A flexible, secure, and simple to manage solution for shared services deployment

Nutanix Enterprise Cloud for State and Local Government Shared Services

State government CIOs named shared services and cloud services among their top 10 priorities for 2018. This approach is viewed as the best way to increase IT agility, adapt quickly to changing needs, and accelerate digital government initiatives.

By offering easy-to-consume shared services based on a private cloud model, it's possible to eliminate duplication of effort and prevent uncontrolled use of public cloud services such as Amazon Web Services and Microsoft Azure, while enabling your IT teams to do more with less.

Unfortunately, legacy IT systems are frequently an obstacle to shared services. With an innovative hyperconverged architecture, Nutanix Enterprise Cloud offers the ideal infrastructure solution for implementing shared services by facilitating consolidation and modernization.

Nutanix Enterprise Cloud provides a unified IT operating environment that spans private and public clouds, providing a single point of control for managing shared infrastructure and applications.

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INTRODUCING NUTANIX ENTERPRISE CLOUD

Nutanix Enterprise Cloud builds on the foundational ideas of hyperconvergence, adding cloud capabilities including full application orchestration and lifecycle management. The result is a flexible platform uniquely capable of solving your shared services and cloud services challenges.

The architecture converges servers, storage, security, data protection, virtualization and networking with one-click operations, full application automation, and multi-cloud management.

With a compact footprint and simplified management, Nutanix Enterprise Cloud is well suited for primary and secondary datacenters and disaster recovery sites, as well as regional and local office deployments. All infrastructure and applications are managed from a single interface called Nutanix Prism.

In a comparison with traditional IT infrastructure, IDC determined that Nutanix Enterprise Cloud delivers substantial benefits that translate to both CapEx and OpEx savings:

- 60% lower TCO
- 97% fewer unplanned outages
- 61% more efficient to deploy, manage, and support
- 7 months to payback

"With IT staff spending the majority of their time maintaining and supporting a mix of five different compute and ten storage platforms, we really needed to consolidate and simplify our infrastructure. One option was to move everything into the cloud, but that would have been prohibitively expensive, so we opted for Dell EMC XC Series appliances running the Nutanix Enterprise Cloud Platform. This has enabled us to deliver the equivalent of a public cloud service – like AWS – right in our own data centre."

—Ryan Kennedy, Academic Computing Team Manager, University of Reading





NUTANIX ADVANTAGES FOR SHARED SERVICES

Nutanix addresses many of the biggest pain points experienced in shared services deployments:

One-click software upgrades. Prism takes the pain and disruption out of upgrades. Intelligent software does all the heavy lifting for upgrades of operating software, hypervisors, and firmware

One-click remediation. Prism suggests remediation actions for alerts and failures, reducing the mean time to repair and significantly improving availability.

Nutanix maintains multiple copies of all data for resilience. Full redundancy is restored automatically in the background if a failure occurs.

HYPERVISOR CHOICE

Nutanix runs on all popular hypervisors including VMware ESXi, Microsoft Hyper-V, Citrix XenServer, and Nutanix AHV. AHV is hardened and secured to high Federal standards from the ground up and is included as part of the system cost, eliminating the overhead of hypervisor licensing.

NUTANIX CALM STREAMLINES SHARED SERVICES DEPLOYMENT

Nutanix Calm is a software option that adds native application orchestration and lifecycle management to Nutanix Enterprise Cloud, simplifying the deployment of shared services on Nutanix. Your IT team defines service and application blueprints, including individual VMs, sets of VMs, or more advanced application services. Calm offers:

- Application lifecycle management. Calm delivers simple, repeatable, and automated management of applications and services across both private and public clouds. Easy-to-use blueprints make deployment automated and repeatable.
- Self-service and governance. The Nutanix Marketplace enables complete self-service.
 - Individual users at the departmental level can consume preintegrated blueprints or custom blueprints that you publish to the marketplace.
 - Role-based governance allows user operations to be limited based on assigned permissions.
 - All activities and changes across the entire infrastructure stack are centrally logged for end-to-end traceability, aiding security teams with compliance.
 - Department and group-level chargeback and cost controls allow you to carefully monitor IT expenses across private and public clouds
- **Hybrid cloud management.** Policy-based reporting shows the overall utilization and true cost of public cloud consumption at a glance so that provisioning decisions can be matched to budget requirements.



Figure 1. Calm provides detailed cost accounting on a team and application basis.



SECURE BY DESIGN

Legacy infrastructure solutions were not designed with security as a primary consideration. The Nutanix architecture takes a security-first approach. From the moment of installation, Nutanix operates in a secure manner. Hourly scans assure continued compliance. Built-in features deliver defense in depth:

- Security Development Lifecycle. Nutanix incorporates security into every step of the software development process and is certified across a broad set of evaluation programs for government, financial services, and healthcare to ensure compliance.
- Automation. Nutanix developed its own Security Technical Implementation Guide (STIG) that meets Department of Defense (DoD) guidelines to speed up security accreditation. Fast baseline checks and validation maintain a secure state over time.
- Microsegmentation. Nutanix microsegmentation enables enforcement of highly granular network communication policies between every VM running on the cluster.
- Flexible encryption options. Choose from hardware or software-based encryption options with robust key management.
- One-Click Upgrades. Many cyber-attacks target known vulnerabilities that have not been patched. Nutanix one-click non-disruptive upgrades take the pain out of patching infrastructure software, making it easier to keep up to date and minimize risk.

NUTANIX IS A LEADER IN THE GARTNER MAGIC QUADRANT FOR HYPERCONVERGED INFRASTRUCTURE

Garner has named Nutanix a leader in their Magic Quadrant for Hyperconverged Infrastructure. See Gartner's analysis of the current enterprise datacenter landscape, including an overview of how vendors compare in the now mainstream HCl space.

GETTING STARTED WITH NUTANIX

With its flexible design, proven security, and simplified management, Nutanix Enterprise Cloud is the smart infrastructure choice for shared services and other private or hybrid cloud deployments. To learn how Nutanix can help you move forward with shared services, contact Nutanix at info@nutanix.com, follow us on Twitter @nutanix, or send us a request at www.nutanix.com/demo to set up your own customized briefing.

Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform leverages web-scale engineering and consumer-grade design to natively converge compute, virtualization and storage into a resilient, software-defined solution with rich machine intelligence. The result is predictable performance, cloud-like infrastructure consumption, robust security, and seamless application mobility for a broad range of enterprise applications. Learn more at www.nutanix.com or follow us on Twitter @nutanix.

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