Empowering Innovation by Scaling, Managing and Securing Your Edge

Atos and Dell Technologies collaborate on the Dell NativeEdge platform to unlock new business value across edge environments.

Business needs
The edge's distributed hardware and software creates new challenges in managing, scaling and securing the edge estate. Organizations need a repeatable, secure, zero touch solution to help deploy software and applications across various devices in the field and throughout the edge estate.

Business results
- Gain a consistent edge experience with deployment, management and monitoring across edge estates.
- Orchestrating application and lifecycle management via a single click, realizing faster time to value.
- Reduce operational complexity at scale to fully leverage edge environments.
- Achieve secure device onboarding and application deployment with zero trust provisioning.

Solutions at a glance
- Dell NativeEdge
A collaboration between Atos and Dell Technologies is unlocking new innovations at the edge. Atos, a global system integrator based in France, needed a secure and effective way to deploy and manage its customers’ diverse and decentralized edge estates. Atos wanted to use its edge applications at scale to help customers streamline and simplify edge operations and better leverage the valuable—and largely untapped—data generated from the Internet of Things (IoT) technologies.

To answer this challenge, Atos Business-Outcomes-as-a-Service (BOaaS) managed services solution can leverage Dell NativeEdge, a unified edge platform with comprehensive edge management capabilities. With Dell NativeEdge, customers can securely and consistently deploy, automate and optimize their entire edge estate via a single dashboard. BOaaS and its artificial intelligence/machine learning (AI/ML) capabilities can work together with Dell NativeEdge, allowing customers to achieve faster time to value and improved business outcomes.

That’s how Atos is working to revolutionize businesses worldwide and helping to design the future of IT. Atos has a massive global reach, operating across multiple industries in 69 countries with over 107,000 employees and annual revenues of € 11 billion.

Achieving a consistent experience across all edge devices.

The diversity and sprawl of edge devices mandate they be managed differently than data center environments. Remote edge devices also mean that local technicians deploying the devices may not have similar skill sets, creating inconsistencies in edge orchestration capabilities. That’s why edge deployment and management approaches must be unique—incorporating principles such as centralized management and zero-touch deployments across edge estates.

Dell NativeEdge does just that. It provides a consistent experience across all devices by streamlining the edge’s provisioning, onboarding, application deployment and lifecycle management. Dell NativeEdge is a unified, open platform that provides centralized application deployment and management across edge devices. Atos views the Dell NativeEdge platform as the core of application orchestration and infrastructure management. Leveraging Dell NativeEdge, Atos BOaaS can achieve comprehensive capabilities that can address any customer-specific IT/OT system requirements.

Together, Dell NativeEdge and BOaaS can also bring business value to the many industries that Atos serves. Providing a consistent edge experience at scale will help customers operationalize rich insights from IoT data. “For example, in manufacturing, our customers can realize new benefits from predictive maintenance. Outcomes include reducing downtime, decreasing costs and optimizing production, creating measurable business improvements,” says Arnaud Langer, Global Managing Partner - Edge & IoT, Atos.

BOaaS and Dell NativeEdge can also allow Atos customers to orchestrate their edge efficiently and effectively. “We can treat the Dell Gateways the exact same way as a full-blown cluster like the PowerEdge XR4000 server because Dell NativeEdge allows secure onboarding from the various devices that Dell provides,” says Arnaud Langer, Global Managing Partner - Edge & IoT, Atos. “We can leverage Dell NativeEdge throughout the lifecycle to provide a consistent edge experience from deployment to orchestration of the solution.”

Ensuring a secure edge environment with zero-trust principles.

Because edge infrastructure is distributed in the field, it is inherently more vulnerable to security threats than servers in a centralized data center. Dell NativeEdge is built with zero-trust security principles from the ground up. From design to deployment and along the entire supply chain, Dell NativeEdge safeguards the integrity of edge hardware by protecting applications and data via hardened blueprints and digitally signed package validation. Technologies like Secured Component Verification (SCV), Secure Supply Chain assurance processes, and Trusted Platform Modules (TPM) are used to secure edge hardware with cryptographic keys.

“We can leverage Dell NativeEdge throughout the lifecycle to provide a consistent edge experience from deployment to orchestration of the solution.”

Arnaud Langer, Global Managing Partner - Edge & IoT, Atos
Dell NativeEdge and Atos BOaaS are two offerings that, when combined, can unleash innovation, boosting business outcomes and value for our customers."

Arnaud Langer,
Global Managing Partner - Edge & IoT, Atos

Further during deployment and use, Dell NativeEdge continually monitors the security of edge infrastructure with zero-trust technologies. Together with BOaaS, Dell NativeEdge can solve the intrinsic security challenges of edge infrastructure and applications for Atos customers worldwide, creating more secure operations.

"Business-Outcomes-as-a-Service can leverage Dell NativeEdge to solve secure edge device onboarding challenges. Dell NativeEdge's secure blueprints for authenticated applications provide trusted deployment of applications at the edge. From manufacturing, through the supply chain to deployment and use, edge security is key for us and our customers," comments Langer.

Orchestrating applications and devices at the edge.

Edge devices in the field are not monitored 24/7/365 like hardware in a data center. That brings new challenges in orchestrating applications across devices. Dell NativeEdge can mitigate these challenges through automation and centralized remote monitoring and management, including multicloud application orchestration from edge to core to cloud.

Atos applications can leverage blueprints in the Dell NativeEdge application catalog, which capture the key information and defaults that should be selected when provisioning the application. A single blueprint can provision both the edge application and the cloud service where the application connects. By using Dell NativeEdge's blueprint and catalog for any application type and any industry, Atos applications can easily be orchestrated across the entire edge ecosystem.

Dell NativeEdge and BOaaS use blueprints, where we can automate, via a repeatable, single-click approach, and deploy the same software at thousands of locations," shares Langer. "This helps realize new benefits, for example, reducing complexities so that non-technical retail personnel can handle on-site operations when aided by Dell NativeEdge's built-in automation."

Improving business outcomes using the edge.

Because the edge's distributed infrastructure adds complexity, it prevents many organizations from tapping into the tremendous value of IoT data. Dell NativeEdge manages that complexity and streamlines edge operations at scale. BOaaS enables organizations to analyze and extract insights from IoT data. The combined capabilities of Atos and Dell Technologies can enable organizations to obtain meaningful, rapid and repeatable business outcomes from IoT data streams and analytics while managing their edge ecosystem from a single dashboard.

"Dell NativeEdge and Atos BOaaS are two offerings that, when combined, can unleash innovation, boosting business outcomes and value for our customers," says Langer.

Learn More About Dell NativeEdge Solutions.

Connect on Social.

Copyright © 2023 Dell Inc. or its subsidiaries. All Rights Reserved. Dell Technologies, Dell and other trademarks are trademarks of Dell Inc. or its subsidiaries. Other trademarks may be trademarks of their respective owners. This case study is for informational purposes only. Dell believes the information in this case study is accurate as of its publication date, October, 2023. The information is subject to change without notice. Dell makes no warranties — express or implied — in this case study.