

Nominee: Schneider Electric

Nomination title: Schneider Electric Partners with Industry Leaders to Deliver Resilient, Hyperconverged Micro Data Centre Solutions

Racks and enclosures are the building blocks of every IT environment. As companies move to take strategic advantage of trends like digitalisation, cloud computing, hyperconvergence and the growth of Internet of Things (IoT), businesses continue to see an increase in the adoption of virtualised applications, which are in turn changing the landscape of data centres.

Many data centres that were once home to a multitude of rack enclosures may now only consist of a single rack solution; hosting critical IT equipment and providing secure network connectivity to the cloud. And with the inevitable increase in data traffic produced by connected devices, there is now a growing requirement for data centre physical infrastructure to be located closer to the source of data.

Schneider Electric's portfolio of micro data-centre solutions including Micro Data Center Xpress™ and SmartShelter™ allow the rapid and cost-effective deployment of secure IT infrastructure to any location, unhindered by challenges of distance, space constraint or environment.

They are available in a variety of standardised formats, all pre-tested and pre-configured at factory level, before being delivered to customers as a ready-to-deploy solution.

Each enclosure comes complete with simplified management, integrated power, uninterruptible power supply (UPS), power distribution, software (DCIM), environmental monitoring and cooling to support a self-contained, secure computing environment. They may occupy spare space in any location and deliver localised computing resources to reduce network latency for time-critical applications, or increase bandwidth for multimedia data-intensive applications.

Whether deployed inside a network closet, a secure server room, or as a single micro data centre, many on-premise IT operations rely on hyperconverged physical infrastructure solutions for support, organisation, and management of the IT chain. With the increase of connected devices, today's racks and enclosures are expected to support a greater number of connections and greater variety of applications, which also has implications for the overall levels of security and resilience required.

Nowadays hyperconverged, edge computing and micro data centre solutions all benefit from the same level of security and technology as their larger counterparts. Developments in Schneider Electric's prefabricated and hyperconverged spaces have become key to ensuring that the most critical edge solutions now come with some level of standardisation in the rack component and include higher levels of security, remote access and environmental monitoring.

Throughout 2017 Schneider Electric announced a number of key Vendor partnerships, which have become instrumental to their micro data centre and hyperconvergence capabilities.

Customers within the hyperconvergence space will often determine which products comprise the stack and need to be reassured that the technology will work immediately as promised, without interruption to service. Integration between different products therefore becomes key to ensuring that the solution works seamlessly.

In January 2017 the company announced it had partnered with HPE on HPE Micro Datacenter, a collaboratively engineered converged infrastructure solution providing end-to-end IT infrastructure, networking, storage and management in a self-contained and easy-to-deploy architecture, ideal for distributed IT environments.

Schneider Electric leveraged its Micro Data Center Xpress™, an integrated and secure enclosure with UPS, power distribution, cooling and monitoring, with HPE storage, network and compute solutions to create HPE Micro Datacenter, a custom-designed and integrated architecture that supports edge environments.

As a result, customers can reduce latency and quickly add capacity while providing a secure and easy to manage remote data center environment. The solution provides greater scalability and flexibility to meet the new demands of the cloud-enabled, hybrid IT environment of the future.

“Successful IT and facilities partnerships are at the core of enabling edge computing,” said Rick Einhorn, vice president, Data Center Consulting, HPE. “The ongoing collaborations with Schneider Electric to provide true software-defined data centres where the work is done provides the solution enterprise is looking for.”

In May 2017 Schneider announced its APC PowerChute™ Network Shutdown v4.2 software had received Nutanix Ready Core Management & Operations certification for Nutanix ESXi and Hyper-V hyperconverged infrastructure deployments. The validation underscores APC's commitment to

delivering market-leading power protection, reliability and simplicity for increasingly sophisticated computing architectures.

The era of big data and the Internet of Things (IoT) has driven new demands for increased security, standardisation, redundancy and management at the edge. As a result, IT environments have become more distributed and virtualized than ever before. Modular and highly-scalable hyperconverged solutions respond to these challenges while offering lower TCO and reduced time to market.

These systems require higher levels of efficiency, standardisation and protection, therefore the APC and Nutanix alliance delivers on the promise of hyperconvergence through a cohesive, total solution that simplifies typical IT commissioning and management, enabling a more optimised and efficient rollout of mission-critical systems.

To ensure the safety of Micro Data Centre solutions during delivery, Schneider has partnered with Cisco to gain certification to ship Cisco Unified Computing System (UCS) Servers pre-racked in NetShelter SX with Shock Packaging cabinets.

NetShelter SX with Shock Packaging design was vigorously tested as part of the Cisco certification process to ensure the safety of the systems during transportation, where pre-racked IT equipment can be at risk from shock and vibration. It provides customers with peace of mind for successful deployment of pre-racked Cisco UCS kit.

The Cisco certification also means Partners can also combine the solution with all the complementary power, cooling, and software systems that comprise the Schneider Electric's InfraStruxure and Micro Data Centre product portfolio, including Micro Data Center (DC) Xpress.

It is here that Schneider Electric's technological advances in standardisation have indeed set a new benchmark for micro data centre solutions, ensuring business continuity for both the end-user and the most business critical applications.

Why nominee should win

- **Hyperconverged micro data centre solutions come complete with with integrated power, distribution and UPS, DCIM, monitoring and cooling to support a self-contained, secure computing environment.**
- **The benefit from the highest levels of security and resilience, similar to those in larger data centres.**
- **They allow computing resource to be deployed cost-effectively, quickly and reliably to the Edge of the network**
- **They can be customised to fit specific space constraints, built to withstand the specific environmental hazards and are pre-tested to ensure integration, functionality and reliability.**
- **They are delivered in Partnerships with other Vendors which include, but are not limited to, Cisco, HPE, NetApp and Nutanix, to ensure business continuity for both the end-user and the most business critical applications.**