DELLTechnologies

Dell Private Cloud Deploying Nutanix

Enabled by Dell Automation Platform

A subscription for Dell Private Cloud software seamlessly ties together three essential components:

Storage: Leverage your existing Dell storage or invest in a new system. You can choose between platform-integrated storage, which offers automation and lifecycle workflows like deployment and updates, or platform-compatible storage that has been validated for Dell Private Cloud but is managed independently.

Compute: Optimize performance with Dell PowerEdge servers. Similar to Dell storage for Dell Private Cloud, you can leverage a new or existing PowerEdge server.

Nutanix license: Procure your own licensing through your preferred channels and achieve ease-of-use through familiar and consistent Nutanix management tools, allowing teams to leverage in-house knowledge and resources with no new training required.

Through tight integration, automation, lifecycle management, and system-level support, you gain peace of mind that your Nutanix ecosystem remains in a continuously validated state – even as your business needs grow and change over time.

Dell Private Cloud delivers the simplicity of an appliance-like experience combined with the flexibility of disaggregated infrastructure, empowering organizations to adapt to evolving IT needs. By integrating with Nutanix, Dell Private Cloud accelerates deployments, simplifies operations, and ensures scalability for modern workloads – all while leveraging Dell's proven hardware and comprehensive support.

How Dell Private Cloud operates

The automation and orchestration engine working in the background facilitates the deployment and management activities of your Dell Private Cloud to ensure that you are operating with ease and executing with confidence. This includes the following:

Dell Automation Platform: A no-cost control plane and orchestrator that provides a centralized, unified experience for Dell customers by automating the deployment and management of both hardware and software. Dell Automation Platform onboards Dell infrastructure resources and provides access to this inventory. Included in Dell Automation Platform is a catalog of blueprints.

Validated blueprint: Dell-tested and validated build schemes that are a declarative representation of an environment that the Dell Automation Platform orchestrator uses to automate activities such as cluster deployment and cluster expansion. These Dell-tested templates are written in TOSCA-based YAML files.

Dell Private Cloud: Dell Private Cloud deploying Nutanix is enabled through Dell Automation Platform and Nutanix-specific blueprints. An extension to Nutanix Prism offers a familiar experience for physical views, lifecycle management, and serviceability capabilities. The Hardware Support Manager plug-in to further simplifies operations, enabling automated PowerEdge firmware updates for a consistently up-to-date and reliable environment.

Specifications for Dell Private Cloud deploying Nutanix

Dell Automation Platform

SaaS	Dell-hosted platform accessible via Dell On-Premises Proxy & Accelerator	**On-premises**	Customer-hosted platform as a virtual appliance - or - Customer-hosted platform as a Kubernetes cluster

Disaggregated infrastructure

PowerEdge	16th gen PowerEdge R660, R760 with Intel 17th gen PowerEdge R670*, R770* with Intel 17th gen PowerEdge R6715*, R7725*, R6725*, R7715* with AMD BOSS-N1 (2x 960GB M.2 configured for RAID 1) Redundant power supplies iDRAC Enterprise or Data Center license OCP 3.0 and PCIe GPU support	**Platform-Compatible Storage**	PowerStore*, PowerFlex, *Available starting Summer 2026

Bring Your Own Networking

Nutanix deployment

Nutanix cluster requirements	Cluster size – 3 to 8 nodes Cluster deployment– all nodes have homogeneous hardware configuration Cluster expansion – only physical NIC configuration needs to match cluster; mixed platforms supported Networking – 4 ports minimum per node; 10GbE minimum Software – AOS 7.5 & AHV 11,0 & Foundation 5.10 PowerFlex - core 4.5.5 and manager 4.8.0.0

Licensing for Dell Private Cloud deploying Nutanix

DELL Automation Platform

Platform license	No-cost subscription added to sales order; only one instance required
Management host*	Customer-provided infrastructure and licensing

Disaggregated infrastructure

Private Cloud software	1-, 3-, 4-, or 5-year subscription Subscription, licensed per PowerEdge node Licenses are portable between Private Clouds
PowerEdge	Requires iDRAC Enterprise or Datacenter license per node
Dell Storage	Use standard storage licensing (e.g. PowerStore, PowerFlex) No additional Private Cloud licenses required

Nutanix

Nutanix cluster	Bring your own subscription – Nutanix Cloud Infrastructure (NCI), Nutanix Cloud Infrastructure Compute (NCI-C)

* If deployed on-premises

Empowering IT with Automation and Flexibility

Intelligent lifecycle management:

- Dell Private Cloud offers automated, full-stack lifecycle management for both Dell hardware (compute/storage) and the private cloud software stack. This includes patching, updating, expansion, and component replacement—with blueprint-driven, validated update routines

- Users have flexibility to define their "desired state"—that is, the combination of hypervisor/OS image, Dell Private Cloud software, and PowerEdge hardware firmware. The system continuously checks for compliance against validated states.

- There is also an option for controlled, documented "version drift" for urgent express or security patches. If a critical security patch needs to be applied before Dell has published a validated state against it, you can compose a desired state with it immediately giving you added security and flexibility for your environment.

Familiar management experience:

- Manage your environment using familiar tools like Nutanix Prism, providing integration of physical and virtual management views, lifecycle management workflows, and serviceability features—all accessed through extensions within your chosen management platform.

- Dell Automation Platform orchestrator acts as the central interface for administration, automation, logging, and inventory for Dell Private Cloud clusters.

Automation and blueprints:

- Day 2 activities such as updating clusters, expanding or removing nodes are all handled via blueprints—predefined, validated workflows that automate multi-step operations and minimize risk.

- Upload your selected software and firmware bundles, preview upgrade paths and health checks with "update advisor" reports, and stage or schedule operations for maintenance windows.

Dynamic licensing:

- Automated process to apply licenses from Dell Digital Locker to cluster deployments for ease of use, tracking and allocation of licenses. No need to manually download license files and paste keys.

Other typical day 2 tasks made easier

- Cluster updates (firmware/software/OS) automated via blueprints and orchestrator.

- Cluster expansion or node removal all handled from the central orchestrator, with blueprint automation mapping/unmapping resources.

- Storage system updates managed centrally—no need for cluster-specific manual steps.

- Compliance and health checks integrated into all workflows.

- The ability to quickly re-provision, repurpose, or decommission infrastructure as workloads or business requirements change.

Dell Private Cloud deploying Nutanix advantages:

- Licensing freedom: Source your own Nutanix licensing without ties to hardware, leverage ELAs and perpetual licenses

- Ease-of-use: Leverage in-house Nutanix expertise with no new training required and access to familiar and consistent tools

- Zero touch, zero trust deployment: Deploy quickly and securely for fast, easy onboarding

- Streamlined operations: Simplify day-to-day operations with automation, intelligent lifecycle management and system-level support

- Investment protection: Repurpose infrastructure to different 3rd party software stacks business needs change

Dell Private Cloud support and deployment options

Dell provides a comprehensive suite of support and deployment services for Dell Private Cloud solutions utilizing Nutanix. These services ensure streamlined installation, expert guidance, and a primary source of system-level support for customers.

	ProDeploy or ProDeploy Plus	ProSupport	ProSupport Plus
Dell Automation Platform: On-premises	**Required** K8s installation and configuration	**Provided** Included with Private Cloud Software (no charge)	
Dell Automation Platform: SaaS	**Required** OXY installation and configuration	**Provided** Included with Private Cloud Software (no charge)	
Dell Private Cloud software	**Required** New clusters only Physical & logical planning Racking and cabling of Power Edge Deploy and set up ecosystem	**Minimum Required** Triage of OS only (Nutanix)	**Recommended** L1/L2 support of OS and collaborative support for L3
		Customer must also maintain support contract with Nutanix	
Dell PowerEdge servers	**Included** Server deployment included with Private Cloud software deployment contract above	**Required** Hardware support required	
Dell storage	**Recommended** Deployment recommended on some Dell storage products	**Required** Hardware support required	

Dell Private Cloud stands out for its exceptional flexibility in configurations and licensing, allowing customers deploying Nutanix to tailor their experience. An open and adaptable infrastructure approach provides robust investment protection with the ability to repurpose to different 3rd party cloud ecosystems as workloads and business needs change. This combination of flexibility, future-proofing, and comprehensive support makes Dell Private Cloud a unique and powerful Nutanix-based solution that leverages the automation, intelligent lifecycle management, and enhanced security that customers have come to know and depend on for seamless operations and continued success.

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