folder from which you launched FTP.

In the config.ini file, find the section heading `[EventActionConfig]`. In the list of events under that section heading, substitute 0x for the initial E in the code for any event to obtain the hexadecimal event code shown in the user interface and in the documentation. For example, the hexadecimal code for the code E0033 in the config.ini file (for the event "System: Configuration change") is 0x0033.

PowerNet MIB Reference Guide

NOTE: The MIB Reference Guide, available on the website, www.apc.com, explains the structure of the MIB, types of OIDs, and the procedure for defining SNMP trap receivers. For information on specific OIDs, use a MIB browser to view their definitions and available values directly from the MIB itself. You can view the definitions of traps at the end of the MIB itself (the file powernet426.mib downloadable from the website, www.apc.com).

Hash Signatures

MD5 Hash: f66048ab6dd4656ed38516cc06706ff7
SHA-1 Hash: af8c4483d8968672e87f908a0425a24b04fe331f
SHA-256 Hash: 0a5ee5ef7849c3b716b49a26f559774a201ad0648879fa4aabdaa172b02f4af8

990-9958C

05-2018