High Availability Networking (Part II)

The Problem: Network Downtime = Customer Unhappiness

While path protection and restoration (see Path Protection. PDF) provide redundant network connections, the failure of an individual component such as a power supply in a network element can bring a network to its knees.

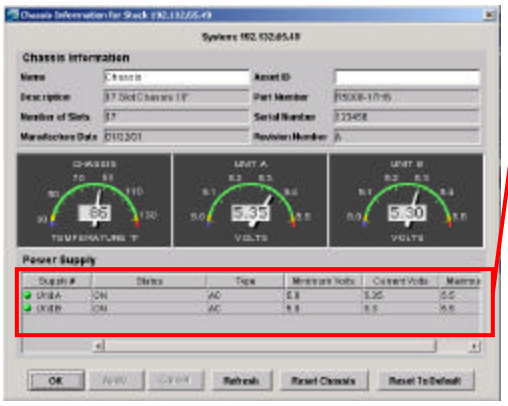
The Solution: Hot Swap Modules and Load-Sharing Power Supplies

Metrobility's chassis-based solutions support dual load-sharing, hot swap power supplies and hot swap port cards and network management cards.

Failed power supplies are common, but frequently go unnoticed until they have created a critical situation. Dual power alone only restores power from a second supply should the first one fail. *Load-sharing* power, a unique Metrobility feature, on the other hand, actually keeps the power balanced between the two supplies should one begin to fail. Early notification of the failing supply through proactive management allows network administrators to identify the problem and replace the faulty supply before any network disruption occurs.

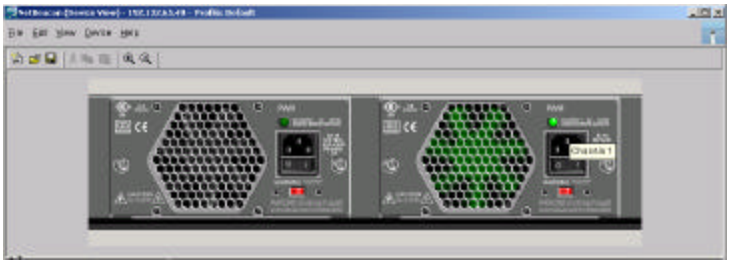
Early alert through proactive management

The analog monitoring capabilities of NetBeacon and WebBeacon provide the proactive management capabilities required to alert network managers of 'out-of-range' conditions.

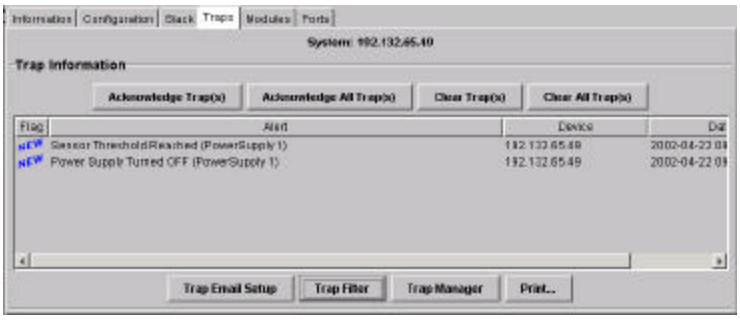


Information provided in the power supply status includes:	
Supply #	A device may have one or two power supplies, denoted Unit A (on the left) and Unit B (on the right).
Status	Operational status of the power supply, either ON or OFF.
Type	Type of power supply: AC or DC.
Minimum Volts	A predefined value representing the minimum voltage that the power supply should output.
Current Volts	The current voltage output by the power supply.
Maximum Volts	A predefined value representing the maximum voltage that the power supply should output.

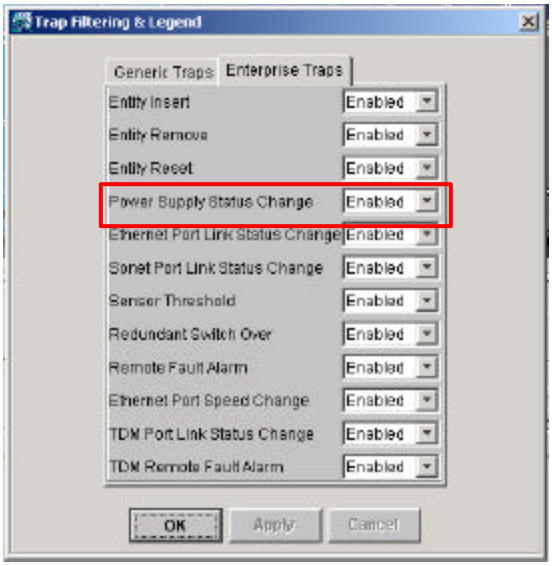
Double-clicking the chassis image in the upper half of the NetBeacon screen will show the rear of the chassis. Both power supplies are connected. Fans are operating normally and show as green in this view.



Power supply A has been disconnected. The fan has stopped running no longer shows as green.



The Traps folder displays a message (SNMP Trap) indicating that Power Supply A has been turned off. A message can also be sent if the power supply goes above or below the acceptable voltage range.



The Power Supply Status Change Traps is an Enterprise Trap and may be enabled or disabled.

The Benefit: Save time and money = Happy End Users

Metrobility offers a number of options to maintain high availability networking. Load-sharing dual supplies keeping power supplied at a constant voltage to the chassis while enabling proactive monitoring enables network managers to replace power supplies before they fail. This translates into a more efficient network with higher uptime for end users.

Product Information

Dual load-sharing power supplies are available for the following Metrobility chassis products.

Radiance

R5000-17HS	17 Slot Chassis with Two Bays for Optional AC and/or DC Load-Sharing Power
R1000-AAF	2 Slot Chassis with Two Fixed, Load-Sharing, Front Facing AC Power Supplies
R1000-AAR	2 Slot Chassis with Two Fixed, Load-Sharing, Rear Mounted AC Power Supplies
R1000-ADF	2 Slot Chassis with One Each Fixed, Load-Sharing, Front Facing AC and DC PS
R1000-ADR	2 Slot Chassis with One Each Fixed, Load-Sharing, Rear Mounted AC and DC PS
R1000-DDF	2 Slot Chassis with Two Fixed, Load-Sharing, Front Facing DC Power Supplies
R1000-DDR	2 Slot Chassis with Two Fixed, Load-Sharing, Rear Mounted DC Power Supplies
R400-02HS-1A	2 Slot Chassis with One External AC PS, (supports two load-sharing supplies)

Lancast

7500-02HS-1A	2-slot Chassis, one AC power supply (supports two load-sharing supplies)
7500-12HS-2A	12-slot Chassis with two Load-Sharing, Front-Facing AC Power Supplies
7500-12HS-2D	12-slot Chassis with two Load-Sharing, Front-Facing DC Power Supplies
7500-17HS-2A	17-slot Chassis with two Load-Sharing, Rear Mounted AC Power Supplies
7500-17HS-2D	17-slot Chassis with two Load-Sharing, Rear Mounted DC Power Supplies

For additional information Metrobility's high availability product features, contact Metrobility Optical Systems at 1.877.526.2278 or 1.603.880.1833, or visit us at www.metrobility.com.