

IPAM for Microsoft

With the growth of IP addresses from increases in applications, IP-based personal devices, IPv6, virtualizations and multi-cloud deployments, organizations struggle with getting their Microsoft-based DNS and DHCP servers to deliver highly available network services and efficiently manage IP addresses. Organizations that want to maintain their existing deployment of Microsoft DNS/DHCP servers need to add technology to make their Microsoft environments more secure, scalable and redundant. They also need a highly scalable and automated enterprise-grade IP address management (IPAM) solution to meet expanding business requirements.

As a Microsoft Gold partner, Infoblox developed Microsoft Management to enable network administrators to handle their IPAM centrally and seamlessly for Microsoft DNS/DHCP services and their Infoblox physical and virtual resources. Infoblox's Microsoft Management solution delivers an overlay with granular capabilities unavailable in Microsoft's management suite, such as centralized IPAM and integrated reporting. Thousands of organizations worldwide are using Infoblox's technology to enhance and improve their Microsoft DNS/DHCP and to enable a centrally managed transition to additional DNS/DHCP-based physical and virtual appliances.

AGENTLESS IP ADDRESS MANAGEMENT FOR MICROSOFT

The Infoblox agentless Microsoft Management solution delivers what Microsoft lacks—improved visibility, automation and control through a powerful, centralized, enterprise-grade, advanced IPAM tool that enhances existing investment yet requires no changes to your current Microsoft environment. Microsoft Management from Infoblox presents no system overhead or performance impacts because it requires no additional software to be installed on any Microsoft DNS/DHCP servers or Windows host. Further, it simplifies IT deployment and reduces management effort because it uses remote procedure calls via DCOM, the same method Microsoft uses to manage its DNS/DHCP via the Microsoft Management Console tool. This approach leads to easier deployment and guarantees tight integration with Microsoft. Plus, it offers read-only or read-write configuration options for greater deployment flexibility and control.

CONCURRENT CENTRALIZED MANAGEMENT OF MICROSOFT AND INFOBLOX DNS/DHCP SERVICES AND IPAM

With its centralized management solution, a system administrator can use Infoblox's web-based interface to manage Microsoft and Infoblox DNS/DHCP services in parallel as well as IP addresses—all from a single control plane. For example, Figure 1 identifies the Microsoft server attributes discovered, displayed and integrated within the Infoblox Grid. Any DNS changes made on

INFOBLOX MICROSOFT MANAGEMENT BENEFITS

- Deliver consistent reliability and uptime with agentless IP address management (IPAM) for Microsoft
- Ensure visibility and accuracy with automated device discovery and data synchronization to reduce IP conflicts, errors and outages
- Improve control with centralized and role-based management of both Microsoft and Infoblox DNS/DHCP services
- Streamline workflows with Active Directory Sites and Services integration
- Enhance visibility and control using identity mapping that connects users with IP addresses
- Gain granular reporting, automatic error checking, auditing and control over user roles, access and permissions
- Retain flexibility and control with read-only or read-write implementation options
- Achieve high availability and redundancy when used in an Infoblox Grid deployment
- Increase staff efficiency and collaboration with advanced IPAM tools to simplify configuration, administration, troubleshooting and change management
- Reduce operational costs and risks by automating manual tools, tedious procedures, backup and system maintenance

Gold
Microsoft Partner



Infoblox appliances will propagate to the appropriate Microsoft DNS server (which can be either stand-alone or part of Active Directory). The solution will automatically synchronize changes made by either Microsoft or Infoblox tool sets. This tight integration enables organizations to maintain their existing Microsoft DNS/DHCP servers while taking advantage of the additional services that Infoblox supplies.

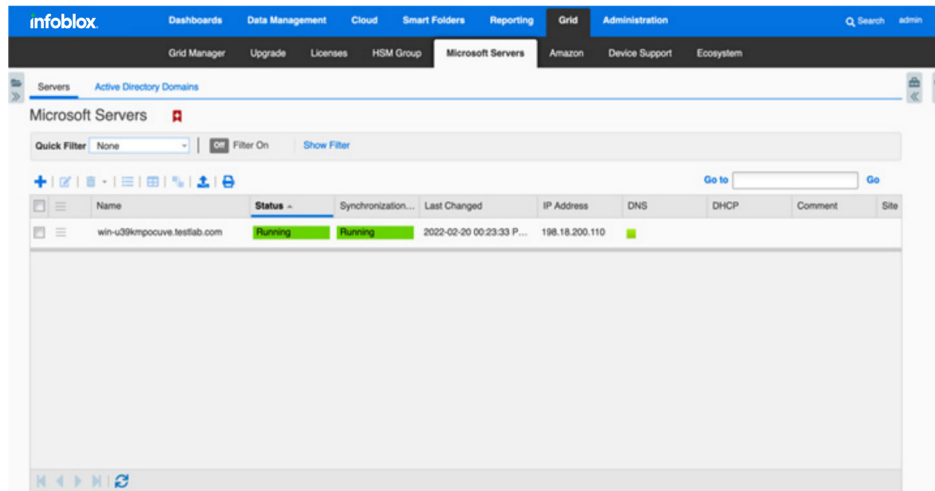


Figure 1: Simplify and centralize Microsoft DNS and DHCP server management with Infoblox IPAM

Moreover, Microsoft Management has full support for Microsoft Split-Scope, a Microsoft DHCP fault tolerance implemented by splitting a DHCP scope across multiple Microsoft servers. Microsoft Management enables the administrator to synchronize existing Split-Scopes for continued management within a single network view. It also displays all information about the Split-Scope in one view, including Microsoft servers, exclusions, reservations and utilization. Having a single view of the Split-Scope lets the administrator see and correct the Split-Scope when there are overlaps or gaps. It will automatically detect a Microsoft-defined Split-Scope (i.e., two servers with total network exclusion equaling 100 percent) and mark it as a proper Split-Scope instance.

AUTOMATED NETWORK PROVISIONING FOR MICROSOFT PRIVATE CLOUD

Infoblox also offers integration with Microsoft System Center Operations Manager (SCOM) and Virtual Machine Manager (VMM). This integration enables automated provisioning and de-provisioning of IP addresses and DNS records for virtual machines as they are created, moved and destroyed. It also shortens the time for provisioning and de-provisioning of network resources in Microsoft virtual environments while delivering unified, centralized IPAM for physical, virtual and cloud environments.

GRANULAR REPORTING, AUTOMATIC ERROR CHECKING, AUDITING AND CONTROL OVER USER ROLES AND PERMISSIONS

Microsoft Management includes extensive reporting and auditing capabilities. The solution automatically logs all IP-related operations both for compliance reasons and for generating reports. The software also contains granular control capabilities, permitting specific operations to be assigned to specific administrators. For example, a DNS administrator can be given full access to an entire DNS zone or limited permission to handle only an A record within that zone. Such granular controls afford an extra level of security that is unavailable on a Microsoft DNS or a Microsoft IPAM server.

INFOBLOX MICROSOFT MANAGEMENT FEATURES

- Agentless IP address management for Microsoft
- Centralized management of both Microsoft and Infoblox
- Active Directory Sites and Services integration
- Network maps, IP maps, user/device identity mapping, Smart Folders and other advanced graphics for visibility into the configuration and use of IP resources
- Read-only or read-write implementation options
- Customizable management GUI for different types of administrators
- Extensive reporting and auditing capabilities
- Granular control over users and permissions
- Elegant visualization of discovered network devices and virtual machines through IPAM
- Support for Microsoft Split-Scope
- Highly available, reliable and fault tolerant when deployed in an Infoblox Grid environment



MICROSOFT SERVER CONFIGURATION

For large enterprise customers, the Microsoft Management Server Configuration for Delegate Name Server Group feature improves user experience, control and efficiency by allowing network administrators to add and configure Microsoft servers when running Sites and Services, especially when using Delegated Name Server Groups in thousands of zones so administrators can avoid managing those zones individually. This capability saves considerable time and effort, improves scalability and shortens time requirements for higher-value tasks.

DISCOVERY AND VISUALIZATION OF NETWORK DEVICES

Through an elegant web-based GUI, Microsoft Management will automatically discover physical devices and virtual machines and display rich contextual IP attributes, data and mapping to enhance visibility and simplify administration (see Figure 2). It also empowers a system administrator to easily view and manage Microsoft AD DNS records and devices (Figure 3). For example, when performing zone transfers from Microsoft to Infoblox, administrators using read-only mode can see all their AD DNS records in the Infoblox GUI. But in read-write mode, they can also manage those records inside Infoblox.

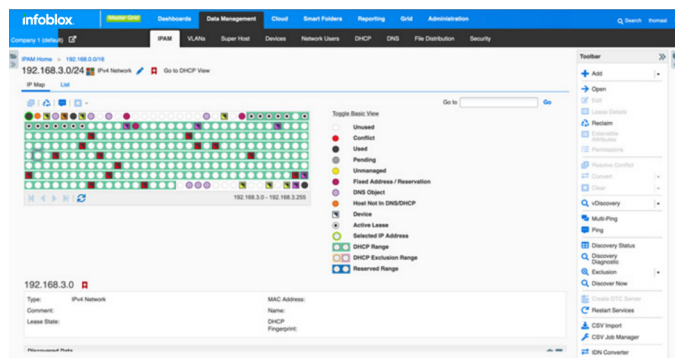


Figure 2: Visual IPAM tools deliver visibility and simplify administration

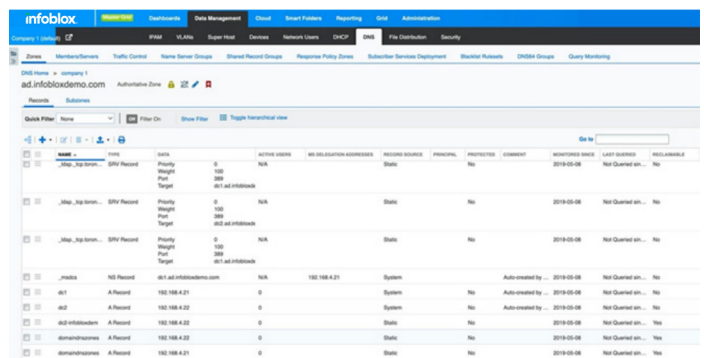


Figure 3: Infoblox makes it easy to find, see and manage your Microsoft DNS records from within Infoblox

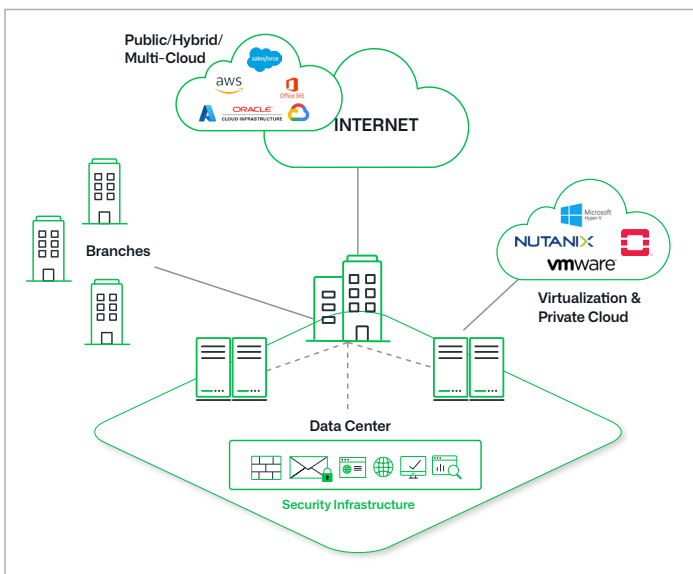


Figure 4: The Infoblox Grid enables visibility and simplifies DNS and DHCP management enterprise wide

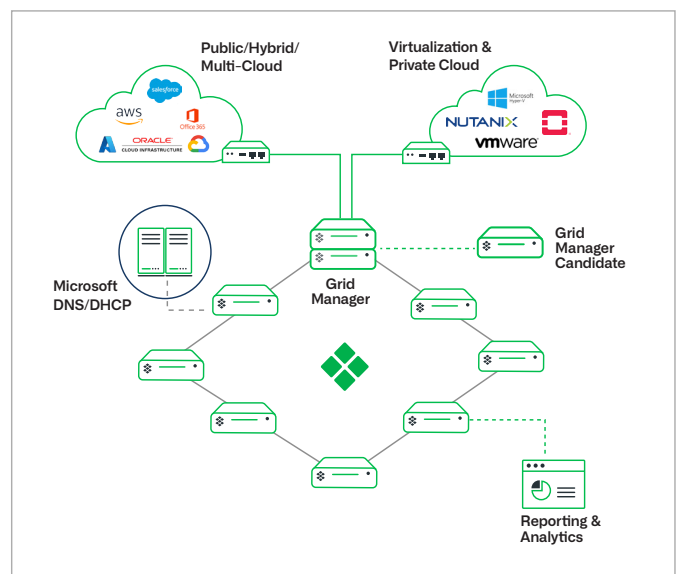


Figure 5: Microsoft Management improves visibility, automation and control, enables reliability and simplifies network management

By employing virtual machine discovery and the use of Smart Folders, system administrators can create collections of virtual resources to be grouped by a VMware Data Center, switch port and VLAN. The software provides summary and forensic-level detail and other management controls that simplify visibility into which devices are accessible by a VMware Data Center. It also quickly identifies any errors encountered and accelerates problem resolution for improved management and efficiency.

HIGH AVAILABILITY IN A GRID DEPLOYMENT

The Infoblox Grid supplies resilient network services, failover, recovery and seamless maintenance for an Infoblox deployment inside a single building, across a networked campus or between remote locations (see Figure 4). When deployed in an Infoblox Grid environment, Microsoft Management ensures that all data obtained from a Microsoft DNS/DHCP server becomes part of the Grid's distributed database, delivering services that are highly available, reliable and redundant (see Figure 5).

VISIBILITY, AUTOMATION AND CONTROL

For organizations retaining their existing Microsoft DNS/DHCP environments, Microsoft Management delivers a secure, highly scalable and automated enterprise-grade IPAM solution to meet expanding business requirements. It delivers the visibility, automation and control to enable reliability, improve efficiency and deliver a consistent experience across the modern enterprise.

Microsoft Management Specifications		
Operating System	Levels	Platforms
Microsoft Windows 2022 Standard and Datacenter	Initial Release	64 bits
Microsoft Windows 2019 Standard and Datacenter	Initial Release	64 bits
Microsoft Windows 2016 Standard and Datacenter	Initial Release	64 bits
Microsoft Windows 2012 R2 Standard and Datacenter	Initial Release	64 bits
Physical and Virtual Appliances Supported: 8x5, 14x5, 22x5 and 40x5		
Hypervisors (Private Clouds) Supported: MS Hyper-V, Nutanix AHV, OpenStack KVM and VMWare ESXi		
Public Cloud Platforms Supported: AWS, GCP, MS Azure and OCI		

For additional specifications and more information, please contact your Infoblox Account Team.



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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