

# Dell NativeEdge: Innovate wherever you operate

The most advanced and cost-effective solution for virtualized workloads at the edge and in distributed data centers<sup>1</sup>

## Distributed environments face unique challenges

Organizations face significant obstacles when deploying traditional enterprise-class solutions across distributed environments.

Many IT teams are seeking alternatives due to challenges such as:

- **Operational complexity** with manual, resource-intensive processes that demand specialized IT skills and may lack seamless integration with diverse hardware or multicloud architectures.
- **Security vulnerabilities** due to the distributed nature and expanded attack surface throughout these environments.
- **Rigid hardware requirements** for deployments where a specific appliance is required and there is limited to no flexibility to select hardware that may be the best fit.
- **High entry costs** of traditional enterprise-class solutions that were never designed for widespread deployment across numerous distributed locations.
- **Licensing disruption** due to complex licensing models that may include unnecessary features that do not align with the core requirements of distributed data centers.

## Introduction

IT environments are becoming increasingly distributed throughout locations such as remote and branch offices, retail locations, manufacturing facilities, distribution facilities, and so on. Throughout these locations, many organizations have been using traditional solutions to support private cloud environments such as hyper-converged infrastructure (HCI) that were designed for larger, enterprise-class data centers.

## Purpose-built for the edge and distributed data centers

Dell NativeEdge is a full-stack solution that securely centralizes the deployment, orchestration, and lifecycle management of diverse infrastructure and applications at the edge and throughout distributed data centers. Simplify operations with deeply integrated automation processes that streamline deployment and operations at scale, without relying on local IT resources. Seamlessly orchestrate virtualized and containerized workloads to unlock the full potential of AI-driven insights. Protect applications, data, and infrastructure with zero-trust architecture and a secure zero-touch deployment process. With flexible configuration options designed to support up to thousands of devices, low entry cost, and multicloud integration, NativeEdge transforms complex distributed environments into secure, scalable, and intelligent extensions of your enterprise.

With Dell NativeEdge you can:

- **Centralize operations** enabling deployment and lifecycle management of infrastructure and applications with no IT skillset.
- **Enhance security** with secure device onboarding and a zero-trust framework.
- **Adapt to any environment** with support for VMs and containers utilizing flexible and highly scalable configuration options.
- **Optimize for AI** by seamlessly orchestrating AI workloads and frameworks with ease using pre-validated blueprints.
- **Reduce costs** and boost efficiency through automation, streamlined management, and low entry cost.

## Centralize operations

Deploy and manage distributed environments with ease. Infrastructure is automatically provisioned with zero-touch onboarding as soon as it comes online—minimizing manual intervention, reducing human error, and accelerating time-to-value. NativeEdge ensures all configurations remain consistent and error-free across all locations, guaranteeing optimal performance without the need for on-site IT intervention. You also gain fleet-wide visibility and centralized policy management so you can monitor health and performance while ensuring compliance for up to thousands of devices.

These efficiencies result in **deployment times of less than one minute** for infrastructure and applications, and **time savings of up to 68%** compared to manual application orchestration.<sup>2</sup>

## Enhance security

When an order is placed, Dell initializes infrastructure with cryptographically verified vouchers used to transfer and prove ownership throughout the supply chain. Once each device is powered on and network cables are plugged in, the Orchestrator automatically initiates secure communications. As the Orchestrator determines the authenticity and integrity of each new device, it will provision the NativeEdge Operating environment. After initial deployment, continuous monitoring enables fast detection and resolution of potential threats, while secure supply chain controls combined with a hardened, immutable OS eliminates the risks of tampering. Finally, secure access controls provide peace of mind across distributed environments with an ever-expanding potential attack surface.

These security capabilities enable **the world's most secure edge operations**<sup>3</sup>, and the combination of zero-touch and zero-trust for secure device onboarding provides **time savings of up to 92%** compared to a manual approach.<sup>2</sup>

## Adapt to any environment

Dell NativeEdge offers flexible architecture with the option to deploy as a single node configuration or as multi-node high availability clusters for robust performance and scalability. It provides native support for both virtualization and containers including features such as live VM migration for non-disruptive workload management, automated VM restart capabilities to ensure high availability and minimal downtime, and automated intelligent load balancing which distributes workloads in a way that optimizes performance, resource allocation, and overall reliability. With software-defined storage, NativeEdge enables you to easily scale storage capacity and even add external storage<sup>4</sup> as business needs evolve. The solution is also fully compatible with third-party (non-Dell) and brownfield (legacy Dell) endpoints, making it possible to simplify the orchestration of applications throughout highly distributed environments. Furthermore, seamless integration with existing VMware and Kubernetes infrastructure ensures you can modernize operations without disrupting current workflows or investments.

These high availability configuration options solidify NativeEdge as **the most advanced and cost-effective solution for virtualized workloads at the edge and in distributed data centers**.<sup>1</sup>

## Optimize for AI

Dell NativeEdge streamlines AI deployment through pre-validated application templates known as NativeEdge Blueprints. These blueprints allow you to automate the deployment of complex AI application stacks and workflows, saving time and ensuring consistency across all locations. It is simple to initiate deployment with a single command, enabling applications to be configured on multiple devices efficiently, complete with consistent updates and automated post-deployment tasks. NativeEdge stands out as **the first edge orchestration platform to automate the delivery of NVIDIA frameworks**<sup>5</sup>, including NIM, Metropolis, and Riva. Through strong partnerships with ServiceNow, Intel, and a broad range of ISVs, NativeEdge offers an extensive library of these pre-validated blueprint options, empowering you to rapidly adopt the AI solutions that drive value and progress.

The result: Dell NativeEdge is **the world's most adaptable and open edge operations ecosystem**.<sup>6</sup>

## Reduce costs

Dell NativeEdge empowers you to achieve significant cost savings by providing the flexibility to choose distributed infrastructure designed for a smaller, more efficient footprint. Deploy the Dell infrastructure aligned with your unique workload requirements—including industrial PCs, tower servers, ruggedized servers, and rack servers—so you can optimize performance at a lower cost per node compared to traditional HCI. In addition to these cost advantages, you benefit from automation of routine tasks and simplified management, driving down operational costs and creating a path to higher ROI.

TechTarget's Enterprise Strategy Group performed a detailed technical evaluation, analyzing a composite manufacturing organization tripling the size of operations over three years. Findings from this study include **up to \$3.3 million in cost savings** and **up to 79% time savings** deploying, maintaining, and managing edge infrastructure with NativeEdge.<sup>2</sup>

## Value of Dell NativeEdge

### Simplify



Simplify operations with deeply integrated automation processes that streamline deployment and operations at scale, without relying on local IT resources.

### Optimize



Seamlessly orchestrate virtualized and containerized workloads to unlock the full potential of AI-driven insights.

### Protect



Protect applications, data, and infrastructure with zero-trust architecture and a secure device onboarding process.

For more information:

[Dell.com/NativeEdge](https://Dell.com/NativeEdge)

## The features you expect—and the features you deserve

NativeEdge delivers everything you have come to expect from traditional HCI appliances to run virtualized workloads such as native support for virtualization and containers, infrastructure lifecycle management, high availability with failover, workload balancing, live migration with VM import, external storage integration, and endpoint scalability.

But NativeEdge does not stop there. It's purpose-built for the new paradigm of distributed environments, offering modern, differentiated capabilities that set it apart: support for bare metal containers, full application lifecycle management, zero-touch hardware deployment, a secure supply chain with an immutable OS, and a SaaS-based management console – all at a lower price per node.

## Conclusion

Dell NativeEdge represents the future of distributed infrastructure management. By combining enterprise-grade virtualization capabilities including robust software catalogs, workload balancing, and seamless integration with VMware and Kubernetes environments—with modern automation, security, and AI optimization, NativeEdge empowers you to modernize edge deployments with minimal disruption while establishing scalable systems for future growth.

Whether you're looking to reduce operational complexity, enhance security posture through a zero-trust architecture and immutable OS, optimize for AI workloads, or leverage a solution that scales effortlessly to meet evolving virtualization needs, Dell NativeEdge provides the comprehensive solution you need to transform your distributed infrastructure. Experience seamless, simplified deployment and management that streamlines operations, reduces costs, and improves performance—delivering enterprise power without enterprise sprawl in a flexible solution designed for the era of distributed AI.

<sup>1</sup> Based on Dell Technologies internal analysis, May 2025

<sup>2</sup> Enterprise Strategy Group by TechTarget Technical Validation commissioned by Dell Technologies, "Dell NativeEdge - Edge Operations Software Platform," February 2025. [Full report](#)

<sup>3</sup> Based on Dell Technologies internal analysis, May 2025

<sup>4</sup> External storage connectivity coming soon

<sup>5</sup> Based on Dell Technologies internal analysis, May 2024

<sup>6</sup> Based on Dell Technologies internal analysis, February 2025



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