



Bridging the manageability gap

With intelligent power management



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In our Expert Perspectives series, Eaton's François Debray has explored the risks associated with legacy data centers, how they are evolving, and the pros and cons of the move towards converged and hyperconverged infrastructures.

In this fourth paper, François looks at how intelligent power management can overcome the manageability gap in data centers adopting converged and hyperconverged infrastructures. This gap prevents organizations from realizing the full potential of their virtualized infrastructures.

How convergence is widening the Manageability Gap

Adopting a converged infrastructure — combining servers and virtualized storage in a single appliance — is often viewed as the way forward for IT.

Even better, hyperconvergence delivers on the promise of a software-defined data center (SDDC) with compute, storage, networking and virtualized technologies all-in-one box.

But this powerful new direction in IT needs just that: power — and more of it than ever before.

Virtualized servers are running at 70-80% capacity compared to 10% previously; every enclosure draws more power and requirements shift suddenly as virtual workloads, applications and storage can be moved at a moment's notice.

All this needs to be managed, if not the complex power demands of converged and hyperconverged infrastructures simply create and widen the Manageability Gap.

5 key ways to close the gap

- 1. Secured IT infrastructure housing.** This ensures reliable housing of your IT appliances as well as easy access to them.
- 2. Ensured uptime and data integrity with power protection.** Power outages can result in data loss and downtime. You can avoid these costly consequences by complementing your converged/hyperconverged infrastructure solution with virtualization-ready Uninterruptible Power Supply (UPS) backup power.
- 3. Intelligent power distribution and management.** To develop your power strategy you need to understand the current rack environment and workload demands and then choose an optimized rack PDU. This will not only distribute power but will also work with power management software to monitor power consumption at an outlet level, shutting down and restarting loads remotely and providing alerts which initiate pre-defined policies.



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4. Environmental monitoring. Extending the remote measurement of power systems ensures that backup and failover policies are triggered when needed, minimizing data loss and optimizing recovery.

5. Integration of power management functions into a virtualization platform. With integration, all power devices (UPSs and rack PDUs) in the virtual network can be viewed in the same application, together with network, server and storage information. This makes it quicker and easier to ensure data integrity and improves business continuity by enabling proper disaster recovery policies in case of power and environmental events.

What you gain from intelligent power management

If the power fails, the data center fails. So, it makes a lot of sense to choose intelligent power management solutions designed specifically for converged and hyperconverged infrastructures to help you overcome the Manageability Gap. You will benefit from:

- **Better business continuity**

It's worth emphasizing that modern power management solutions ensure high uptime of IT infrastructure, data integrity and continuation of business processes in case of power and environmental events. This is crucial in today's competitive environments.

- **Improved efficiency of your IT infrastructure**

You can monitor and manage power devices from your existing virtualization dashboard to save time and money.

- **Lower costs**

High efficiency, pay-as-you-grow power solutions ensure that you do not overprovision. They also reduce energy consumption and cost. More accurate energy metering via modern PDUs will simplify load balancing, identify spare power capacity and provide greater billing accuracy.

Conclusion

Intelligent power management solutions will help you prevent and minimize the effect of power disruption in the data center. They are also designed to integrate easily with converged and hyperconverged infrastructures for more efficient management through a single pane of glass. The result is that you improve business continuity, increase efficiency, save valuable time and significantly lower costs — and close the Manageability Gap.

About the expert

François Debray is currently Business Development Manager for Eaton (EMEA) and is instrumental in helping organizations innovate and increase efficiency with the best white space solutions. His deep understanding of the sector is built upon more than a decade of experience in technical training as well as technology sales and marketing.



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Publication No. WP152015EN
Expert Perspectives Article No 4
April 2016

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