

ReNotes990-3864x-EN 20 NOV
APC by Schneider Electric
(www.apc.com)
APC part number: 990-3864D

RELEASE NOTES for
AP88xx Metered Rack PDU
AP89xx, AP86xx Switched Rack PDU

Released: 16 August 2012

IMMEDIATELY UPGRADE ALL rPDU
DEVICES CURRENTLY RUNNING rPDU
APPLICATION VERSION 6.09 TO VERSION
6.10. THIS CAN BE ACCOMPLISHED VIA THE
NORMAL UPGRADE PATH.

THE RACK PDU WILL CONTINUE TO SUPPLY
POWER BUT IF THE FIRMWARE IS NOT UPDATED
THE UNIT MAY BECOME UNRESPONSIVE.

Affected Revision Levels:

apc_hw05_aos_518.bin Network
Management Card Operating System &
TCP/IP Stack
for Hardware Platform v05
apc_hw05_rpdu2g_515.bin

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Switched/Metered Rack PDU2 Application
powernet406.mib PowerNet(R)
SNMP Management Information
Base (MIB)

For details on upgrading the firmware for your Rack PDU, see the User's Guide on the APC web site (www.apc.com).

APC Device IP Configuration Wizard
v5.0.1

The wizard is a windows application designed specifically to remotely configure the basic TCP/IP settings of Network Management Cards. The wizard runs on windows(R) 2000, windows 2003, windows Vista, windows XP, windows 7, and windows Server 2008.

The wizard is available as a free download from the APC web site. On the web site, search by part number SFDIPW501 to find the downloadable file.

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1.0 OS & TCP/IP Stack Modifications (apc_hw05_aos_518.bin)

1.1 COMPATIBILITY

apc_hw05_rpdu2g_515.bin Rack Mount
Power Distribution Unit

1.2 KNOWN ISSUES IN THIS VERSION

1. Performing manual edits (using some editors, e.g. Notepad) to the Config.ini file with UTF-8 characters may result in unrecognized characters being appended to the file. This may result in error messages being logged when these characters are processed. However, the Config.ini file

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is still processed correctly.
(RTWOCORE-750)

2. The SNMPv1 "communityString" OID allows 15 characters but should allow 16.

(RTWOCORE-742)

3. The NMC Upgrade utility supports ASCII characters only for username and password. (RTWOCORE-753)

4. When upgrading from 5.0x systems, IP addresses in the event log for preexisting events (that is, events which PRECEDED the upgrade) will cause the creation of miscellaneous odd characters in the log. This will NOT corrupt the log. Log entries made after the upgrade will represent properly as expected. (RTWOCORE-733)

5. When upgrading from 5.0x systems, if NTP (network time protocol) is not enabled, the NMC clock will need to be set manually.

6. Non-ASCII characters conveyed to an ISX Manager will not display properly in ISXM.

7. 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.

8. The following warning events do NOT cause the Network Management Card to send an SNMP trap:

- System: Detected an unauthorized user attempting to access the FTP interface.

- System: Password Changed (RTWOCORE-166)

9. In the Config.ini file, the [EventActionConfig] keys may report incorrect

data when performing a mass configuration. (RTWOCORE-168)

10. In the CLI, the "system" command accepts Name,

Contact, and Location values that exceed the character limit, but

the UI truncates those values in the logon banner. (RTWOCORE-649)

11. The device and outlet user privileges in the CLI are not consistent with

the device and outlet user

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privileges in the web interface.
(RTWOCORE-232)

12. Using the Config.ini file to
configure the following keys in the
[SystemUserManager] and
[SystemDateTime] sections may cause the
web

interface to display the
following values incorrectly:

- ReadOnlyUserName
- DeviceUserName
- AdminUserName
- NTPPrimaryServer
- NTPSecondaryServer

(RTWOCORE-234)

13. User names can be defined using the
Config.ini file, but by default
password keys are no longer
included. Transferring an unedited
Config.ini

file in the old format (with
password keys) can cause unintended user
name/

password pairs unless the user name
field is removed from the file.

(RTWOCORE-248)

14. When SNMPv3 access is enabled,
disabling SNMPv1 access by clearing the
"Enable SNMPv1 access" check box
has no effect. (RTWOCORE-249)

15. If the manual upload of the data log is repeated at 90-second intervals, the third upload attempt will fail.
(RTWOCORE-434)

16. In the Config.ini file, the [SystemPreference] key EventLogDisplay shows:

- 0 instead of Disabled and
- 1 instead of Enabled.

(RTWOCORE-144)

17. In SNMP browsers, UDP ports are not reported correctly and all TCP ports except the web port are not shown. (RTWOCORE-148)

18. The NMC supports six SNMP trap receivers, but only four can be configured to receive event notifications. (RTWOCORE-241)

19. When using Mozilla Firefox, access using HTTP port 6000 is blocked. Microsoft Internet Explorer 6 allows access using HTTP port 6000.
(RTWOCORE-243)

20. In the web interface, the Primary and Secondary RADIUS servers accept invalid IP address values.
(RTWOCORE-490)

21. In the CLI, the Primary and Secondary RADIUS server commands append the previous server secret to the end of the new server secret. (RTWOCORE-491)

22. In the Config.ini: the SystemUserManager username keys return strange values when the value is greater than 10 characters in length. (RTWOCORE-234)

23. In the Config.ini: the SystemDateTime Server keys return strange values when long strings are applied. (RTWOCORE-235)

24. Domain Name parameter displays result as "Success" for invalid value in the CLI. (RTWOCORE-480)

25. The usernames for Admin, Device and Read-only users allow longer strings than the 64-character limit in the Config.ini file. (RTWOCORE-792)

26. The User Link Display name configuration exceeds 20 characters when

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using a Config.ini file.
(RTWOCORE-794)

27. The Quick Links Display name configuration only allows 6 characters in the web text box. (RTWOCORE-793)

28. The snmp mib2 udp/tcp connection tables are incorrect. (RTWOCORE-148)

29. There are different Date Formats on the NMC General/About page.
(RTWOCORE-238)

30. The CLI does not process HOME or END keys properly. (RTWOCORE-216)

31. The CLI command history buffer continuously wraps around, instead of stopping at the end/beginning
(RTWOCORE-217)

32. In the Config.ini: SystemLinks, LinkName and LinkDisplay fields truncate values which are too long.
(RTWOCORE-233)

33. The Web UI Device and Read Only Username fields don't report a form failure when submitting an empty string.

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(RTWOCORE-486)

34. The DNS Domain Name validation doesn't conform to RFC 1035 Standards for formatting. (RTWOCORE-370)

35. The Config.ini keywords "LinkDisplay" and "LinkName" in the [SystemLinks] section accept a NULL value. (RTWOCORE-795)

36. The Trap receiver NMS settings incorrectly allow for a NULL entry. (RTWOCORE-796)

37. The SNMP v1 and v3 Community Access Addresses incorrectly allow for a NULL entry. (RTWOCORE-797)

38. The SNMP v1 Trap Community Name incorrectly accepts values greater than the max of 15 and NULL. (RTWOCORE-798)

39. The syslog Server address incorrectly accepts a NULL entry. (RTWOCORE-799)

40. The Config.ini for RMS Configuration incorrectly accepts values greater

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than allowed. (RTWOCORE-800)

41. Browsing to a logon page directly after a previous logon results in a temporary logon failure.
(RTWOCORE-831)

42. When data log rotation is enabled or disabled, the event log will log the same event "System: Configuration change. Data log rotation enable". This is misleading if the rotation was disabled. (RTWOCORE-1053)

43. RPDU does not respond to ipAdEntNetMask OID via SNMP.
(RTWOCORE-1080)

44. RPDU may warmstart during periods of large network activity.
(RTWOCORE-1097)

45. Some event logs may not be displayed when the event log filter is set to an option other than "All Logs".
(RTWOCORE-1102)

46. In SNMP: sysUpTime OID is continuously lagging from actual NMC UP time value. (RTWOCORE-1110)

47. Configuring a fourth email recipient may cause the following event,

"System: Email: Could not mail, queue full." (RTWOCORE-1112)

1.3 NEW FEATURES & ENHANCEMENTS SINCE AOS v514

1. Engineering enhancement to facilitate soft/graceful recovery and to capture more comprehensive debug information.
2. Support for changing the SMTP port number for email recipients.

1.4 BUGS FIXED IN THIS VERSION SINCE AOS v514

1. The Config.ini keyword "Protocol" in the [NetworkSYSLOG] section is not indexed, which means the list of values for this keyword is not clear to the user. (RTWOCORE-789)
2. In the command line interface (CLI), the help text for the "ftp" command

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incorrectly states that the FTP
port can be reset to port 5000. The
valid range is 5001-32768.
(RTWOCORE-478)

3. In the Config.ini file, the
following [RemoteMonitoring] keys accept
values that do not use valid
e-mail syntax:
- CfgPriDataEmailRecip
- CfgPriRegEmailRecip
- CfgSecDataEmailRecip
- CfgSecRegEmailRecip
(RTWOCORE-146/236)

4. In the Config.ini file, the
[RemoteMonitoring] key
RegEmailAddress=apc
should be on a new line. It is
incorrectly appended to a comment line.
(RTWOCORE-154)

5. When defining group event actions
at the web interface, the
"up to (x) times after the initial
notification" field cannot accept a
value greater than 99. (It should
allow users to enter numbers with three
digits). (RTWOCORE-188)

6. The CLI does not validate input for
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some arguments,
which can lead to unexpected
results. (RTWOCORE-189)

7. Entering a quotation mark as part
of the RPDU name results in the name not
being displayed in the NMC.
(RTWOCORE-134)

8. The range for the FTP port given in
the CLI is wrong. (RTWOCORE-478)

9. Custom Daylight Saving Time is not
working. (RTWOCORE-963)

10. Incorrect time stamp sent in email
header. (RTWOCORE-1162)

11. Spamfilter marks email as malformed
due to content transfer encoding
mechanism.
(RTWOCORE-1133)

12. Leading numbers in domain names are
not accepted for input fields.
(RTWOCORE-940)

2.1 COMPATIBILITY

apc_hw05_aos_518.bin Network
Management Card OS & TCP/IP Stack

See 1.0 OS & TCP/IP Stack Modifications (apc_hw05_aos_518.bin) for a list of modifications and enhancements that affect this application version.

2.2 KNOWN ISSUES IN THIS VERSION

1. ISX Manager's Building Management System does not recognize AP88XX, AP89XX, or AP86XX SKUs in the "Select BMS Slave Devices" screen. (NGPDU-202).

2. Selecting the "Launch Log in New Window" button on the Data Log web page will sometimes launch a new window with no data records, only column headers. (NGPDU-466).

3. The data log will sometimes fill to 2000 records when the maximum entries has been configured to a value less than 2000. (NGPDU-450).

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4. 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 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. (NGPDU-569)

5. CLI interface does not have a command that allows the user to know that an outlet user is disabled. Therefore, if a CLI user attempts to assign outlets to this disabled user, the command will fail with a "parameter error", but the user will not know the actual reason. (NGPDU-570).

6. When a large number of outlet groups are controlled simultaneously, some controls may not complete. Additionally, the Rack PDU may reboot. (NGPDU-450).

7. Telnet session may close unexpectedly after performing the CLI command

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to control many outlets at the same
time. The command will complete,
but the user may have to log back
in to the telnet session. (NGPDU-872)

8. After a "CAN bus off" alarm has
been resolved, the clearing event is not
generated and the alarm remains in
the active list. (NGPDU-948)

9. If a "Cancel Pending Commands" is
issued when more than 6 outlet group
commands are in progress, some of
the cancel commands may not get
processed. (NGPDU-930)

10. In some situations, such as when a
large number of events are generated
at the same time, some events may
not get logged. This may also cause
the active alarm list to not
display an active alarm, or to display
an
alarm that has actually been
cleared. (NGPDU-807, NGPDU-886)

11. If a breaker is tripped on an
AP86xx SKU with two outlet banks
(AP8641, AP8653), outlets 9 through
16 may report incorrect measurements.
(NGPDU-901)

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12. Outlet controls issued to outlets that are already in the desired state are logged in the event log. This is different than previous behavior.
(NGPDU-825)

13. 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.
(NGPDU-892)

14. In order to support up to four Rack PDUs in a Network Port Sharing group, the data log record format was changed. This will result in the data log being cleared during an upgrade to firmware version 515. Users are advised to save the data log before upgrading if the records are needed.
(NGPDU-827)

15. Cisco Energywise is not supported in this firmware release.

2.3 NEW FEATURES & ENHANCEMENTS SINCE
RPDU2 v512

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- Section 1.3 enumerates the features & enhancements for the 518 system.

1. Network Port Sharing feature has been added. This feature allows for up to

four Rack PDUs (AP84xx, AP86xx, AP88xx, AP89xx) to share one network connection.

2. Updated RADIUS capability to support Network Port Sharing feature.

Please view

the User Guide for more information.

2.4 BUGS FIXED IN THIS VERSION SINCE RPDU2 v512

1. AP86XX SKUs may temporarily display "Component communications lost with Outlet Board X Meter" alarm during outlet control actions. (NGPDU-401).

2. Event logs for outlet scheduling will sometimes generate events with inaccurate outlet numbers. (NGPDU-568).

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3. When controlling outlets using the SNMP OID "rPDU2DeviceControlCommand" and an IPv6 address, the command may take longer to finish than expected. (NGPDU-634).

4. Bank current screen is missing on the LCD display for SKUs AP8641, AP8841, AP8865, AP8887, AP8941, AP8965. (NGPDU-806).

5. SNMP OID walks will sometimes encounter an unexpected delay. Workaround is to configure the SNMP agent for a short timeout, such as less than 5 seconds. The first retry will return quickly. (NGPDU-531).

3.0 APC Device IP Configuration Wizard v5.0.1

3.1 COMPATIBILITY

apc_hw05_aos_518.bin and prior Network Management Card OS & TCP/IP Stack

4.0 Miscellaneous

4.1 RECOVERING FROM A LOST PASSWORD

See the User's Guide on the APC web site (www.apc.com) for instructions on how to recover from a lost password.

4.2 EVENT SUPPORT LIST

For the event names and event codes for all events supported for a currently connected APC device, first retrieve the config.ini file from the RPDU.

To use FTP to retrieve the config.ini file from a configured RPDU:

1. Open a connection to the RPDU, 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 RPDU.

```
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".

4.3 POWERNET MIB REFERENCE GUIDE

NOTE: The MIB Reference Guide, available on the APC Web site (www.apc.com), explains the structure of the MIB, types of OIDs, and the procedure for defining 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

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(powernet406.mib, downloadable from the
APC web site,
www.apc.com).