

SOLUTION NOTE

# Infoblox OpenStack Adapter for Private Cloud

## BENEFITS

- Rapid IP address provisioning to OpenStack cloud environments
- Automatic reclamation of IP addresses from decommissioned VMs
- Automatic deployment of DNS records to new VMs
- Single-pane-of-glass management of cloud, virtual, and physical networks
- Unified view of OpenStack, VMware and Microsoft cloud environments
- Comprehensive network data for audit, compliance tracking and reporting



## Automating Core Network Services for OpenStack

As enterprises launch more virtualization and cloud initiatives, they are relying on private clouds for new levels of business agility and flexibility to supplement the cost savings they already enjoy. Private cloud technology allows uniquely rapid responses to changing business needs, but one key issue moving forward is vendor lock-in. A solution to this issue is the OpenStack cloud management platform.

## Customer Challenge: Friction in the Cloud

OpenStack is a viable open-source cloud orchestration platform that enables organizations to avoid vendor lock-in and leverage the efforts of the open-source community—with significant momentum providing key functionality and rapid adoption. But while the flexibility and agility that private cloud delivers are in sight, implementation challenges remain.

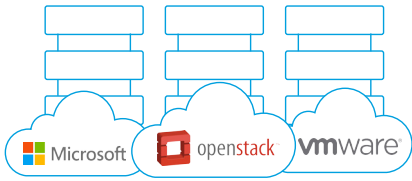


- Server-consolidation savings achieved from virtualization efforts and in private-cloud pilot programs may not be realized when moved to production.
- Organizational and process issues become sources of friction, inhibiting the deployment of cloud programs.
- For private cloud projects to succeed, the network fabric needs to capitalize on new levels of automation.
- Traditionally, network teams have relied on manual scripting and configuration, which need to be automated before private clouds can succeed and businesses can achieve their commercial goals.

OpenStack enabled significant progress toward establishing a solid technology for a flexible and agile cloud, but critical gaps remain. Network teams often rely on manual IP address and DNS provisioning, making it impossible to quickly provision cloud services. While they can spin up multiple virtual machines in minutes, in many cases it still takes hours, days, or even weeks to provision their IP addresses and DNS records. OpenStack itself does little to solve these issues.

OpenStack also add another management console alongside existing tools for virtualization and cloud platforms from VMware and Microsoft. Each platform requires its own approach and integrates differently with the existing network fabric, creating a significant tracking, audit, and compliance burden.

## Solution Overview



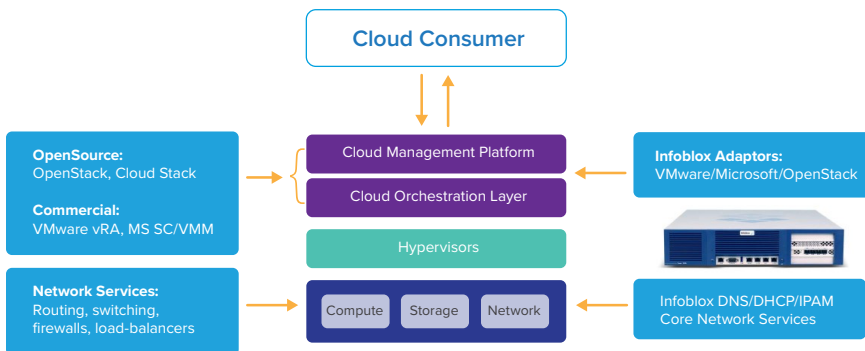
Infoblox' DDI Adapter for OpenStack lets enterprises eliminate the friction in OpenStack-based private-clouds. By automating key provisioning processes

that are currently manual, this adapter helps private-cloud projects reach the finish line much sooner and deliver the business value and agility they promise.

The Infoblox DDI Adapter for OpenStack brings new levels of automation for core IP networking services such as DNS, DHCP, and IP Address Management, which OpenStack does handle natively. At the same time, the Infoblox

centralized management approach manages multiple cloud platforms including VMware, Microsoft, and OpenStack—from a single pane of glass for delivery of IP address provisioning, DNS records, and DHCP control while avoiding the proliferation of management systems.

### Where Infoblox Fits



### Feature Highlights

The Infoblox DDI Adapter for OpenStack, in combination with the Infoblox Grid™, provides the following:

- Automated IP address provisioning and reclamation, allowing faster VM provisioning and prevention off “VM

sprawl” by automatically reclaiming IP addresses when VMs are decommissioned.

- Infoblox Smart Folder views deliver simple visibility of IPs, 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 provides role-based access control, audit trails, and automated one-touch updates to all Grid members.
- Centralized management enables all cloud, virtual, and physical networks to be viewed and controlled from a single web-based GUI.
- OpenStack, VMware, and Microsoft cloud platforms can be managed from one console.

## Value Proposition/Benefits Summary

Infoblox DDI Adapter for OpenStack delivers the following benefits:

- Enhances the native OpenStack functionality, making it much more robust and production-ready
- Improves network deployment time by eliminating manual configuration errors and automating provisioning processes
- Enables DevOps use cases by supporting multiple overlapping network blueprints
- Reduces friction in cloud deployments by adding network automation and visibility
- Brings visibility for individual VM components in dynamic, virtualized environments
- Provides all of the tools necessary 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

### Availability

Infoblox OpenStack Adapter is available via download from the Infoblox website at [www.infoblox.com/downloads](http://www.infoblox.com/downloads), or by contacting your Infoblox sales representative.



Infoblox enables next-level network experiences with its Secure Cloud-Managed Network Services. As the pioneer in providing the world's most reliable, secure and automated networks, we are relentless in our pursuit of network simplicity. A recognized industry leader, Infoblox has 50 percent market share comprised of 8,000 customers, including 350 of the Fortune 500.

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