Infoblox

SOLUTION NOTE

vNIOS for DNS and IPAM on Microsoft Azure

Industry-Leading Virtualized Network Services for Azure

BENEFITS

Gain Faster DNS for Azure
Enhance Azure application support with faster and more reliable DNS

Expand Performance and Reliability
Increase performance and ensure uptime with DNS and IPAM deployment options for hybrid cloud, public cloud and fault tolerance

Enable Dynamic Security Policies
Connect with Azure AD to provide identity data and dynamic security policies for your users and groups

Improve Consistency
Ensure DNS and IPAM consistency across Azure and traditional networks

Lower Costs
Reduce total cost of ownership (TCO) by decreasing hardware, power, cooling and real-estate costs

Use Eco-Friendly Solutions
Save power and protect the environment by reducing the number of servers and appliances

Speed Processes with Easy Deployment
Deploy easily using your standard virtualization practices

Extend Flexibility
Combine physical appliance and multiple virtual appliance options into a single deployment

The Challenge

Organizations are modernizing their networks to gain the benefits of cloud architecture—lower costs, improved agility and flexibility, enhanced security and global access. Yet many network administrators continue to struggle with manual, labor-intensive, error-prone processes to manage their IP addresses (IPAM) and DNS operations. Legacy tools and freeware often present complex architecture and deployment challenges. Because these tools lack DNS configuration change detection, verification capabilities and audit tools, tasks such as asset discovery, Active Directory replication, authentication, file processing and printing are all negatively impacted. These challenges mean poor visibility, inefficient operations, conflicts and outages, compromised security and the inability to meet compliance and audit requirements.

The Solution

Leverage Infoblox DNS and IPAM on Microsoft Azure

Infoblox DNS and IPAM for Azure extends its industry-leading software, fully integrated with the Infoblox Grid, as a virtual NIOS (vNIOS) or cloud platform appliance. The virtual machine (VM) option delivers centralized and distributed DNS, IPAM, FTP, TFTP and HTTP protocol services.

Add Flexibility and Scalability for Azure Stack

Organizations can operate virtual appliances on both Azure and Azure Stack. Within Azure Stack, teams can run Infoblox DNS and IPAM, DHCP services and vDiscovery for detecting resources and cloud endpoints. Azure Stack Government is also supported. This on-premises cloud integration offers the ultimate flexibility and scalability for Azure deployments.

Improve IPAM Visibility and Control for Public Cloud Instances

Infoblox IPAM provides advanced network discovery (including virtual resources), network and IP mapping and advanced filtering through innovative features such as Smart Folders. An easy-to-use graphical user interface supplies template-based configuration, automated error prevention and real-time visibility for monitoring and reporting. Improve your detection and response time with IPAM visibility that extends from traditional networks to hybrid cloud deployments.

KEY CAPABILITIES

Discovery and IPAM Sync
Engage accurate, automated, vendor-agnostic discovery, visibility and multi-grid IPAM sync and mass conversion of IP addresses to managed assets

Virtual and Cloud Appliances
Speed time to value with full Infoblox DNS and IPAM integration in public or hybrid clouds

Single Control Plane
Gain visibility into your network address space via a single control plane

Flexible DNS Deployment
Develop your network with external or internal DNS deployment options

Better App Performance
Deliver better user experiences with faster DNS for Azure applications

Resiliency
Ensure resiliency with fault tolerance and support for disaster recovery

Threat Detection and Remediation
Integrate with BloxOne Threat Defense to detect, block and resolve security threats

Adaptive Defense
Engage Azure Sentinel SIEM and SOAR for contextual data and faster security response

Network Traffic Management
Use DNS Traffic Control (DTC) to manage traffic, deploy, and keep apps performing on public clouds

Network Visibility and Intel
Get alerts, historical and current data, and analytics for better network control

Easy Updates
Simplify operations with one-touch software upgrades

Extend Visibility and Cloud Migration with Reporting in Azure

Network visibility is critical in today's hybrid multi-cloud environments. Infoblox supplies the ability to deploy Reporting and Analytics members in Azure public clouds. This capability simplifies the migration of physical data centers to the cloud and delivers single- and multi-site visibility into DDI metadata for historic audit/compliance, real-time alerting, network performance and capacity planning.

Increase Resilience and Availability

Infoblox virtual appliance software for Azure has all the redundancy, high-availability, access control and disaster-recovery features of Infoblox hardware appliances. Users gain the proven reliability and uptime benefits of an Infoblox solution while taking advantage of the cost benefits of Azure cloud offerings. With a single authoritative IPAM database across physical and virtual appliances, all networking address data and interactions for all appliances in the Grid are in one place, current and available.

Extend Security to Detect, Block and Remediate Threats

Infoblox DNS and IPAM as a virtual appliance for Azure also supports BloxOne® Threat Defense, Infoblox's foundational hybrid security solution. BloxOne Threat Defense allows organizations to detect and block modern malware, C&C, data exfiltration and DGA threats, consolidate and distribute threat intelligence to the entire ecosystem and improve security operations center efficiency through automation and ecosystem integrations.

Engage Azure Sentinel for SIEM and SOAR for Adaptive Defense

Maximize the rich DNS query data generated by BloxOne with Azure Sentinel, Microsoft's cloud SIEM and SOAR solution. Connect your BloxOne data to Sentinel in a single click to view raw DNS logs in an easy-to-read form. Visualize data within interactable dashboards and detect and investigate anomalies and more using out-of-box, customizable Sentinel tools specifically developed and tailored for BloxOne.

Delegate DNS and IPAM Tasks to Relevant Owners

With Infoblox tools, the network team can collaborate effectively with server and data center teams across traditional and virtual resources. Infoblox delivers secure role-based administration and auditing capabilities to allow effective delegation of responsibilities in a virtualized environment.

Reduce Rack Space, Power and Cooling Requirements

By leveraging the Azure Public Cloud, Infoblox virtual appliance software runs on public cloud resources that save equipment rack space and reduce power and cooling costs. This approach enables organizations to lower their TCO and build an environment-friendly infrastructure.

Manage Network Traffic for App Uptime, Performance, Deployment and Disaster Recovery

Infoblox DNS Traffic Control (DTC) is an affordable, integrated DNS global server load balancing (GSLB) solution that improves the end-user experience, simplifies global traffic management and reduces capital and operating expenses. It delivers business continuity, reliable application uptime, high availability, resiliency and disaster recovery by distributing network traffic across geo-diverse, on-premises, public and hybrid cloud environments for e-commerce, portals, web and internal business-critical applications. DTC integrates authoritative IPAM with DNS and GSLB to intelligently direct user traffic to optimal servers. It's scalable to meet changing data volumes and business needs and integrates with Infoblox Reporting and Analytics, making DTC an essential tool for fast, easy network traffic management on public clouds.

Gain Network Intelligence through Trending, Reporting and Analysis

Infoblox Reporting and Analytics leverages our unique platform for real-time views and management of DNS, IPAM and network services security. You can see and access the wealth of business-impacting network data with instant alerts, historical and predictive reporting for on-demand tracking, audit, forecasting and control. Integrated with our Grid technology, Reporting and Analytics enhances real-time management of networks and network services through Splunk, an extensive, customizable and historical reporting and visualization engine. Data from virtual appliance software for Azure integrates with Infoblox Reporting and Analytics so you can use the latest network insights to better manage your network. Virtual Reporting and Analytics members can be deployed on-premises or in Azure public cloud environments to gain greater visibility and flexibility and to simplify data center to cloud migrations.

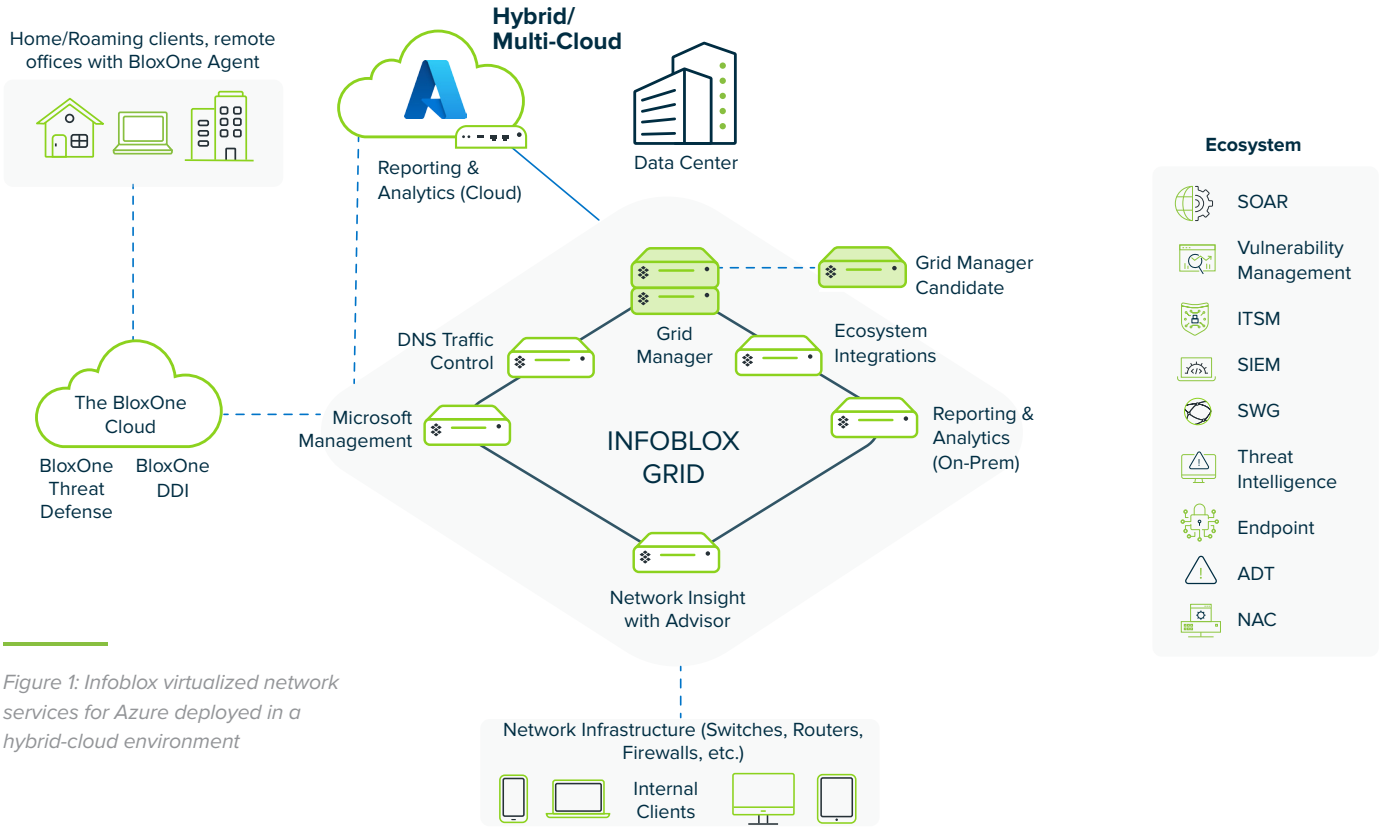

Figure 1: Infoblox virtualized network services for Azure deployed in a hybrid-cloud environment

Infoblox DNS and IPAM Virtual Appliance Options for Microsoft Azure

Enterprise Platform

Infoblox Appliance	Role	Azure Shape	Interfaces	DNS Queries Per Second*
TE-v825	Grid Member	DS11_v2 Standard	2 interfaces	22,500
TE-v1425	Grid Manager or Member	DS12_v2 Standard	2 interfaces	75,000
TE-v2225	Grid Manager or Member	DS13_v2 Standard	2 interfaces	200,000
TE-v4015	Grid Manager or Member	DS13_v2 Standard	2 interfaces	300,000
TE-v4025	Grid Manager or Member	DS13_v2 Standard	2 interfaces	300,000
TE-v5005	Grid Manager or Member	DS13_v2 Standard	2 interfaces	300,000

DNS Security is Key to Stopping Ransomware and Data Theft

Infoblox Appliance	Role	Azure Shape	Interfaces	VM Capacity	API Calls Per Minute	DNS Queries Per Second*
CP-v805	Grid Member	DS11_v2 Standard	2 interfaces	1,000	10	4,000
CP-v1405	Grid Member	DS12_v2 Standard	2 interfaces	5,000	50	30,000
CP-v2205	Grid Member	DS13_v2 Standard	2 interfaces	20,000	200	143,000

**The stated performance numbers are for reference only. They represent the results of lab testing in a controlled environment focused on individual protocol services. Enabling additional protocols, services, cache hit ratio for recursive DNS and customer environment variables will affect performance. To design and size a solution for a production environment, please contact your local Infoblox solution architect.*

Contact Us

For more information or to get answers on Infoblox DNS, IPAM and other network services for Azure, connect with your Infoblox account team, see our core network integrations or contact us at Infoblox.com.

Infoblox

Infoblox is the leader in next generation DNS management and security. More than 12,000 customers, including over 70 percent of the Fortune 500, rely on Infoblox to scale, simplify and secure their hybrid networks to meet the modern challenges of a cloud-firs world. Learn more at www.infoblox.com.

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