

Cyclades® PM IPDU Appliances
Release Notes
Version 1.9.1
June 19, 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

Update Instructions

Please refer to your Installation, Administrator and User manual for detailed instructions to update the Cyclades PM appliance to version 1.9.1.

A firmware package to upgrade from DSView® 3 software is also available.

Appliance Firmware Version and Language Support Information

Appliance/Product	Firmware Type	Version	Filename
Cyclades PM	Opcode	V_1.9.1	fl0542002.bin
Cyclades PM	DSView 3 package	V_1.9.1	fl054202.pkg

Enhancements

Cyclades PM v1.9.1 contains the following enhancements.

- I. **Support for Cyclades PM42 model** – Cyclades PM42 is the first three-phase IPDU in the Cyclades PM family. Though Cyclades PM42 uses the same microcontroller as the other models, its hardware has several differences. Cyclades PM v1.9.1 firmware has support for the new features used in the Cyclades PM42 appliance:

1. **Current per phase**

As each phase has a current sensor, the *current* command returns the current for all three phases (named X, Y and Z). Also, the *current* command can take the phase name as argument; in this case, only the current on that phase will be displayed.

2. **Alarm per phase**

The alarm threshold can be configured per phase. This can be done by adding the phase name to the command to configure the threshold. If the phase name is not defined, the configuration will apply to all phases.

3. Voltage

The Cyclades PM42 IPDU has a voltage sensor for each pair of phases (XY, YZ and XZ). Therefore, the *voltage* command returns the voltage for each pair. The pair can also be entered as an argument of the *voltage* command; in this case, only the voltage on that pair will be displayed.

4. LED Display

The Cyclades-PM42 IPDU has an LED matrix display instead of the 7-segment displays that are used in other models. Also, the LED display is able to display either current or voltage on each of the sensors. To accommodate this change, the *display* command will accept other arguments besides the orientation (0/180). The user can choose to display current or voltage and configure the time to cycle through the sensors.

5. Hardware over current protection

The Cyclades PM42 IPDU has an electronic circuit breaker that can be reset either by pushing a button or by a command. Through the *hwocp* command, the user can check the HW over current protection status and reset it if the circuit breaker is tripped. When the circuit breaker is tripped, all outlets that are configured to be on will be displayed *OFF+* as outlet status.

6. Outlet status sensor

The Cyclades PM42 IPDU has the capability of sensing whether the outlet is on or off, while other models display the outlet status based on the latest outlet command. Due to this feature, the *status* command will add a '!' character after the outlet status if the sensed outlet status doesn't match with the configured outlet status. This mismatch is usually due to hardware failure.

II. Configurable cycle delay

In the *cycle* command, the interval to turn on the outlets was fixed at one second. In the 1.9.1 version, this interval is configurable by the *outcycledelay* command. The default value for the outlet cycle delay will be 15 seconds.

Fixes

Cyclades PM 1.9.1 contains the following fixes:

1. *dbsync* command does not hang anymore when there are too many users in the database.
2. outlet commands (e.g *on*, *lock*, *interval*) invalidate outlet ranges in which at least one of the outlets is out of bounds (e.g. 88-130).
3. user can specify the IPDU as argument for maximum *current/temperature/humidity reset* command.
4. the watchdog timer is active at all times, even during initialization; this minimizes the risk of hanging after the firmware upgrade is interrupted.

Known Issues

Cyclades PM 1.9.1 contains the following known issues:

1. *dbsync* command in version 1.9.1 is not compatible with 1.9.0, so issuing this command in a chain with both versions may not synchronize correctly the user databases.
2. PM doesn't invalidate some commands when there are more arguments than specified in the syntax.

3. The boot message still mentions *AlterPath*. This is necessary in order to assure daisy-chaining compatibility with older versions.
4. The version 1.9.1 is integrated with Cyclades ACS version 3.1.0-1, with full support. It is also integrated with Cyclades OnBoard version 3.1.0 and Cyclades KVM version 3.0.0, with limited support (new PM features are not manageable).

Change Log

The following changes were made in this release:

1. All references to *AlterPath® PM* were changed to *Cyclades PM*, except the boot message.
2. All references to *Cyclades Corporation* were changed to *Avocent Corporation*.
3. The default alarm threshold was changed to 80% of the maximum current in the Cyclades PM IPDU.
4. The following commands have been changed or created:
 - alarm
Usage: alarm [<ipdu number or ID> [<threshold> [X|Y|Z]]]
(for Cyclades PM42 model)
 - current
Usage: current reset [<ipdu number or ID>]
current [<ipdu number or ID> [X|Y|Z]] (for Cyclades PM42 model)
current [<ipdu number or ID>] (for other models)
 - display
Usage: display [<ipdu number or ID> [<0|180> <I|V>[<cycle time>]]] (for Cyclades PM42 model)
display [<ipdu number or ID> [<0|180>]] (for other models)
 - interval (the interval cannot be configured with decimals in the Cyclades PM42 IPDU).
 - outcycledelay
Usage: outcycledelay [<delay>]
 - voltage
Usage: voltage [<ipdu number or ID> [XY|YZ|XZ]]
 - hwocp
Usage: hwocp [<ipdu number or ID> [reset]]