

Dell EMC Vscale Architecture

Business benefits

- **Seamlessly scalable:** seamlessly scale your IT infrastructure across systems and locations to support digital transformation of your business.
- **Agile:** create adaptive pools of resources available to meet dynamically changing workload demands and evolving capacity requirements.
- **Economical:** maximize resource utilization and cost-effective use of shared resources, while simplifying operations.

Deployment outcomes

- **Continuous optimization:** Workloads able to always use the most cost-effective technologies and freely move between compute and storage types and virtualized and container paradigms.
- **Policy-driven IT:** Network, compute and storage teams able to define guardrails and classes while not making them the bottleneck to business agility; retroactively monitor effectiveness and optimize behind the scenes.
- **Return on easier refresh cycles:** Compute, storage, network and virtualization technologies refreshed with less effort, while assuring interoperability.
- **Return on investment:** More cost-effective use and management of IT assets through resource-sharing.
- **Incremental scalability:** Add links and switches and increase speed of links as needed without a big initial investment.

Modern data center architecture for your evolving business

Dell EMC Vscale Architecture is an industry-proven, modular reference architecture used to build data-center infrastructure at scale to meet evolving workload demands.

Vscale combines the market-leading Dell Technologies portfolio of converged infrastructure systems with pools of compute, storage and data protection resources; a common Cisco network fabric; a common layer of management software; and a path for further data center transformation through integration with existing legacy IT investments.

Vscale delivers a modern data center with the flexibility to meet business needs today, and in the future, because it does not lock your organization into a specific technology. You can cost-effectively move toward a cloud environment by building upon and leveraging current data-center assets.

This proven Vscale approach includes:

- An engineered and validated architecture for all infrastructure components
- Logical-build best practices to provide prescriptive connectivity between components
- A proven configuration built and shipped by Dell Technologies manufacturing
- The Vscale reference architecture design document – an infrastructure blueprint that can be updated as your environment evolves

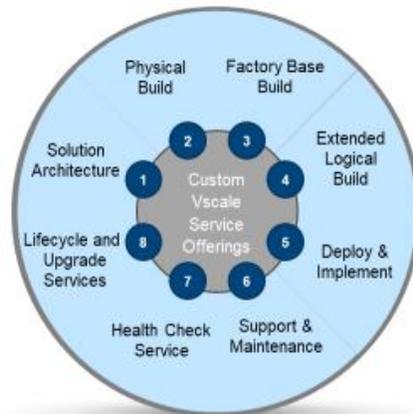
The architecture can contain the following components:

- **Scalable Spine/Leaf LAN** combined with optional software-defined networking (SDN)
- **Core/Edge SAN** switching architecture
- **New or Existing VxBlock CI, PowerFlex and VxRail**
- **Vscale Out of Band Management** – to facilitate monitoring and managing of all Vscale components
- **Vscale Fabric Technology Extensions** – modular containers that provide connectivity for compute, storage and data protection that can be consumed by any resource attached to the Vscale Fabric
- **Vscale Border Technology Connect** – providing external intranet and Internet connectivity for external-facing routers, firewalls and other edge functions to communicate with the Vscale Architecture
- **Vscale Open Technology Connect** – enabling modular containers to integrate Dell and third-party components that have not been validated for the Vscale Architecture, providing additional flexibility
- **Advanced Management Platform (AMP)** – hosting core management applications, extendable to support management and orchestration stacks

Vscale: Extending the value of convergence

The Vscale Architecture enables you to extend the scope and value of converged infrastructure to the entire data center or across multiple data centers. Benefits to your organization include:

- Reducing risk with the infrastructure components and network fabric that are engineered and manufactured according to a common standard that enables interoperability across shared resources
- Managing components through a common layer of monitoring software and common provisioning/configuration tools
- Gaining specialized support for the infrastructure, including the network fabric, from each component vendor



Continuum of available Vscale professional services

Vscale: Delivering value to stakeholders across the enterprise

- **CEOs:** Gives you best path to evolve IT so you can digitally transform your business for top-line growth while saving operational costs that you can directly apply to the bottom line – or reinvest savings into IT for further advantage.
- **CFOs:** Enables data center modernization, growth and operations in the most cost-effective way – plus resource-sharing that maximizes the utilization and return on existing and new investments.
- **Line of Business owners:** Provides the availability, performance and capacity elasticity to assure that service delivery meets your goals and customer expectations.
- **CTOs/VPs of Infrastructure and Operations:** Provides a policy-based, flexible and simple operational model that enables you to continually optimize delivery of your current mission-critical workloads and free up capacity to support your business' further digital transformation.
- **Operations Staff/System Administrators:** Provides a solution with standardized tooling that enables you to execute your day-to-day tasks with confidence.