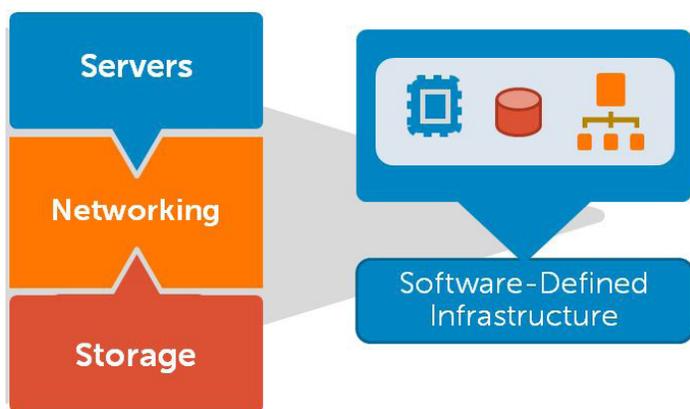# Dell software-defined storage solutions

Advance your IT with enhanced flexibility and orchestration

Your data center, defined by you

Dell's SDS portfolio is designed to make IT more efficient, deliver new IT faster, and make technology simpler and easier to use. Whatever your compute and storage needs involve, Dell and its partners can help you to choose the best approach that will grow with your business. Dell SDS solutions offer hypervisor-integrated systems and open-source solutions to deliver IT infrastructure quickly and efficiently for your future-ready data center.

Dell Storage and Microsoft Storage Spaces (DSMS)

provides Dell validated and tested building blocks — Storage, Networking and Servers — for a complete compute to storage solution. The predefined configurations offer Dell end-to-end engagement — sizing, deployment, management and support — for the lifecycle of an entire solution.

Scality and Dell offer an integrated solution that combines Scality RING software and Dell server and storage hardware for capacity-driven storage environments. The Dell and Scality solution provides object-based storage that scales to multiple petabytes and billions of objects with linear performance scaling. These software-based solutions are designed for 100% uptime and run on standard x86 servers to increase flexibility and introduce cloud economics to large storage environments.

Dell's SDS partner technologies

Nutanix®, Nexenta™, Microsoft® Storage Spaces, VMware® VSAN, RedHat® Inktank Ceph and Scality

Expand your environment with ease as your business needs grow

Consolidate compute and storage into a single chassis with the Dell XC Series web-scale hyper-converged appliances powered by Nutanix software. Without disrupting your growing business needs, an XC Series appliance installs and integrates easily into any data center, and can deploy multiple virtualized, business-critical workloads such as VDI, test and development, and private cloud.

Dell XC Series integrates Dell's proven x86 server platform with Nutanix web-scale software for a highly scalable compute and storage solution.

Dell and Nexenta SDS solutions offer open source-based storage software coupled with Dell's proven server, network and storage technologies and comprehensive management capabilities. These solutions are certified, preconfigured and offer highly flexible SDS that includes SAN and NAS support, unlimited snapshots and cloning, block and file replication and inline deduplication.

Dell XC Web-scale Converged Appliance

The Dell XC 720XD Web-scale Converged Appliance integrates Dell's proven x86 server platform and Nutanix web-scale software to provide an enterprise-class converged appliance for virtualized environments. As a highly differentiated infrastructure solution, the XC 720XD consolidates compute and storage into a single appliance enabling application and virtualization teams to quickly and simply deploy new workloads. This solution enables data center capacity to be easily expanded — one node at a time — delivering linear and predictable scale-out with pay-as-you-grow flexibility.

The XC Series Appliance incorporates many of the advanced software technologies that power leading web-scale and cloud infrastructures, such as Google®, Facebook®, and Amazon™ — but is engineered for all enterprises, regardless of size. Its key attributes include:

- Converged – Seamlessly integrates server and storage resources
- Software defined – Delivers all services through software using proven Dell hardware
- Server-attached flash – Merges flash-based storage with compute for fast performance
- Scale-out – Increases performance linearly by adding capacity one node at a time
- Hybrid – Delivers a unified data fabric supporting industry-standard hypervisors and clouds

Designed to simplify IT

The XC Web-scale Converged Appliance radically simplifies the deployment of virtual machines in any environment. The Nutanix Distributed File System (NDFS) runs on each appliance, aggregating direct-attached storage resources (hard disk drives and flash) across all nodes. This pooled storage is made available to all hosts, replacing the need for traditional centralized storage. With an unrivaled ability to run VMs out of the box, Nutanix delivers an easy, modular approach to building modern data centers.

The Dell XC solution can be installed in a fraction of the time required for traditional server and storage infrastructure and Dell's worldwide Services team is available to further reduce the burden on IT staff.

Ideal for virtualized workloads

The XC Appliance is an ideal solution for nearly any virtualized workload. Multiple appliance choices with different price-performance profiles, coupled with multi-hypervisor support, make it perfect for running different workloads at high performance, in a unified Dell XC cluster. It can be easily integrated into any data center and can support multiple virtualized, business-critical workloads including Microsoft Exchange, SQL Server, Oracle and SAP database applications, desktop virtualization, big data, and private cloud deployments. IT and storage administrators no longer have to manage LUNs, volumes or RAID groups. They can manage their virtual environments at a VM level using policies based on the needs of each workload.

Intuitive and powerful management interface

The Nutanix Prism management framework provides a highly intuitive, easy-to-use graphical user interface (GUI). All information is organized and presented through elegant touch points to facilitate easy consumption of operational data. Prism provides the ability to define and manage a complete converged infrastructure from nearly any device and includes REST APIs for integration with third-party cloud management systems.

Prism Central gives administrators a bird's eye view of resources across multiple clusters running different hypervisors and enables them to manage individual clusters using the GUI or a Windows PowerShell command-line interface. The GUI simplifies configuration and management of replication, DR, and compression policies, which can be applied to individual VMs. Compute and storage scaling and maintenance are automated through a simple one-click add node feature, auto-discovery protocols, and a non-disruptive, one-click upgrade of the Nutanix OS and host hypervisor.

Cluster Health provides comprehensive monitoring of VMs, nodes and disks in the cluster. It proactively flags potential issues in the converged infrastructure stack and provides the ability to visually navigate issues by grouping and filtering resources at VM, host and disk levels.

Business benefits

- **Reduces IT risk and improves agility:** Allow new applications to be deployed with minimal upfront investment, fast deployment and simplified IT management.

- **Predictable infrastructure costs:** Linear scale-out architecture makes it easy to forecast IT requirements and project costs.

- **Increased data center efficiency:** Single infrastructure runs all applications at high performance eliminating IT silos.

- **Lower CAPEX/OPEX:** Integrates server and storage to lower data center equipment, and power and cooling costs.

- **Pay-as-you-grow economics:** Enables data center growth to match demand by adding resources on demand.

Technical benefits

- **Simplify data center architectures:** Data center building blocks help eliminate system complexity.

- **Drive maximum performance:** Advanced data tiering and local flash speeds application response times. Elastic Deduplication delivers accelerated performance.

- **Efficiently scale the data center:** Expand infrastructure one node at a time to eliminate overprovisioning.

- **Support all virtualization projects:** Hypervisor agnostic technology supports VMs running on VMware® vSphere® & Microsoft® Hyper-V®. Enables popular hypervisor features, including HA, DRS and more.

- **Provide enterprise-class storage:** Software-delivered storage services include snapshots, clones, compression, deduplication, thin provisioning and more enterprise features.

Global services and support

Reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell Enterprise Solutions and Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services has a wide range of options to make technology acquisition easy and affordable. Contact your Dell Sales Representative for more information.

Simplify your storage at Dell.com/Storage.