Deploying and Configuring the New HP Rack and Power Manager

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HP Rack and Power Manager 1.0

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What is HP Rack and Power Manager?

- HP Rack and Power Manager is a Enterprise class Web-based application that enables administrators to manage large numbers of devices (HP Uninterruptible Power Systems "UPS" and Console Management Controllers "CMC") from a single management console.
  - Tower UPSs—UPS T700, UPS T1000 XR, UPS T1500 XR, UPS T2200 XR
  - Rack UPSs—UPS R1500 XR, UPS R3000 XR, UPS R6000, UPS R12000 XR
  - CMCs—Rack environmental monitoring devices
- A browser interface provides secure remote access (128-bit SSL encryption) to management agents anywhere on your network
  - Internet Explorer version 6.0 or Netscape Version 6.2 and Later

- Rack and Power Manager software can be configured to send alert traps to HP Insight Manager or other SNMP-management programs or run as a standalone power management system.

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HP Rack and Power Manager 1.0 Features

- UPS
  - Configure redundant UPSs to support servers with multiple power supplies (New Feature)
  - Manage a graceful shutdown of attached equipment during utility power failures
  - Manage independent UPS load segments to provide separate power control of connected equipment
  - Shut down and reboot any UPS and attached equipment based on a user-specified schedule (One Time, Daily & Weekly)
  - Shut down and reboot any UPS and attached equipment based on load segment
  - Delay restart by load segment after a power outage to sequence the startup of system components
  - Display UPS logs for analysis (New feature Graphical Logs)
  - Monitor the status of UPSs and perform UPS diagnostics

HP Rack and Power Manager 1.0 Features

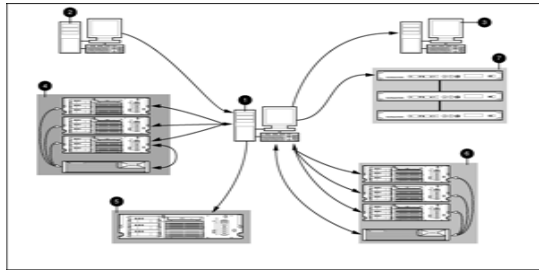
- CMC
  - Configure and monitor the CMC sensors and options (air temperature, shock/vibration, humidity, intrusion, smoke detection, and front and back door locks)
  - Display CMC logs for analysis (New feature Graphical Logs)
  - Remotely or locally monitor and controlling rack environments monitor set thresholds for CMC sensors and to take action when conditions are detected to be outside the threshold.

HP Rack and Power Manager 1.0 Features

- Customize alerts
  - Send email notification messages
  - Send broadcast notification message
  - Send SNMP traps
  - Issue computer commands
  - Perform device actions

- General
  - Can be configured to take action on multiple devices based on an event of a single device.
  - Rack and Power Manager has the ability to issue commands to servers that the software recognizes.
  - Scripted installs for System and Serial Relay Agents.

Rack & Power Manager Architecture



- **Rack and Power Manager leverages a distributed architecture that consists of three major components:**
  - Management Server
  - System Agent
  - Serial Relay Agent

Management Server

- **The Rack and Power Manager application runs on a single server, which acts as the management console. The Management Server communicates with discovered and managed CMCs and UPSs throughout the network. The Management Server continuously polls devices for status. Once an alert is detected the Management Server acts on configured event policies. Additional features of the Management Server include:**
  - Polling the network for supported UPSs, CMCs, and System Agents (automatic discovery)
  - Controlling security and authentication
    - Individual logon accounts
    - SSL implemented
  - Generating status and configuration pages for authenticated users connecting through a Web browser
  - Generating commands to send to the System Agents to prepare for, initiate, and cancel tasks
  - Notifying administrators of alerts with email messages, email pages, and pop-up messages
  - Sending alert traps to Insight Manager and other manageability software programs that receive SNMP traps
  - The Management Server operates on a single server.

HP Rack and Power Manager 1.0

HP Rack and Power Manager 1.0 Agents

System Agent

- **The System Agent is the software component that runs on a server and allows Rack and Power Manager to gracefully shut down the operating system of that server or to take another pre-configured action in case of a specific event.**
  - Install the System Agent on any server that is attached to a UPS and on any server that Rack and Power Manager uses to initiate a command.
  - A server that has a System Agent installed is discovered and recognized by Rack and Power Manager as an Agent.

- Serial Relay Agent
- **The Serial Relay Agent is the software component that runs on a server and allows Rack and Power Manager to communicate with a UPS that is serially attached to a network-connected server.**
  - Install the Serial Relay Agent on any server that is serially attached to a UPS

Supported Operating Systems

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Management Server

- Microsoft Windows NT 4.0 Server with Service Pack 6
- Microsoft Windows NT 4.0 Server Enterprise Edition with Service Pack 6
- Microsoft Windows 2000 Server with Service Pack 2
- Microsoft Windows 2000 Advanced Server with Service Pack 2
- RedHat Linux 7.2, 7.3 Server

Supported Operating Systems

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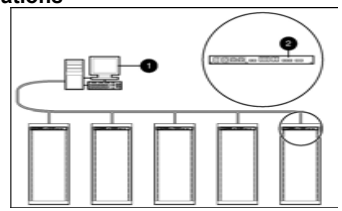
System & Serial Relay Agents

- Microsoft Windows NT 4.0 Server with Service Pack 6
- Microsoft Windows NT 4.0 Server Enterprise Edition with Service Pack 6
- Microsoft Windows 2000 Server with Service Pack 2
- Microsoft Windows 2000 Advanced Server with Service Pack 2
- Novell Netware 5.1 with Support Pack 5
- Novell Netware 6.0 with Support Pack 2
- RedHat Linux 7.2, 7.3 Server

HP Rack and Power Manager 1.0

- **Supported Hardware Configurations**



Network Connected CMC

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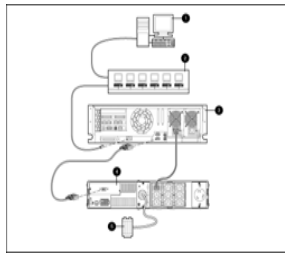
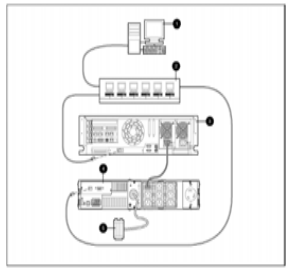
Supported Hardware Configurations



- Single UPS Serial Connected



- Single UPS Network Connected

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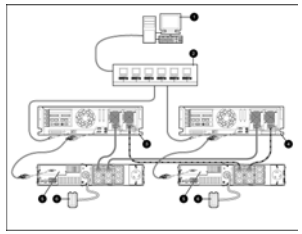
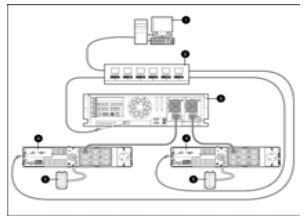
Supported Hardware Configurations





- Redundant UPS's Serial Connected

- Redundant UPS's Network Connected

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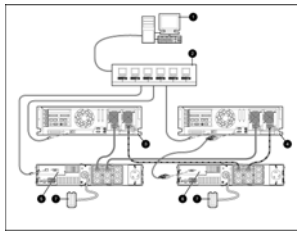
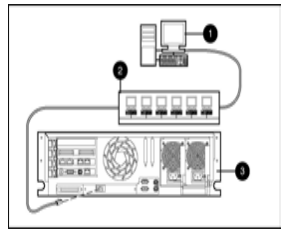
Supported Hardware Configurations



- Redundant UPS's Serial / Network Connected



- System Receiving Commands from HP Rack and Power Manager

HP Rack & Power Manager 1.0

- Open Source Software used in Rack and Power Manager 1.0

- **Open Source Software used in Rack and Power Manager 1.0**

Software	Version	Function
Install Anywhere	4.5 Enterprise Edition	(Application installer)
Open SSL	0.9.6g	(Security Application)
Interbase	1.0.0 Build 768	(Database)
GoAhead	2.1	(Web Server)
Java (JRE)	1.3.1_06	Windows (IE &Netscape)
	1.4.1_01	Linux (Netscape)

HP Rack & Power Manager1.0

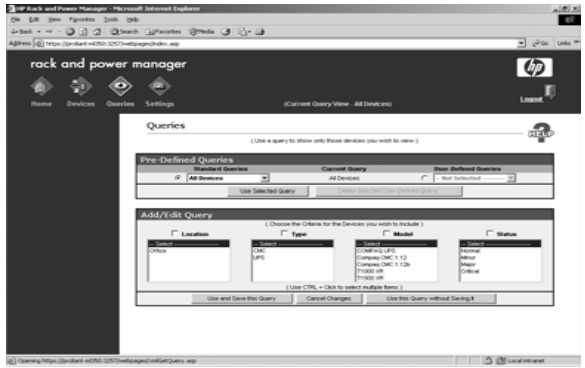
- Rack and Power Manager 1.0 Release version:
  - Production release version, RC4 = 1.0.1 (Build3)
- How is Rack and Power Manager 1.0 going to be distributed?
  - Software download via the WEB www.hp.com/products/ups
  - CD (Rack and Power Manager 2.0) shipped with UPS and CMC

Home Page

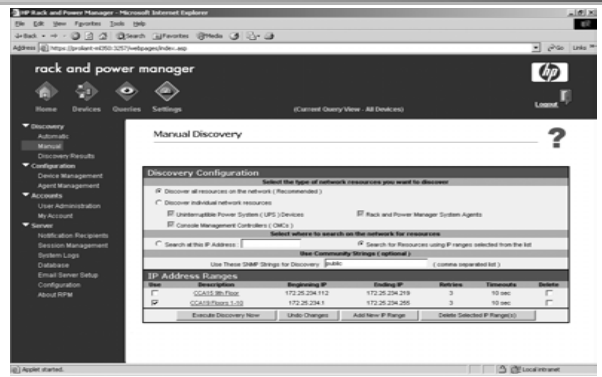
rack and power manager
Home
Devices
Queries
Settings
Logout
Home
Device Search
Enter the name of the device:
Search
Home Page Settings
Show this page when RPM starts
Apply
Current Status

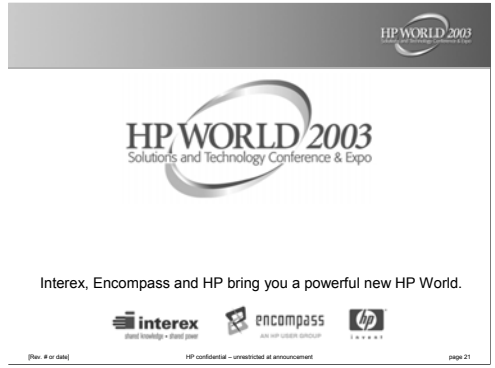
Devices Page

Queries Page



HP Rack and Power Manager 1.0 Features

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