

Harnessing the Power  
of Enterprise Clouds

# Nutanix™ Brings Enterprise Cloud to Oil and Gas

## SOLUTION BENEFITS

### Improves IT Efficiency

Increases IT utilization and reduces costs by consolidating application infrastructure silos.

### Decreases Footprint

Converges compute, storage, and virtualization, eliminates separate storage systems, and reduces power, space, and cooling.

### Scales to Meet Growing Demands

Additional storage capacity and compute can be added quickly with predictable results.

### Provides the Highest Availability

Infrastructure self-heals from drive and server failures—critical for environments where service may be delayed. Software and firmware updates are simple and non-disruptive.

### Delivers Maximum Security

Nutanix systems are certified across a broad set of evaluation programs to ensure compliance with the strictest standards.

### Offers Unparalleled Performance & Efficiency

Full remote replication plus back up VMs and data to your local systems, to a remote site or the cloud.

Increased global energy challenges worldwide, coupled with volatile commodity prices, are pressuring oil and gas companies to more precisely understand their existing and prospective assets. From the datacenter to remote locations to the edge on rigs, IT has come under new pressure due to the increased amount of data generated; new interpretation, visualization, and modeling applications; and by new access methods, including virtual desktops. By optimizing IT infrastructure and adopting technology trends, such as virtualization and hyper-convergence, IT can enable business managers to improve decision making and allow for faster, more efficient drilling and extraction.

Nutanix Enterprise Clouds have been selected by numerous customers for their upstream and downstream applications, alleviating data and application bottlenecks at much lower costs and space than traditional IT infrastructure. By combining a web-scale 100% software approach with one-click simplicity, the Nutanix Enterprise Cloud OS is able to handle the needs of even the most demanding applications—from the data center to the drilling rig, including the oil and gas industry's suite of tools and technologies.

## NUTANIX ENTERPRISE CLOUD

Nutanix Enterprise Cloud is a unified IT operating environment that melds private, public, distributed, and edge clouds, providing a single point of control for managing infrastructure and applications. Nutanix Enterprise Cloud delivers a consistent, high-performance and seamless experience for both cloud operators and consumers of cloud-delivered services and applications. Each Nutanix node in the distributed cluster has its own software-based storage controller VM, along with storage.

Built using a web-scale architecture, the system not only ensures that active data is available and being served from flash, it also enables truly linearly scaling when more performance and capacity are needed with one-click. The Nutanix Enterprise Cloud OS supports a wide range of hardware platforms and ruggedized and virtualization options, including Nutanix AHV, VMware vSphere, Microsoft Hyper-V, and Citrix XenServer—giving IT the power of choice.

Enterprise level high-availability is built into the Enterprise Cloud OS. Features such as in-cluster and multi-site replication are complemented with VM-level snapshot and cloning capabilities for critical applications and IT services, including processing and handling the large amounts of data produced during exploration and drilling.

## RISK-FREE AND HIGH-PERFORMANCE INFRASTRUCTURE FOR INTERPRETATION AND VISUALIZATION

Applications and functions in support of seismic interpretation, visualization, and drilling have undergone transformation, especially with the adoption of technologies such as the Internet of Things (IoT). Nutanix makes IT infrastructure invisible, so the organization's focus can remain on the applications in support of exploration, drilling, upstream, and downstream activities. In a study of 11 real-world deployments, IDC analysts discovered that IT organizations slashed the time spent to deploy compute resources by 73% versus traditional IT infrastructure, and reduced unplanned downtime by 97%.

**NUTANIX**  
YOUR ENTERPRISE CLOUD

Nutanix Enterprise Cloud OS also extends the upside of virtualized desktops and application to technical teams that were previously denied the benefits of VDI due to their complex data sets. Additional capacity is simply added by adding more nodes—all while maintaining the end-user experience. The Nutanix Enterprise Cloud OS also incorporates cutting-edge GPU technology, enabling high-end visualization for exploration, drilling, and ongoing modeling. It can also securely deliver functionality, such as high performance file serving and block storage, on the same platform that is used to host business-critical workloads, enabling greater collaboration.

### ONE-CLICK, EFFICIENT SOLUTIONS FOR FIELD AND REMOTE LOCATIONS

Providing IT infrastructure for remote sites including the edge has always been a challenge for IT in the oil and gas industry. With a need to support sites as diverse as drilling rigs and remote technology centers with specialized technical teams, it is essential to deploy the right infrastructure.

Nutanix Enterprise Cloud OS gives IT the ability to support virtual servers and desktops in remote sites using a fraction of the power, space, and cooling of traditional IT solutions—with none of the complexity previously required. By maximizing compute, storage, and performance per rack-unit (RU) using the same web-scale architecture, IT can bring up remote sites with minimal effort or footprint. Using Nutanix’s network-efficient replication, critical VMs and associated data can be replicated to a centralized location for disaster recovery without incurring exorbitant connectivity costs or requiring local IT expertise.

For centralized deployments and remote locations, manageability and security benefits are realized with Nutanix’s unique one-click Prism and REST-based APIs. With the intuitive, consumer-grade management framework for end-to-end infrastructure management and operations, all sites can be centrally managed with significantly less effort. Nutanix Enterprise Cloud incorporates machine learning to help automate management tasks, such as dynamic scheduling, and power unique features, including capacity planning. Prism also provides intuitive search functionality and customized dashboards, enabling administrators to further reduce time spent on ongoing management. In the same study mentioned earlier, IDC found that Nutanix requires 61% less IT staff time to deploy, manage, and support.



Enable remote and field teams with linear scalability and efficient replication.

### WORLD-CLASS ENTERPRISE SUPPORT AND CONSULTING SERVICES

Nutanix understands the importance of staying productive and offers world-class support and services to help IT and field teams get the most from their investments. With a global support presence, 24x7x365 support availability, a non-returnable disk and HDD option, and four-hour parts replacement<sup>1</sup>, Nutanix can ensure the availability of mission-critical applications, data, and end-user desktops worldwide. Additionally, Nutanix offers a rich set of services, ranging from design to implementation to ongoing management, to help organizations maximize return from their investments.

### GET STARTED

Whether supporting investments in field drilling rigs or handling upstream and downstream applications needs in remote offices or the datacenter, Nutanix is committed to our customers’ success in the oil and gas industry. Sign up for a customized technical briefing with Nutanix by sending a note to [info@nutanix.com](mailto:info@nutanix.com).

<sup>1</sup>See [www.nutanix.com/support](http://www.nutanix.com/support) for coverage details



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Nutanix is a global leader in cloud software and hyperconverged infrastructure solutions, making infrastructure invisible so that IT can focus on the applications and services that power their business. Companies around the world use Nutanix Enterprise Cloud OS software to bring one-click application management and mobility across public, private and distributed edge clouds so they can run any application at any scale with a dramatically lower total cost of ownership. The result is organizations that can rapidly deliver a high-performance IT environment on demand, giving application owners a true cloud-like experience. Learn more at [www.nutanix.com](http://www.nutanix.com) or follow us on [Twitter @nutanix](https://twitter.com/nutanix)

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