Celebrating 30 Years 1984-2014

Server Technology
Quality Rack Power Solutions

Sentry Power Manager

Rack-Level Data Center Power Monitoring & Management

If you manage a datacenter, we have a solution for you.

How do I...

Get ultra-reliable power distribution within the data center along with the ability to actively manage it?

Monitor power and energy usage at the device, rack, and upstream for all enterprise data centers?

Generate trending graphs and advanced analytics with the click of a mouse?

Improve the efficiency of power usage, floor-space usage, and personnel time usage?

Power Distribution

No matter the rack/cabinet power needs, Server Technology® has the solution for you. Known for quality and accuracy, the PIPS® and POPS® CDU® family provides you peace of mind.

Monitoring & Management

Keep tabs on all aspects of power usage and environmental conditions throughout your data center installations. Be alerted as conditions change so that uptime can be maintained.

Trending & Analytics

Create custom NOC views with live-updating trends and send critical reports and trends to key personnel on a schedule. Predict capacity bottlenecks and maintain redundancy.

Efficiency Improvements

Maintain optimal capacity in the rack while maintaining efficient use of energy at all levels. Optimize use of your time through unique management and configuration tools.

Introduction to Sentry Power Manager (SPM)

The one solution to help you manage today's data center challenges.

Designed by the experts.

No one knows or understands data center power better than the data center power experts at Server Technology. Our laser focus on power and performance at the cabinet level gives us the knowledge, insight and expertise to analyze, evaluate and advise you on how to best achieve your goals — whether they're centered around power management, efficiency, capacity planning, remote management, PUE/DCiE or meeting green initiatives.

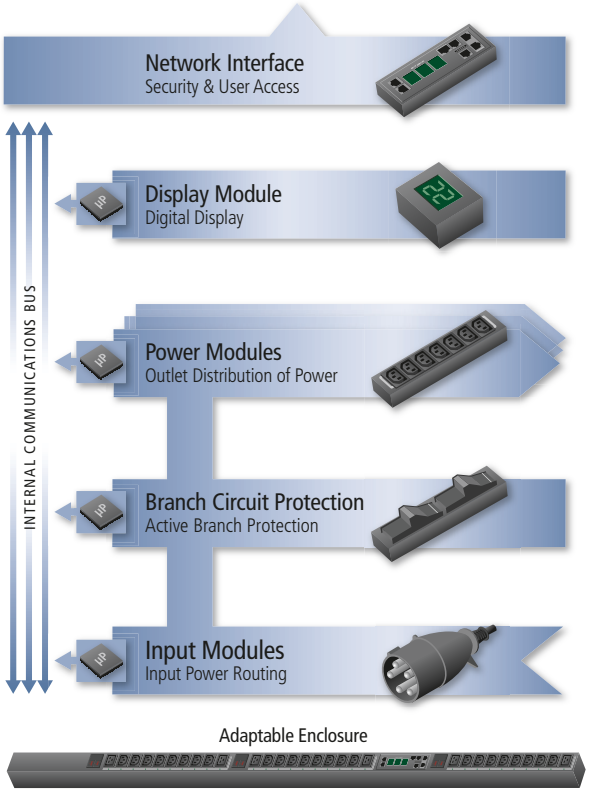
What is Sentry Power Manager?

Sentry Power Manager is the most comprehensive and affordable rack-level solution to measure, monitor and trend power and environmental information in your data center.

We hear about your challenges every day. Increased power costs with lower power availability. The need for more and more computing power. Higher density cabinets and capacity planning issues. How to continuously measure and report on your cabinet power consumption and comply with your company's green initiatives. You need help. You need SPM and Server Technology cabinet power distribution units (CDUs) — the complete solution for rack-level or device level power measurement and management.

Start with the world's most reliable data center rack CDUs.

For over 30 years, Server Technology has been the industry leader in providing the world's biggest companies with data center solutions including the highest quality rackmount power distribution units. Intelligent cabinet-level power distribution units (CDUs) set the industry-standard for quality, reliability and absolute performance.



What makes our CDUs the most trusted in the industry?

Our three dozen patented innovations in rack-based power have enabled us to create our unique "Quality Power Architecture" which is found within our entire Sentry CDU hardware product line.

QPA: The foundation of the world's most reliable CDUs.

Server Tech's Quality Power Architecture (QPA) is the foundation that enables the Sentry CDU solutions to support the quality, breadth and flexibility that are the hallmarks of Server Tech's exceptional line of rackmount CDUs. QPA enables Server Technology to deliver the industry's most comprehensive line of rack-based CDUs that are guaranteed to perform to rated specs over their entire lifespan. Service and reliability unseen anywhere else. Sentry Power Manager leverages QPA to create the perfect system of power across your enterprise.

SPM & CDU Integration

Setup Intelligent CDUs & Sentry Power Manager in a SNAP

It's a SNAP!

Log on. Auto Discover. Auto Configure. Relax.

Configuring your rack-level CDU network has never been easier. Especially if you have hundreds or thousands of CDUs in your network. With Sentry Power Manager's exclusive SNAP technology, you can manage your entire network from a single user friendly dashboard.

The combination of Server Technology's intelligent cabinet power distribution units (CDUs) and Sentry Power Manager (SPM) enhanced by Server Tech's SNAP technology gives you the most comprehensive system of power available for rack-level data center power distribution and data center control, monitoring and measurement.

SNAP Functionality.

- Plug & Play CDU installation and configuration
- Plug CDU into network, right out of the box
- SPM auto-discovers CDU and brings into SPM
- Create custom templates for easy CDU configuration
- CDU is configured and ready to go, providing power information right away
- Once discovered, SPM can push SNAP configuration templates to CDU

vmware READY

CDU Product Selector

	Per Outlet Power Sensing (POPS)	Input Current Monitoring	Environmental Monitoring	Access, Security & Communications	Expansion Module	Individual Outlet Control
Smart CDU		✓	✓	✓	✓	
Switched CDU		✓	✓	✓	✓	✓
POPS Smart CDU	✓	✓	✓	✓	✓	
POPS Switched CDU	✓	✓	✓	✓	✓	✓

SPM Key Features

> Custom Views for each user to have quick access to relevant data

> Alarm monitoring and management from the data center level down to the outlet

> Mass configuration of Server Technology CDUs through secure SNAP feature

> Setup cabinet-level redundancy checks

> Identify temperature variation across the data center

> Manage user rights to access and control equipment power

> Convert continual data polling from all cabinets into actionable information in a variety of forms

CDU Key Features

> PIPS® and/or POPS® high-accuracy measurements of current, voltage, power, etc.

> Environmental measurements through plug-and-play probes

> SNMP traps and email alerts

> Master-Expansion linking allows single-IP access to the cabinet pair of CDUs

> Top Tier Access Security and user permissioning

> Thousands of models available to fit the ever expanding needs of today's data center

> Quality Power Architecture backed by stringent validation and test processes

Your Data Center Command Center

Powerful Tools for Taking Command of Your Data Center

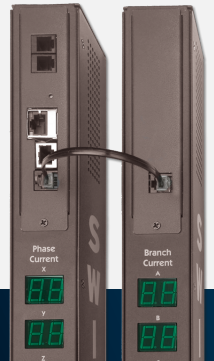
Linkable Expansion Module

The Expansion Module CDU, Smart CL[G] or Switched CX[G], is our exclusive method for linking together outlets on different power circuits.

The Expansion Module CDU, CL[G] or CX[G], increases the number of managed outlets on a single IP address. Each expansion module links to its parent Smart CS[G] or Switched CW[G], which contains both network and serial interfaces. When linked to a Smart or Switched CDU, the CL[G]'s or CX[G]'s outlets are auto-discovered by the Smart or Switched CDUs firmware, and all available outlets are viewable through the firmware.

On the Switched CW[G], outlets are individually controllable, or groups of outlets can be controlled between the Switched CW[G] & CX[G] with one command. Expansion Module CDUs can be a single or dual-power feed and a Zero-U or horizontal enclosure.

A-Feed CS[G]-CW[G] **B-Feed** CL[G]-CX[G]



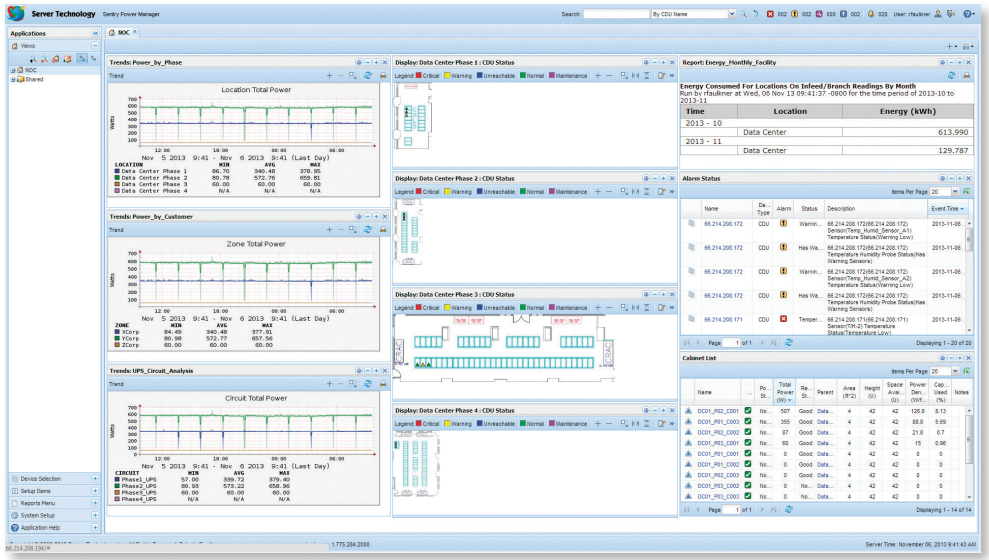
Management Made Easy

The best power measurement technology on the market for data center rack-level power monitoring.

You'll know and understand everything that's going on with your power with the data from your CDUs, collected and aggregated within SPM. SPM's interface makes it easy to set up your own customizable network operations center (NOC) views. Customize your views to help you make key power management decisions.

An overall view of each CDU, each cabinet, each location. As much or as little as you want to see with intuitive drill-down menus, featuring icon-based management functionality.

NOC views have dozens of separate monitoring and management windows. Dedicated and consolidated information for cabinets, CDUs, Circuits, Lines, Locations, Outlet Clusters, Outlet Groups and Zones provides detailed information and configuration for each one of these parameters.



"These products allow us to get to market earlier. They decrease the length of the test period to get the same amount of data. We did 10 million tests on our last project – if you lose 1% through downtime, that's significant."

— Dan Brown, Intel Labs

Management Made Easy

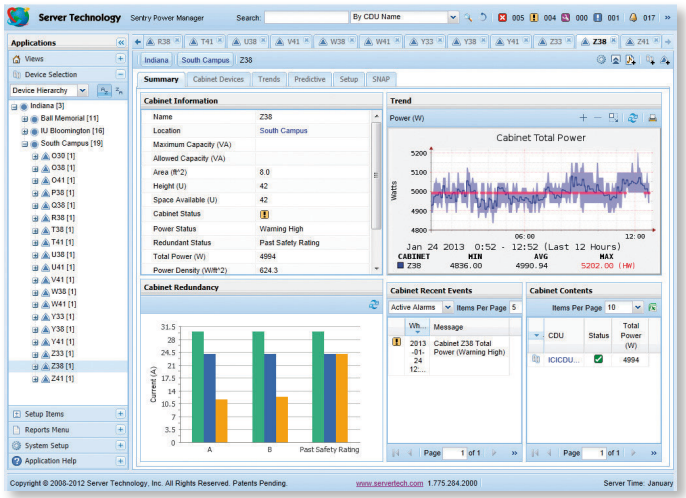
> A single point to access all of your CDUs

> Central Location for alarms

> Live-updating trends for all your critical data

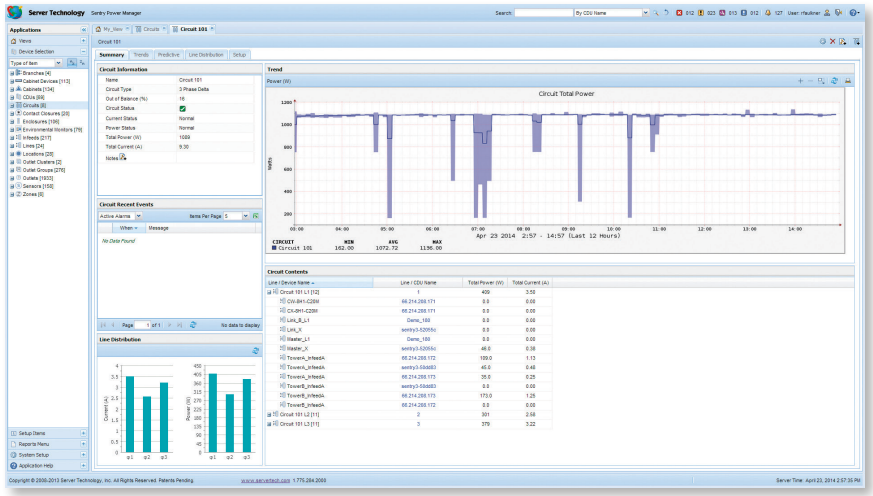
Your Data Center Command Center

Powerful Tools for Taking Command of Your Data Center



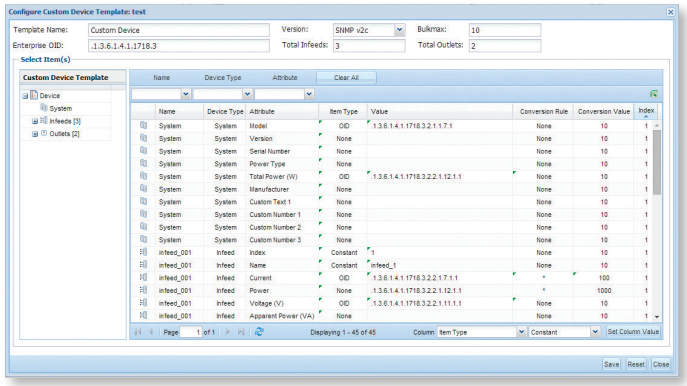
Maintain Uptime, Improve Efficiency, & Plan for Growth

> Cabinet Redundancy checks
> Cabinet device elevations
> Reports and Predictive Trends
> Power management
> Environmental monitoring



Get a Virtual View Into Your Whole Power Distribution Chain

> Balance 3-phase power systems
> Get alerts on UPS, CDU, RPP line currents - even on non-network devices
> Compare CDU measurements with other device measurements to identify losses



Query More than Just Your CDUs

> Monitor power from SNMP-capable power devices at every level
> Walk the MIB and determine what you need to know
> Watch trends and get alerted

Keep Track of all Critical Power and Environmental Data

> Benchmark energy usage for efficiency improvements
> Understand growth with predictive trending
> Send information to key personnel on a schedule

"Sentry Power Manager doesn't just tell you that a cabinet has a problem; it gets out a map and shows you where the problem is."

- Marty Sems, Processor

Middleware Integration

Access and Communication with Third Party Systems

The world's top companies rely on Server Technology

97% of our customers buy from us again... and again; and again. We believe that says something about us. About the quality, performance and reliability of our products. About the speed in which we deliver them to you. And about how our people take care of you with service, product knowledge and technical support. It's why the top Fortune 500 companies order from us and trust us to deliver daily.

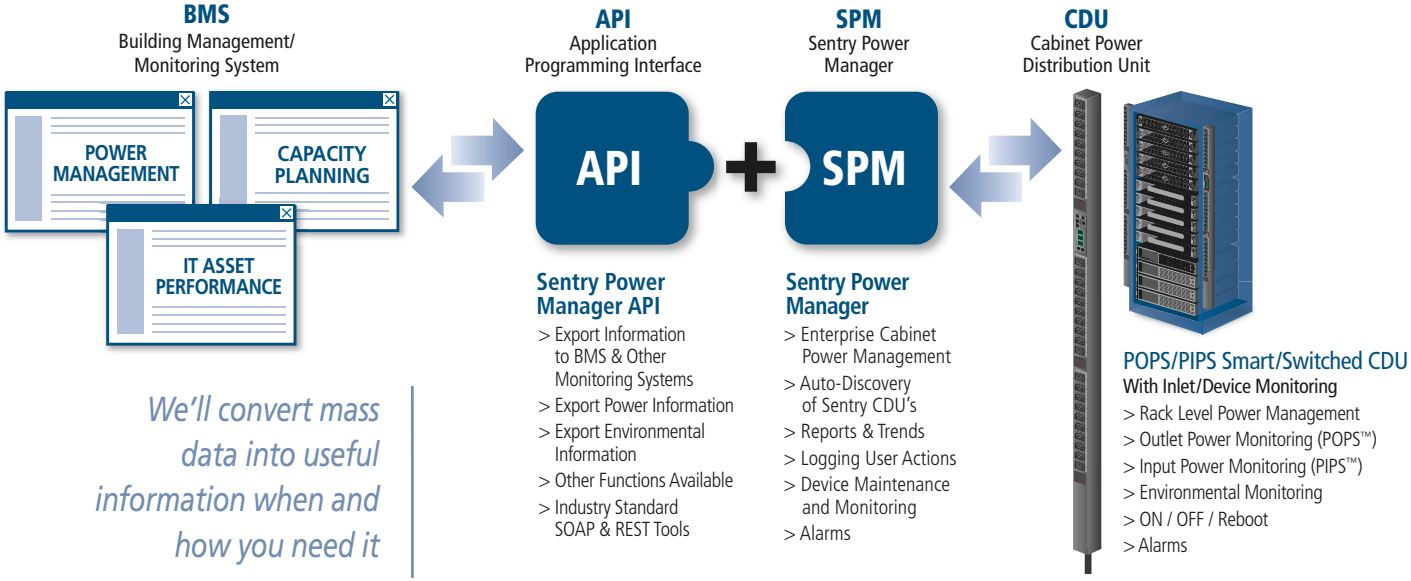
Middleware or Stand-alone Flexibility.

SPM provides the best of both worlds. SPM can serve as a middleware solution with your Building Management System (BMS) or other Data Center Monitoring software package. When used this way, SPM provides power and environmental information via a well-documented Application Programming Interface (API) for a "single pane of glass" view. SPM's API is based on industry standard Simple Object Access Protocol (SOAP) and Representational State Transfer (REST) XML-based tools which allow SPM to communicate to third party systems. SPM can be a stand-alone operation and information solution, for power and CDU device management including setup, configuration, firmware upgrades and other functions.

API Key Features

> The API allows a "single pane of glass" view in your central system while also providing one location to monitor and manage all of your CDUs

> Communicates power and environmental information to existing software systems



We'll convert mass data into useful information when and how you need it

Sentry Power Manager API

> Export Information to BMS & Other Monitoring Systems
> Export Power Information
> Export Environmental Information
> Other Functions Available
> Industry Standard SOAP & REST Tools

Sentry Power Manager

> Enterprise Cabinet Power Management
> Auto-Discovery of Sentry CDU's
> Reports & Trends
> Logging User Actions
> Device Maintenance and Monitoring
> Alarms

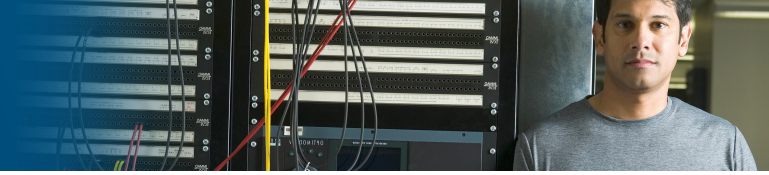
POPS/PIPS Smart/Switched CDU

With Inlet/Device Monitoring

> Rack Level Power Management
> Outlet Power Monitoring (POPS™)
> Input Power Monitoring (PIPS™)
> Environmental Monitoring
> ON / OFF / Reboot
> Alarms

Hub & Node Management

Manage Multiple CDUs Across Multiple Locations



Hub & Node Management

Do you need the power monitoring and management convenience or administrative rights broken up between data center locations? Hub-and-Node SPM architecture will provide the solution for you. Individual Node SPM systems are managed as if they were stand-alone. The Hub monitors conditions at the Nodes and allows overall administrative access to monitor and manage the multiple Nodes and their corresponding CDUs.

Hub & Node Key Features

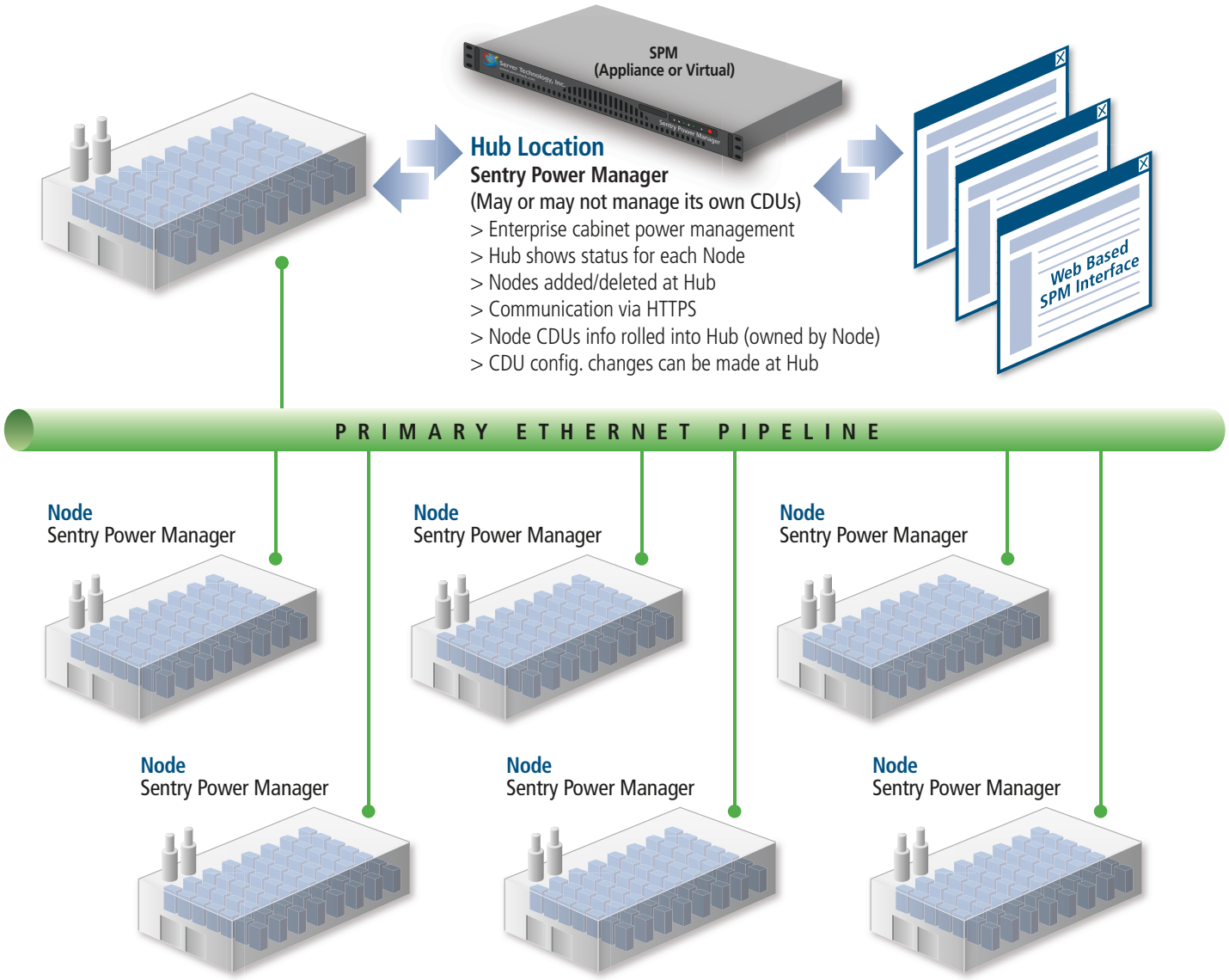
> Hub can also monitor its own CDUs

> SNAP can be used from the Hub to affect CDUs at any or all Nodes

> Alerts roll up from Node to Hub

> Energy rolls up Node to Hub

We'll show you where you can reduce data center expenses and how to monitor and remotely manage your CDUs from a central location.



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