Cyclades® ACS Advanced Console Server Appliances
Release Notes
Version 3.3.0-1
November 23th 2009

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Update Instructions
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Please refer to your installation, administrator and user manual for detailed instructions to update the Cyclades ACS console server to version 3.3.0

An upgrade to the Cyclades ACS console server plug-in for DSView® 3 management software is not required. However, the support to the Avocent PM 1000, PM 2000 and PM 3000 Power Management Power Distribution Units (PM PDUs) as well as the ServerTech Smart CDU will not be available through the DSView 3 software if the previous version of the plug-in is used. In order to have all features listed in this release available through DSView 3 software, DSView 3 software version 3.7.1 and ACS console server plug-in version 3.3.1 are required. An appliance firmware package to upgrade from DSView 3 software is also available.

After ACS console server firmware has been upgraded to version 3.3.0-1, it is mandatory that the Web browser cache of any system which intends to be connected to the ACS console server Web interface is cleaned up.

ACS console server firmware version 3.3.0-1 provides an internal mechanism which preserves existing configuration when upgrading from firmware versions 2.6.0 and later. However, it is strongly recommended that you back-up system configuration before the firmware version is upgraded.

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Appliance Firmware Version and Language Support Information
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| Appliance/Product | Firmware Type | Version | Filename | Part Number |
|---|---|---|---|---|
| Cyclades ACS console server (all | Opcode | V_3.3.0-1 | fl0536011.bin | FL0536-011 |

| models) | | | fl0536011.bin.md5 | |
|---|---|---|---|---|

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                        Enhancements
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Please refer to your installation, administrator and user manual for a detailed list of features supported by Cyclades ACS console server version 3.3.0.

Major features of Cyclades ACS console server 3.3.0 include:

**I.** Power Mgmt supports new PM PDUs:
 .  Avocent PMPDUs (PM 1000, PM 2000 and PM 3000 PDU family).
 . ServerTech Smart CDUs with version 6.0g or later.

**II.** pmCommand has new commands to support the measured information of the new IPDUs:
 . powerondelay - Display or configure post turn on outlet delay.
 . poweroffdelay – Display or configure post turn off outlet delay.
 . coldstartdelay - Set the duration of the cold start delay for PDU.
 . currentthreshold - Display or set the threshold for current of one element.
 . powerinfo - Display or clear the power consumption of one element.
 . cumulativepower - Display or clear the cumulative power consumption of one element.
 . powerfactor - Display or reset the recorded power factor of one element.
 . voltageinfo - Display or clear the recorded voltage for one element.
 . sensors - Display or set the environment monitoring sensors.

**III.** Web User Interface – PDU Power Mgmt menu.
 The following pages are upgraded:
 . Outlets Manager -> Show: table with Current, Power Consumption and Alarm state for Avocent PM PDUs
 . View IPDUs Info displays for each detected PDU:
 .. number of banks
 .. number of phases
 .. current, power consumption, voltage and power factor per PDU, Phase and Bank.
 .. environment sensors information
 . Configuration of the current thresholds for the PDU, for each Phase and for each Bank.

**IV.** New Enterprise MIB to address the information from the new PDUs.
 . new tables for PDU, Phases, Banks and Outlets with information about current, voltage, power factor, power consumption.
 . new table with information about environment monitoring sensors.

**V.** OpenSSL package was upgrade from version 0.9.8g to 0.9.8l because of security vulnerability CVE-2009-3555.

**VI.** Update on the Avocent Certificate used by java applet on 'Connect'.

**VII.** The authorization group via RADIUS authentication is accepting new syntax and more than one attribute FRAMED-FILTER-ID in one single message
Now the "group_name=" string and the semicolon in the end of the atrribute are optional.
New Syntax:
      Framed-Filter-Id = "[group_name=] <group1> [, <group2>][;]"
      Framed-Filter-Id += "[group_name=] <group11> [, <group22>][;]"
 Examples:
1) Framed-Filter-Id = "group1, my_group, group4"
   Framed-Filter-Id += "group11, group4"
2) Frame-Filter-Id = "group_name=group1,my_group,group4;"

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## Fixes
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Cyclades ACS 3.3.0 console server release contains the following fixes:
1. SSHD will send during negotiation with the client the list of authentication methods available based on its configuration (/etc/ssh/sshd_config file). Fixed L3 case (SAP 65489604).
2. Sierra Wireless GPRS 750 card is detected as serial device. Fixed L3 case.
3. LDAPS does not require manual configuration in the /etc/ldap.conf file.
4. Support for power control outlets in a daisy-chained through SNMP Set command. Fixed L3 case.
5. When adding a community (SNMP Configuration), if appliance is using Ethernet dual stack mode, the community will be valid for both networks, IPv4 and IPv6. However source should be configured using the IPv4-mapped-Ipv6 address. **In other release notes, you have IPV4 and IPV6, and it's inconsistent in this doc. Check "v" capitalization for consistency.
6. The DEFAULT polling rate was changed from 10 to 20 seconds. Data monitoring in this release collects more data than the old version.
7. Pool of Serial Ports without the IPv6 alias configured can be accessed using one of configured alias.

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## Known Issues / Restrictions
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Known issues from previous versions still present in this one:

1. Power Mgmt is taken more time to get all information from PDUs during start time when there is a big number of PDUs to be detected. During this phase, users can feel some slowness to access the appliance.

2. Configuration of alarm current threshold per segment is not available for Cyclades Intelligent Power Distribution Units (IPDUs) with 2-segment running firmware version 1.8.0 or early

3. Detection of Cyclades IPDU with 2-segment will fail if the unit is daisy chained after an Avocent PM PDU running version 1.3.0. This problem affects the Power Device Add operation through DSView 3 software, because the chain will not be detected.

4. Detection of Cyclades IPDU with 2-segment running firmware version 1.9.1 will fail if the unit is daisy chained after a Cyclades IPDU running firmware version 1.9.2.

5. The configuration of polling rate is by IPDU; however it is effective for the serial port. If the serial port has a chain of IPDUs, the poll rate will be the lesser value. The poll rate needs to be greater than the DEFAULT value (20000 ms), if not, the DEFAULT value will be used.

6. Billing, Modem Replace, Generic Dial and Raw Data 2 ways features were removed from ACS due to size limitation.

7. The support for '-F' option (force upgrade for PDUs without logical connection) was removed from pmfwupgrade command.

8. Web browser Netscape® 8.1 is not supported to access Cyclades ACS console server Web interface.

9. Using ACS console server Web interface, whenever a new user is configured with privileges to manage the outlets of a certain server (Ports -> Physical Ports -> Modify Selected Ports -> Power Management), it is necessary to press buttons "Try Changes" or "Apply Changes" before the new user can be seen in Applications (Applications -> PMD Configuration -> Users Management).

10. Cyclades ACS console server v3.0.0 was the last ACS console server firmware version that was compatible with AlterPath® Manager (APM) v1.4.1.

11. The upgrade of the ACS console server firmware code may fail if the internal files are concurrently being accessed by another process or operation. If this occurs, please try firmware upgrading again until it succeeds. When the upgrade operation is performed from DSView 3 software, make sure to review the Operation Results and confirm it has finished successfully before the ACS console server can be rebooted. It is also recommended that the DSView 3 software status polling is disabled while firmware upgrade is run.
NOTE: Please do not reboot the ACS console server if the firmware

upgrade operation has failed. It will render the console server completely inoperable and require technical assistance.

12. The ACS console server Classic Boot Application will **not** be upgraded to support IPV6 protocol, which means that ACS console server boot configuration will **not** support IPV6 protocol. If firmware upgrade using IPv6 is necessary, the user can do it through FTP or scp using either WMI (Web Management Interface) or CLI (Command Line Interface).

13. IPv6 support will **not** be available for the following services:
    a. IPMI (Intelligent Power Management Interface)
    b. NIS Remote Authentication
    c. Port Virtualization (Clustering)
    d. NFS (Network File System)
    e. LPD (Line Printer Daemon)

14. IPv6 support in Dial-up Connections – ACS console server plug-in Version 1.3.1 for DSView 3.5.1 software (or later) will not allow configuration of IPv6 addresses for dial-up connections. Communication between DSView 3.5.1 (or later) software and appliance units (including ACS console servers) while in contingency mode (modem connection active) will be encapsulated in IPv4 over PPP (Point to Point) dial connections.

15. Samba – client access to Windows File System – was removed from an ACS console server image due to size limitations.

16. The PCMCIA commands suspend, resume and reset are not supported with Linux® Kernel 2.6.22.1.

17. PCMCIA Ethernet - Xircom® cards only work at 10 Mbps when connected to 3Com® and D-Link® hub/switches.

18. When the Hostname Discovery feature is enabled, the "Physical Ports" screen doesn't automatically reflect Hostname changes in the servers connected to the ACS console server serial ports. It is necessary to log-out from the web interface, and then log-in again to refresh the browser cache and load the new names.

19. As DHCPv6 protocol does not provide IPv6 prefix lengths, just IPv6 addresses, there must be an IPv6 router providing advertisement messages with network prefixes to the ACS console server when it is configured to obtain its IPv6 address from a DHCPv6 server. If the prefix is not sent by a router, the ACS console server will become unreachable. This is a limitation of the DHCPv6 protocol.

20. When the IPv6 configuration method for the Ethernet interface is set to DHCP, DHCPv6 parameters (stateful IPv6 address, DNS server and Domain name) are accepted even if the "Managed address configuration" and "Other configuration" flags sent by the IPv6 router are not set.

21. If the authentication method is NIS, the user is advised to create an entry for user id 0 in the authentication server; otherwise many ACS console

server applications may not work. Another option is to always use NIS/Local instead of NIS.

22. Some MS-Windows Servers events may not be correctly formatted.


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Important Configuration Details
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Please note the following Configuration Details for this release:

1. It is necessary to explicitly specify the local and remote IPv6 addresses when using PPP connections with IPv6, otherwise the PPP connection will not work (see your installation, administrator and user manual for configuration details).

2. When adding an IPv4 community (SNMP Configuration) and the network is using dual-stack mode, you should configure as source an IPv4-mapped-Ipv6 address.

3. When editing file /etc/resolv.conf manually, there should be no spaces after the addresses configured for DNS servers.

4. The syntax for /etc/ssl_version.conf is:

*SSLVER=SSLv2 or SSLVER=SSLv3 or SSLVER=SSLv23*

*SSLCIPHER=DEFAULT or SSLCIPHER=HIGH or SSLCIPHER=MEDIUM or SSLCIPHER=LOW*

5. When configuring X.509 Authentication in ssh server, the file /etc/ssh/authorized_keys must allow read and write permissions. This can be done by issuing the commands below:
   *chmod 600 /etc/ssh/authorized_keys*
   *chmod 755 /*
   *config runconfig*
   *config savetoflash*

6. The 'Hostname Discovery' feature
   It requires the following configuration in the serial port:
   a) Connection Protocol: Console (Telnet), Console(SSH) or Console(SSH/Telnet)
   b) DCD State: Regard
   c) Data Buffering: Enabled
   d) Data Buffering Destination: Local
   e) Data Buffering File Size (bytes):  100 or more
   f) Hostname Discovery: checked
   g) Timeout(seconds): 10

   It has by factory default the following configuration:
   a) Probe String: "\n"

b) Answer String: `"([A-Za-z0-9\._-]+)[ ]+[Ll]ogin[:]?[ ]?$"`
   `This answer will match most of Unix`

It uses the following regular expression in Answer String to match the hostname: `([A-Za-z0-9\._-]+)`.
`Examples of Answer String:`
a) `Most of Linux machines, the hostname comes in the`
   `login prompt, for example "MY-Linux login:"`
   `The answer string "([A-Za-z0-9\._-]+)[`
   `]+[Ll]ogin[:]?[ ]?$" will get MY-Linux as the`
   `hostname of the server.`
b) `Cisco routers, the hostname comes in the prompt, for`
   `example "Cisco2522>".`
   `The answer string "([A-Za-z0-9\._-]+)[>#]" will get`
   `the Cisco2522 as the hostname of the device`
c) `ACS 6000 appliance, the hostname comes in the middle`
   `of the banner, for example "ACS6000 2.0.1.3-20090507`
   `MY-ACS6048 ttyS0"`
   `The answer string "ACS6000 [^ ]* ([A-Za-z0-9\._-]+)`
   `ttyS" will get the MY-ACS6048 as the hostname of the`
   `ACS 6000.`

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## Change Log
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The following changes were made in this release:

1. Pmd_ng daemon was modified to support the Avocent PM PDU and the ServerTech Smart CDU.

2. The following files were modified to remove the support for Billing and others customized features (modem replace, raw data 2 way, generic dial):
   - /etc/portslave/pslave.conf
   - /etc/config_files
   - /etc/daemon_list

3. The /etc/ldap.conf was modified to add the following line:
   'tls_checkpeer=no'