Automating Network Services for Nutanix AHV

Organizations are adopting initiatives based on virtualization, cloud and hyperconverged infrastructure. To do so, they need higher levels of agility and flexibility to fulfill the promise of greater efficiency. Infoblox NIOS technology helps solve this problem by accelerating the deployment and management of critical network services in virtualized environments. The release of NIOS 8.5 adds vNIOS for Nutanix Acropolis Hypervisor (AHV) to Infoblox’s stable of vNIOS solutions for private cloud platforms such as VMware and OpenStack.

Challenges Faced

Nutanix AHV, integral to Nutanix Acropolis, is a comprehensive enterprise virtualization solution. AHV delivers the capability to run enterprise applications, including:

- Combined VM operations and performance monitoring
- Backup, disaster recovery, host + VM high availability
- Dynamic scheduling
- Broad ecosystem support

Despite these features, gaps remain. Many network teams still rely on spreadsheets to manage IP address and DNS provisioning, making it impossible to quickly deploy cloud services. While organizations can spin up multiple virtual machines in minutes, it may take hours, days or longer to provision the corresponding IP addresses and DNS records. Achieving time to value can be challenging.

Solution Overview

Infoblox vNIOS for Nutanix AHV lets organizations eliminate friction in deployments. vNIOS for Nutanix AHV automates key provisioning processes and helps drive projects to completion, delivering the promised business value and agility. vNIOS for Nutanix AHV adds new levels of automation for the core IP network services: DNS, DHCP and IP address management. At the same time, Infoblox centralized management administers DDI services on multiple virtualization platforms, including VMware, Microsoft and OpenStack. Through a single pane of glass, NIOS 8.5 manages IP address provisioning, DNS records and DHCP while avoiding a proliferation of management platforms.
Feature Highlights

Infoblox vNIOS for Nutanix AHV, in combination with the Infoblox Grid™, provides the following:

- Automated IP address provisioning allows faster VM provisioning and prevents “VM confusion” by automatically reclaiming IP addresses when VMs are decommissioned.

- Smart Folder offers visibility to IP addresses, DNS records, VMs, networks and tenants by group, VLAN or network, including overlapping IP address ranges.

- Infoblox Grid automates high availability and disaster recovery failover for core IP services, including DNS and DHCP.

- Infoblox Grid delivers role-based access control, audit trails and automated one-touch updates to all Grid members.

- Nutanix, OpenStack, VMware and Hyper-V cloud platforms can be managed from one console.

Value Proposition and Benefits

Infoblox vNIOS for Nutanix AHV delivers the following benefits:

- Enhances the native AHV functionality, making it more robust and production ready.

- Improves deployment time by eliminating manual configuration errors and automating provisioning processes.

- Reduces administrative friction in cloud deployments through network automation and visibility.

- Delivers visibility of VM components in dynamic, virtualized networks.

- Provides the tools to configure, view, change, track and report on network conditions across multiple network environments simultaneously.

- Delivers comprehensive tracking, logging and reporting for audit and compliance purposes.

Figure 1: vNIOS for Nutanix AHV extends the Infoblox Grid to remote sites and/or public clouds.