

Cyclades® ACS Advanced Console Server Appliances  
Release Notes  
Version 3.1.0  
January 2, 2007

This document outlines:

1. Update Instructions
2. Appliance Firmware Version and Language Support Information
3. Enhancements
4. Fixes
5. Known Issues
6. Change Log

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Update Instructions  
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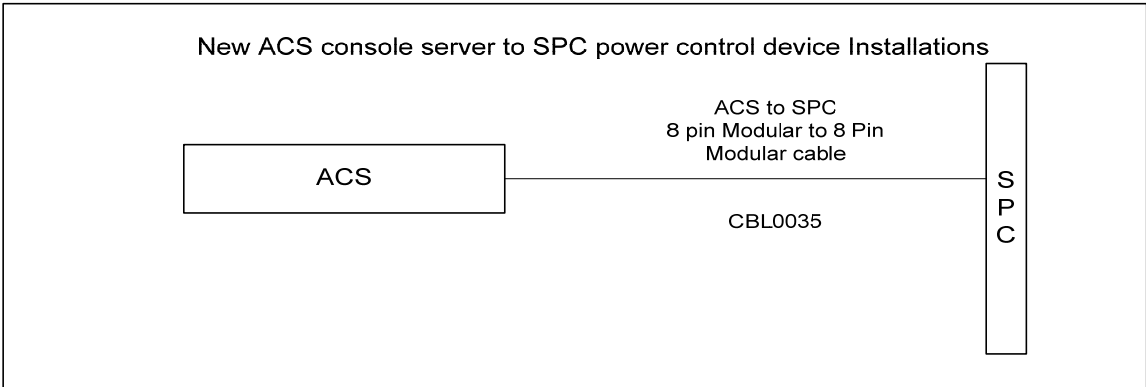
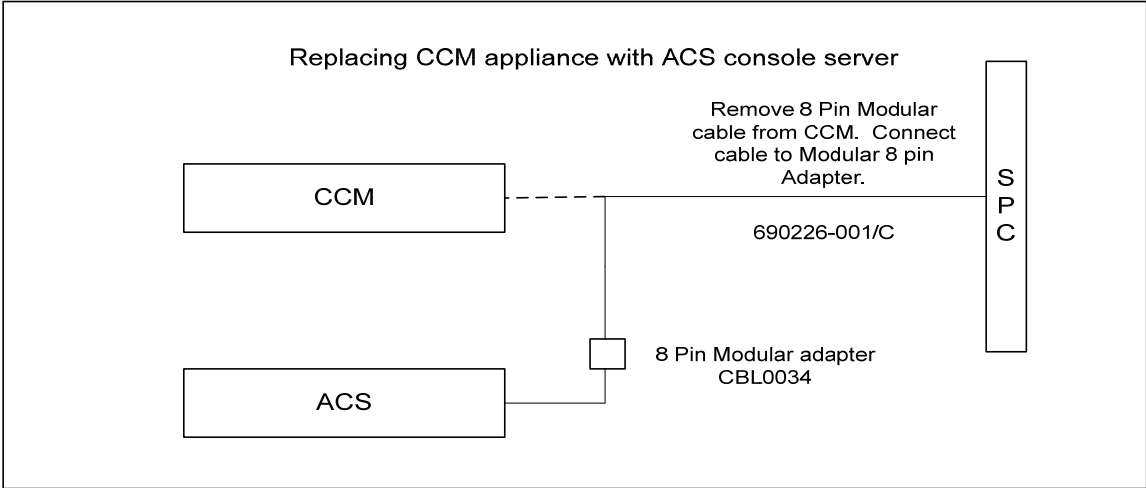
Please refer to your Installation, Administrator and User manual for detailed instructions to update the Cyclades ACS appliance to version 3.1.0.

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Cabling Update  
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To connect third-party IPDUs to the Cyclades ACS appliance requires special cabling and adaptors. These cables and adaptors are available from Avocent or you can build your own cable as needed.

If you are building your own cables, the serial pin-out information for the ACS console server can be found in the Cyclades ACS Installation/Administrator/Users Guide under chapter 2, pages 15 and 21.

If you are buying cables from Avocent, you will need part numbers CBL0034 and CBL0035 for connecting SPC IPDUs. If you are replacing a CCM appliance with Cyclades ACS products, you will need the CBL0034 adaptor. If you are connecting an ACS console server to an SPC IPDU, you will need the CBL0035 adaptor as displayed in the following diagrams:



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Appliance Firmware Version and Language Support Information

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Appliance/Product	Firmware Type	Version	Filename
AlterPath® ACS	Opcode	V_3.1.0	FL0536002.bin

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Enhancements

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This release contains the following enhancements:

- I. **Power Management Re-design** - One of the major enhancements made in Cyclades ACS v3.1.0 is the Power Management Re-design and Third Party Power Management Support. As a result of these two major additions, a few other enhancements were added which are listed below:

- 1. Third Party Power Support**
  - a. In addition to the Cyclades PM, Cyclades ACS 3.1.0 supports SPC and ServerTech Switched CDU power products.
  - b. Both SPC and Server Tech products are managed from DSView 3 software version 3.3.
  - c. A license is required to support Server Tech's Switched CDU products. License activation is done through the DSView 3 management software interface.
- 2. IPDU auto-detection**
  - a. Once an IPDU is plugged in one of the serial ports configured as "power management", its speed, type, model and name can be automatically detected.
  - b. If auto-detection is not enabled, the user will have to specify the IPDU type and speed.
  - c. With the IPDU auto detection feature, adding and dropping IPDUs in a daisy chain can be dynamic, eliminating the re-configuration and re-association of power outlets.
- 3. IPDU Status Polling Performance Enhancement**
  - a. Enhancements have been made so that the new power management design implementation maintains an internal cache and allows for IPDU status polling configuration.
  - b. Instead of sending requests for information on-demand, the internal information cache is constantly updated. This decreases the response time when the user wants to get information about the IPDUs.
  - c. In large deployments, this performance enhancement eliminates long waits to receive outlet information from ACS units.
- 4. Dynamic IPDU Identification**
  - a. In Cyclades ACS v3.1.0, each IPDU is assigned with a unique IPDU ID, which will be the primary reference for that IPDU.
  - b. Outlets will be referred as <IPDU ID>[<outlet number>].
  - c. As IPDU ID configuration is stored in the IPDU, the references to that IPDU in the appliance configuration will not change when the IPDU moves to another port or to another position in a daisy-chain.
- 5. Command synchronization across serial ports**
  - a. The command line interface (pmCommand) and the menu interface (pmMenu) are not bound to a single serial port. Therefore, a single command can be issued to IPDUs connected to different serial ports.
  - b. Power cycle commands to outlets from different serial ports will be synchronized (no outlet in the outlet list will be turned on until all outlets from the list have been turned off).
- 6. Outlet groups**
  - a. Outlet groups can be configured as a set of one or more outlets, which can be defined as <IPDU ID>[<outlet number>] or <outlet name>.
  - b. Groups of outlets that belong to a server from a CAS port, which were called "multi-outlets" in previous versions, will be treated as special outlet groups and will be automatically generated as part of port configuration.
- 7. User access list**
  - a. Information about the outlet permissions for each user will be consolidated in a simple file (/etc/pmd.users), which will assign a list of outlets for each user.
  - b. The access list accepts a variety of entry types, such as "all", <IPDU ID>[<outlet number>], <outlet name>, or <outlet group>.
- 8. Real-time answer to PM commands**
  - a. Previous implementations made the answer for complex PM commands (pmCommand and pm) available to the user only after the command had been completely processed. Now, partial answers are shown almost immediately after the appliance starts receiving answers from the IPDU.

## **9. Outlets in Web Interface grouped by IPDU**

- a. The previous Web Interface showed the list of all outlets (from all IPDUs) in one page, making the performance low when too many IPDUS were attached to the appliance. Now the user chooses the IPDU before entering the outlet management page, which will contain only outlets from that IPDU hence making outlet management extremely easy.

**10. New event logs available.** See Change Log section below, items 5 and 6.

**11. New OIDs available.** See Change Log section below, item 7.

## **I. Security Breaches covered by OpenSSL & OpenSSH package upgrade**

- a. Upgrade the OpenSSL package from 0.9.8 version to 0.9.8d version
- b. Upgrade the OpenSSH package from 4.3p1 version to 4.4p1 version

## **II. Flexible Day Light Savings Configuration**

- a. Cyclades ACS v.3.1.0 supports generic way of configuring Day Light Savings feature.
- b. A user can configure any month (Jan-Dec), week (1, 2, 3, 4 & 5), day (Mon-Sun) and any time of the day for Day Light Savings
- c. With the passing of Energy Policy Act of 2005 by united States Congress (which will be effective starting in March 2007), this feature will allow easy configuration of such changes in Day Light Savings laws.

## **III. Linefeed suppression extended to SSH**

- a. Linefeed suppression option was extended to SSH sessions.
- b. Configuration is the same as for Telnet sessions:
  - when configured as 0, linefeed suppression will not be performed;
  - when configured as 1, linefeed suppression (after a CR) will be performed;
  - when configured as 2, NULL suppression (after a CR) will be performed.

## **IV. Backup Appliance access via dial-up**

- a. PPP over a PCMCIA modem or isdn card can be configured independent of the Unit Authentication. This new parameter will allow access to the appliance when the primary network is down and the unit authentication is performed in a remote sever. The default value is follow unit authentication (unit-auth).

## **V. Flexible Configuration of Tacacs+ Group Authorization**

- a. Any Port can be mapped to a host name or IP address and to the number of the Serial port that the user has authorization to access.
- b. Any Port can be mapped to a host name or IP address and to any user that has authorization to access all serial ports of Cyclades ACS appliance.
- c. Following is the new syntax for raccess attribute that will be accepted by ACS:  
portXX=<ACS hostname or ACS IP address>/ttySnn  
portXX=<ACS hostname or ACS IP address>/ttynn  
portXX=<ACS hostname or ACS IP address>/any  
where: XX - anything  
nn - number of the serial port that the user has authorization to access.  
any - the user has authorization to access all serial ports of the ACS appliance.

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## Fixes

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This release contains the following fixes:

1. DCD feature works for a socket session in ACS1 with hardware flow control enabled.
2. Java Applet Serial Session works for passwords greater than 9 characters.
3. Tacacs+ logs show correct timestamp for old Timezone.
4. SNMPD daemon works normally when frequent snmpwalk commands are issued.
5. Event generation for Windows 2003 servers performs XML macro expansions.
6. Line feed suppression works with Cyclades ACS appliance using DSView 3 software Putty.

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## Known Issues

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This release contains the following known issues.

1. Web browsers Netscape 8.1 and Microsoft Internet Explorer 7.0 are not supported in ACS 3.1.0.
2. Using WebUI, whenever a user is entered to manage the outlets of a certain server in Ports domain (Physical Ports->Modify Selected Ports->Power Management), it is necessary to Try or Apply the change before it can be seen in Applications domain (PMD Configuration->Users Management).
3. Cyclades ACS v3.0.0 was the last ACS firmware version that was compatible with AlterPath Manager (APM) v1.4.1.
4. The upgrade of ACS firmware may fail if the directory /mnt/flash is being accessed by another entity. If this occurs, please re-try upgrading again. When the upgrade operation is performed from DSView 3 software, make sure to review the Operation Results. It is also recommended that the DSView 3 status polling is disabled when firmware upgrade is run. NOTE: DO NOT re-boot the unit if ACS firmware upgrade fails either way. It will result into flash corruption.

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## Change Log

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The following changes were made in this release.

1. CLI and Web interfaces were modified to support configuration changes in the redesigned Power Management daemon.
2. PM Firmware upgrade command (pmfwupgrade) syntax changed:  
pmfwupgrade [<options>] {all | -s <serial device name> | <IPDU id>} [<filename>]  
<options>:  
-h Show this help message and exit  
-f Do the upgrade without asking any question  
-F Do the upgrade without logical connection with PM  
-v Print messages about the execution  
-s <serial device name>: Serial port name where the PM unit is connected  
<IPDU id>: IPDU identification name  
<filename>: The new firmware to upload to the PM unit. Default:/tmp/pmfirmware

3. The PM menu interface command was changed from pm to pmMenu, and it will not require the serial port as parameter.
4. The PM command line interface command (pmCommand) will not require the serial port as parameter either; however, it will behave like the "old" pmCommand if serial port is passed as parameter.
5. Event Notifications. Following are the events generated by the appliance that were changed to support the 3rd Party IPDU:
  - a) Event # 22: A power device attached to the appliance is detected to be online.
  - b) Event # 23: A power device attached to the appliance is detected to be offline.
  - c) Event # 24: An outlet on a chain of power device has been turned on.
  - d) Event # 25: An outlet on a chain of power device has been turned off.
  - e) Event # 26: An outlet on a chain of power device has been issued the cycle command.
  - f) Event # 27: A power device attached to the appliance has exceeded the maximum threshold for total load.
  - g) Event # 28: A power device attached to the appliance has gone beneath the minimum threshold for total load.
  - h) Event # 32: The appliance has started an upgrade of the PM software.
  - i) Event # 33: This trap is generated when PM Firmware upgraded is done to indicate the result.
6. Event Notifications. Following are the new events generated by the appliance:
  - a) Event # 36: the outlet state has changed to on.
  - b) Event # 37: the outlet state has changed to off.
  - c) Event # 38: detected on sense failure in one power device socket.
  - d) Event # 39: detected off sense failure in one power device socket.
  - e) Event # 40: the socket name has changed.
  - f) Event # 41: the power device has exceeded the maximum threshold for total load of an inlet.
  - g) Event # 42: the power device has gone beneath the minimum threshold for total load of an inlet.
7. Cyclades MIB, new OIDs:
  - a) cyPMUnitTable: Sequence Interval and Cycle Interval
  - b) cyOutletTable: Minimum On Time, Minimum Off Time and Wakeup State.