| # Nutanix Acropolis

Traditional infrastructure is extremely siloed and complex forces businesses to make decisions based on dataceter resources and technology limitations rather than the unique needs and characteristics of the applications. As a result, a significant chunk of IT effort is spent is on just scaling and managing the infrastructure vs focusing on the applications and business value they provide.

TURNKEY SOLUTION FOR ANY APPLICATION AT ANY SCALE

Enterprise Cloud is a model for IT infrastructure and platform services that delivers the agility, simplicity, and pay-as-you-grow economics of public clouds without sacrificing the security, control and performance of a private infrastructure. Enterprise Cloud (EC) is made of three core components: Prism, Acropolis, and Calm. Prism is the management plane that provides a unified management interface that generates actionable insights for optimizing virtualization, infrastructure management and everyday operations. Acropolis is the foundation of the platform that starts with hyper-converged infrastructure then adds built-in virtualization, storage services, virtual networking and cross-hypervisor application mobility creating a turnkey solution that can be deployed out-of-the-box in 60 minutes or less. Calm adds native application orchestration and lifecycle management to the Nutanix Enterprise Cloud Platform. Calm decouples application management from the underlying infrastructure – enabling applications to be easily deployed into private or public cloud environments. The addition of advanced application management to the Nutanix platform turns common tasks into repeatable automations accessible to all IT teams, without giving up control across the infrastructure stack.
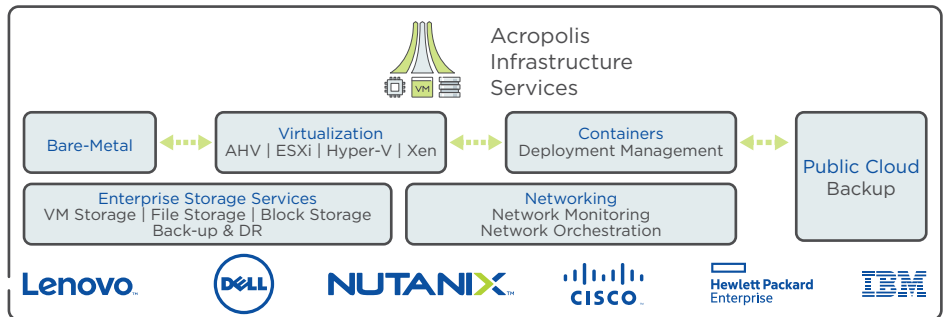

Fig 1: Acropolis "All-in-One" Solution at a glance

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KEY COMPONENTS

Nutanix Acropolis has 5 key components that make it a complete solution for delivering any infrastructure service:

Built-in AHV Virtualization

Nutanix Acropolis includes AHV, our native virtualization solution, and additionally supports the virtualization solutions of VMware ESXi, Microsoft Hyper-V and Citrix XenServer. Nutanix AHV is a comprehensive enterprise virtualization solution tightly integrated into Acropolis and is provided with no additional license cost. AHV delivers the features required to run enterprise applications, for example:

- Combined VM Operations and Performance Monitoring via Nutanix Prism

- Backup, Disaster Recovery, Host and VM High Availability

- Dynamic Scheduling (Intelligent placement and resource contention avoidance)

- Broad Ecosystem Support (Certified Citrix Ready, Microsoft Validated via SVVP)

NUTANIX™
YOUR ENTERPRISE CLOUD

Platform Services

Nutanix Acropolis delivers a comprehensive set of software-defined platform services so that IT organizations can consolidate all their workloads on the Nutanix platform and manage them centrally. The use cases include:

- VM-centric storage to support almost any virtualized application

- Container Centric storage with persistent storage support for Kubernetes and Docker.

- Nutanix Volumns, a native block storage solution, for physical applications

- Nutanix Files, a native file storage solution for unstructured data such as large-scale home directories, user profiles and more.

Enterprise Storage Capabilities

Nutanix Acropolis employs MapReduce technology to deliver highly distributed Enterprise grade storage to ensure no single points of failure and negligible impact to real-time performance. Nutanix Enterprise Storage capabilitie include, but are not limited to:

- Performance acceleration capabilities such as caching, data tiering & data locality

- Storage optimization technologies, such as De-dupe, Compression & Erasure Coding

- Data protection technologies to support snapshots to local, remote and cloud based sites

- Disaster Recovery features, such as, synchronous, asynchronous, and near-synchronous replication.

Networking Services

Nutanix Acropolis provides a comprehensive set of services to visualize the network, automate common network operations and secure the network through native services and partner integration. These services include, but are not limited to:

- Application-centric visualization of the physical and virtual network topology to instantly diagnose and fix common networking issues.

- Open APIs that enable network devices and services such as top-of-rack switches, application delivery controllers (ADC) and firewalls to automatically adapt based on application lifecycle events.

Enterprise Cloud is the Future of IT

World's most advanced data-centers rely on Nutanix technology and solutions to power their work-loads at any scale. It's time for businesses to move away from legacy infrastructure. Eliminate the need for stand alone SAN or NAS-based storage and expensive virtualization and mitigate complexity and silos. Let Enterprise Cloud enable the possibility to run applications in the right environment at the right time.

NUTANIX™
Your Enterprise Cloud Platform