

Adressing Challenges to Powering IT at the Network Edge



Can You Ensure Resilience at the Network Edge?

Challenge

As more applications are added and access to your network grows, your organization's dependence on distributed computing escalates. This puts pressure on you to ensure critical availability to users.

Consider

Today's users expect applications to be available. However, as you support more applications at the edge, managing remote systems can present numerous challenges. Ineffective power quality can pass through your UPS units and cause undetected problems. Some UPS systems don't protect against the most common electrical disturbances which can result in data/signal corruptions, stress on electrical components and more. It can also be difficult to properly manage power systems with internal staffing.

Solving the Challenge

Reliable, resilient, fault-tolerant UPS systems are essential to protecting your power against electrical disturbances happening outside and inside your building, be it a storm or even an elevator's electrical motor draw. These disruptions can generate surges, outages and voltage fluctuations. You need power systems that condition, filter and offer zero transfer time. And you'll want a program that supports your operations after the sale.



How Vertiv[™] Can Help

Vertiv can provide true, resilient power protection with:

- A proven on-line, double conversion UPS that protects irrespective of the quality of incoming power
- Power service plans for UPS systems that include:
 - All-day, everyday emergency response
 - Parts and labor coverage
 - Local and remote experts to manage and support your sites
- System Intelligence to provide you with local and network warnings and notifications
- Environmental monitoring to alert staff of irregular temperature, humidity, physical access and even fluid leaks
- Controllable outlets, so you can reboot equipment, prioritize protection and run times for specific applications
- Extended battery runtime
- Scalability to meet capacity, redundancy or battery times
- Maintenance bypass to accommodate loads so IT systems do not need to be powered off

Six Most Common Causes of Data Center Downtime



Source: 2013 study of data center outages, Ponemon Institute



Can You Meet Demands for Quick Application Deployment?

Challenge

Supporting your IT edge to handle new or different applications or upgrading existing facilities often requires power systems to be up and running quickly, but installing, configuring and managing your UPSs can take too much time, effort and resources.

Consider

Users want new IT equipment and applications deployed and operating yesterday. What's more, your staff wants that equipment installed quickly, easily and accurately. However, installing most UPSs at remote facilities was less than ideal and took staff away from other duties.

Solving the Challenge

You need a partner that is not only knowledgeable, nearby and flexible, but who also possesses a total power solution set. With a factory-authorized technician, the installation and setup of your UPSs can be predictive and less burdensome. Get the right UPS, distribution unit and partner to help accelerate configuration and deployment.

How Vertiv[™] Can Help

Vertiv can help solve deployment obstacles with:

- A 5-year power assurance protection plan that includes:
 - Local, power engineers to start up and test the UPSs
 - All-day, everyday emergency response, even in remote areas and facilities
 - Parts and labor coverage
 - Startup and disposal of old UPS and batteries
- Fast, bundled shipments that are easy to handle
- Scalability to respond to changes in capacity, backup time or redundancy
- Factory-tested, preassembled solutions
- Configuration software for replicating multiple units faster and more accurately
- Flexible rack and room power distribution and configurations



Do You Lack Visibility and Control at the IT Network Edge?

Challenge

It can be difficult to see what's happening with your power at the edges of a network, making it easier for disruptions to lead to business interruptions. Asking staff to manage remote power protection in addition to other daily responsibilities can not only hinder productivity, it may introduce more problems.

Consider

Real-time visibility of your IT space and critical systems is important. User-friendly UPSs and PDUs that provide the right information at the right time help minimize costly human mistakes and prevent situations from becoming real problems. Local power technicians can also help support internal staff responsibilities.

Solving the Challenge

You need visibility and access to critical power information, as well as an easy way to analyze and make sense of it. Intelligent technologies and support programs either on site or at your remote location can help minimize your staff's time and effort managing power.

How Vertiv[™] Can Help

Vertiv can provide true visibility and control with:

- A robust network of power systems that become intelligent devices on your network
- An easy-to-use, intelligent LCD panel that helps reduces human errors
- Environmental Monitoring and sensor systems to track temperature, humidity, physical access and leak detection at the rack or in the room
- Multiple audible and visual alarms to alert you to critical issues
- Monitoring and management software plus Data Center Infrastructure Management (DCIM) systems
- Remote diagnostics and monitoring for proactive response





Are You Concerned with the Economics of Supporting the Network Edge?

Challenge

These days, budgets are tight and power protection at the network edge is an investment you have to justify. Making sure you have the most efficient and economical power strategy is now a necessity.

Consider

First, the cost of downtime. Loss of revenue due to lapses in productivity are both detrimental and preventable. Next address more efficient UPS systems to save utility costs. Consider the costs of labor needed to support network changes, such as time to manage upgrades and removals. Unnecessarily dispatching service providers to attempt equipment fixes can also become quite costly.

Solving the Challenge

Managing actual costs requires a full picture. Powering the network edge is not just about UPSs and rack PDUs. Creating a holistic strategy for your power investment is the answer. You should consider UPSs with high operating efficiencies that don't jeopardize performance. Select a partner that offers efficient, flexible solutions and local, factory-trained technicians that can help manage your power assets.

How Vertiv[™] Can Help

Vertiv can provide cost-effective power protection with:

- High UPS operating efficiencies under all modes of operation
- Optimized capacity and footprint with high power factor
- ENERGY STAR[®] Qualified UPS products
- Power service programs that:
 - Ensures peace of mind across your entire network
 - Minimizes internal staff time and costs
 - Saves money on emergency servicing
 - Eliminates costs for parts, maintenance, repair and travel for up to five years
 - Enables remote monitoring and diagnostics
- Agile solutions that maximize your investment and can adapt to new requirements

Save Now. Save Later.

- Lower first costs
- Reduce operating costs
- Minimize downtime costs
- Lower TCO



ENERGY STAR qualified UPS models available

R qualified LEARN MORE AT

Solutions for the Network Edge

No matter your IT network needs, Vertiv[™] has the solutions available now to ensure your systems are supported effectively.





- High power factor (1.0)
- Compact rack/ tower design
- Efficiency (up to 95%) in online mode





Vertiv[™] Liebert APS UPS: Provides mission-critical availability to power your critical IT functions through power disruptions, it adapts efficiently and effectively as your power requirements change.

- 5-20 kVA, Online Protection
- Scalable design
- Rack or floor •
- Bypass, battery, distribution, environmental monitoring options

Power Assurance Package: Offers lifecycle power management for network edge UPS systems to eliminate the worry surrounding power performance, installation, disposal, emergency parts, labor, travel and maintenance. It helps reduce IT responsibilities to save time and money.

- 5 year protection plan
- Installation, startup
- Old UPS/battery disposal
- Parts, labor, travel



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Integrated Solutions: The Vertiv[™] SmartCabinet[™] (shown) is a turn-key solution that contains all supporting infrastructure needed to properly deploy IT at the branch. The Vertiv[™] SmartRow[™] infrastructure solution is ideal for smaller data centers. It combines up to six data center racks, including precision cooling, UPSs, power management, monitoring and control technologies and fire suppression, in an enclosed system.

Other Key IT Solutions



LIFE[™] Services Remote Diagnostic and Preventative Monitoring



Vertiv[™] Liebert[®] PSI5 UPS: Line interactive technology for slightly less critical loads.



DCIM and infrastructure management



Full line of racks and rack PDUs



Thermal Management solutions



Power Solutions for All Your Network Applications

No matter where your critical IT systems are located, you can trust Vertiv[™] to have the right solution, at the right price...right now.

- IDF/IT network closets
- Large network peripherals
- VolP
- Workstations
- Financial branches
- Healthcare labs, carts
- Digital records systems
- Security systems
- Point of sale
- Process control
- Material handling
- Back office IT



So What Should You Do Next?

Locate and contact your local business partner for more information.

For more information about these solutions and all others supporting the data center, visit www.Vertiv.com.



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