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vNIOS for DNS, DHCP and IPAM on Microsoft Azure

Industry-Leading Virtualized Network Services for Azure

THE CHALLENGE

CONSISTENT, SECURE CRITICAL NETWORK SERVICE DEPLOYMENTS ACROSS HYBRID, PUBLIC CLOUD ENVIRONMENTS

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 lead to poor visibility, inefficient operations, conflicts and outages, compromised security and the inability to meet compliance and audit requirements.

THE SOLUTION

MARKET-LEADING, ENTERPRISE-GRADE DNS AND IP ADDRESS MANAGEMENT FOR HYBRID, MULTI-CLOUDS

Leverage Infoblox DNS and IPAM on Microsoft Azure

Infoblox DNS and IPAM for Azure extends Infoblox's 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.

Empower DHCP for Azure

Organizations with cloud-first initiatives or those interested in decommissioning physical data centers and simplifying migration to the cloud can deploy DHCP for Azure. This capability ensures service consistency by allowing DHCP services to be configured on vNIOS instances in Azure and serve DHCP to on-premises clients.

Add Flexibility and Scalability for Azure Stack Hub

Organizations can operate virtual appliances both on Azure and Azure Stack Hub. Within Azure Stack Hub, teams can run Infoblox DNS and IPAM 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.

BENEFITS

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

Enable DHCP for Azure
Configure DHCP services on vNIOS Azure instances and serve DHCP to on-premises clients

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

Ensure DNS Consistency
Enhance DNS and IPAM consistency with NIOS read synchronization for Azure Cloud- Native DNS applications across Azure and traditional networks for greater accuracy and user experience

Deliver High Availability (HA)
Configure NIOS appliances for HA redundancy to improve uptime and avoid single points of failure in Azure

Improve Discovery and Visibility
Eliminate blind spots with automated discovery, unified and forensic visibility of virtual networks and machines on Azure

Ensure DNS Consistency and User Experience

Admins can configure read synchronization to match Azure Cloud-Native DNS applications for Infoblox objects and the user interface. This capability improves user experience and consistency across cloud platforms.

Deliver Resilience and High Availability (HA) and Uptime

NIOS allows customers running cloud platform (CP) appliances to configure two NIOS appliances for High Availability (HA) and uptime. HA measures how reliably users can access the system, impacted by planned maintenance and unscheduled downtime. Uptime measures the time a system is operational. With HA, admins can achieve both and avoid single points of failure in Azure and other public cloud environments, especially for mission-critical applications and workloads.

In addition, 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 serving as a centralized repository for all physical and virtual appliances and network connections, rich contextual real-time network metadata is not only easily visible through a single control plane but backed up and available to ensure network resiliency and uptime.

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.

Extend Network Insight and Reporting Members in Azure

Network visibility is critical in today's hybrid multi-cloud environments. Infoblox provides the ability to deploy Network Insight discovery and Reporting and Analytics software appliances in Azure public clouds. This capability supports cloud-first initiatives and simplifies the migration of physical data centers to the cloud. It also enables asset discovery and visibility into DDI metadata for historic audit, compliance, real-time alerting, network performance and capacity planning.

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.

Simplify Processes and Increase Productivity with Infoblox PayGo on Microsoft Azure Marketplace

Infoblox PayGo is a flexible, self-service, usage-based licensing model for developing and deploying DNS, DHCP and IP Address Management services across multi-cloud environments. By leveraging PayGo through Microsoft Azure Marketplace, organizations can quickly access and deploy critical network services without traditional sales processes or large infrastructure

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

Detect, Block and Remediate Threats
Avoid disruptions with virtual Advanced DNS Protection (vADP) for Azure to detect and mitigate the widest range of DNS attacks

Tap Rich Threat Intelligence to Strengthen Security
Combine threat intelligence with BloxOne® Threat Defense for anytime, anywhere security on Azure

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

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

Access Infoblox PayGo on Azure Marketplace
Explore new DDI capabilities, solve challenges, draw down committed spend, quickly access scalable capacity, accelerate deployment and simplify complexity

KEY CAPABILITIES

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

commitments. PayGo enables businesses to explore new capabilities and solve network, cloud and security challenges. It draws down committed spend, provides instant access to scalable capacity, accelerates deployment, and simplifies complexity for greater productivity and faster time-to-value. For more information, visit Infoblox on Microsoft Azure Marketplace.

Extend Security to Detect, Block and Remediate Threats

NIOS adds virtual Advanced DNS Protection (vADP) for Azure public cloud to detect and mitigate the widest range of DNS attacks including volumetric, NXDOMAIN, DNS hijacking and other exploits. With vADP, administrators can quickly detect attacks, maintain DNS integrity, enhance uptime and extend external DNS protection from local on-premises instances to public cloud environments.

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, command and control (C&C), data exfiltration and DGA threats, consolidate and distribute threat intelligence to the entire ecosystem and improve SOC efficiency through automation and ecosystem integrations.

Engage Azure Sentinel for SIEM and SOAR Adaptive Defense

Maximize the rich DNS query data generated by BloxOne with Azure Sentinel, Microsoft's cloud Security Information and Event Management (SIEM) and Security Orchestration, Automation and Response (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.

Flexible Deployment Options

Infoblox vNIOS for DDI is tightly integrated with industry-leading on- premises, virtual and cloud appliances. Infoblox supports Microsoft Azure, private cloud environments (including VMware, OpenStack, Microsoft and others) and traditional networks—or any combination in a hybrid deployment. The unified solution ensures maximum flexibility, scalability and service availability.

Infoblox offers a full range of deployment options through secure, purpose-built physical and software appliances for small remote and branch offices, medium-sized organizations and large enterprises and services providers with data centers and distributed sites. The Trinzic X6 physical and software appliance platform offers up to 50% better DNS and DHCP performance over prior models. It also includes cost-saving licenses for Cloud Platform API automation, DNS Firewall and DNS Traffic Control global server load balancing. No matter what your organization needs, Infoblox provides the commercial, enterprise and service-provider-grade solutions that deliver a consistent, critical network experience with the reliability and flexibility to scale your environment as your business needs require.

Reduce Rack Space, Power and Cooling Requirements

By leveraging Microsoft Azure, 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.

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

Flexible DNS Deployment
Extend your network with external or internal DNS to improve user experiences with faster DNS for Azure applications

NIOS Read Synchronization for Azure Cloud-Native DNS Applications
Match NIOS objects and the user interface to Azure cloud-native DNS for consistency and improved user experience across cloud platforms

High Availability (HA) in Azure
Ensure reliability for mission- critical applications by configuring two NIOS cloud platform (CP) appliances for HA and network uptime

Discovery and IPAM Sync
Automate vendor-agnostic discovery, visibility and multi-grid IPAM sync and mass conversion of IP addresses to managed assets for greater accuracy, user experience and efficiency

Dynamic Network and Security Policies
Provide identity data and dynamic network and security policies for your users and groups in Azure

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

Fault Tolerance and Disaster Recovery
Ensure resiliency with NIOS provides fault tolerance and support for disaster recovery to ensure platform resiliency
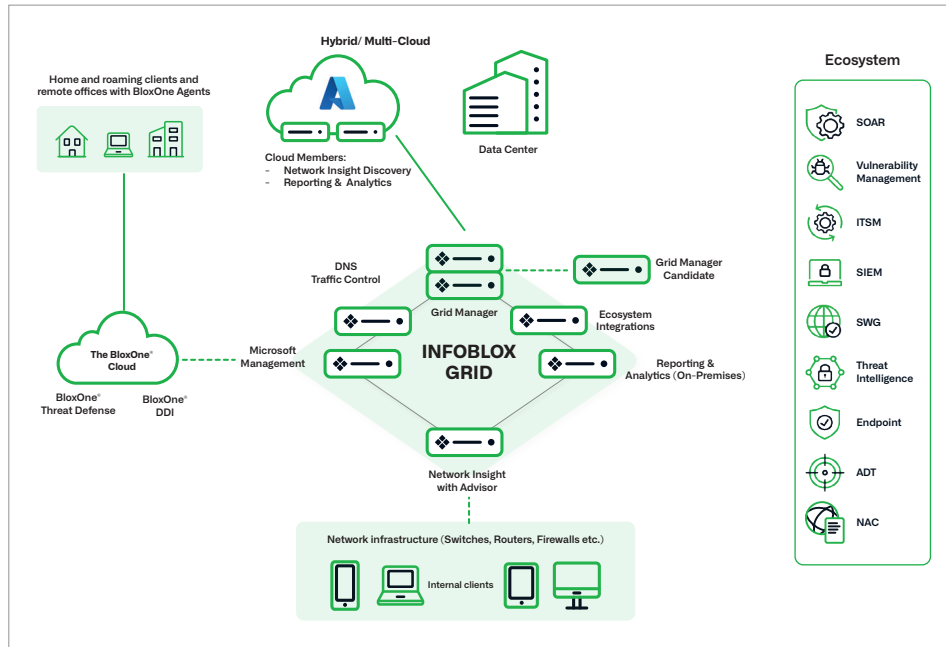
INFOBLOX DNS AND IPAM FOR MICROSOFT AZURE

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

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

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

Contextual Network Intelligence
Get alerts, historical and current data and analytics for better network control

Flexible Deployment and Easy Updates
Ensure flexibility, scalability and service uptime with streamlined software upgrades on purpose-built appliances for on-prem, virtual and cloud deployments

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

INFOBLOX DNS AND IPAM PLATFORM SPECIFICATIONS FOR MICROSOFT AZURE

Software Model	DNS Queries Per Second* (QPS)	DHCP Leases Per Second*(LPS)	Azure Instance Type	Network Discovery (ND) Model		Reporting (RPT)
TE-926	33,750	225	Standard_E4s_v3	ND-906	☑	N/A
TE-1516	67,500	400	Standard_E8s_v3	ND-1516	N/A	N/A
TE-1526	112,500	675	Standard_E16s_v3	ND-1526	☑	N/A
TE-2326	250,000	1,200	Standard_E20s_v3	ND-2326	☑	N/A
TE-4126	450,000	1,500	Standard_E32s_v3	ND-4126	☑	N/A
TR-v5005	N/A	N/A	Customize	N/A		☑

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INFOBLOX DNS AND IPAM PLATFORM SPECIFICATIONS FOR MICROSOFT AZURE HUB

Software Model	DNS Queries Per Second* (QPS)	DHCP Leases Per Second*(LPS)	Azure Hub Instance Type	Network Discovery (ND) Model		Reporting (RPT)
TE-926	33,750	225	Standard_E4_v3	ND-906	⊖	N/A
TE-1516	67,500	400	Standard_E8_v3	ND-1516	N/A	N/A
TE-1526	112,500	675	Standard_E16_v3	ND-1526	⊖	N/A
TE-2326	250,000	1,200	⊖	ND-2326	⊖	N/A
TE-4126	450,000	1,500	⊖	ND-4126	⊖	N/A
TR-v5005	N/A	N/A	N/A	N/A		⊖

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.

☑ Supported / included

⊖ Feature is supported on this model but not this platform

N/A Feature is not supported on this model or platform

CONTACT US

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

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Infoblox unites networking and security to deliver unmatched performance and protection. Trusted by Fortune 100 companies and emerging innovators, we provide real-time visibility and control over who and what connects to your network, so your organization runs faster and stops threats earlier.

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