infoblox

INFOBLOX UNIVERSAL DDI™ FOR MICROSOFT MANAGEMENT

Centralized delivery and control of Microsoft DNS and DHCP services across hybrid and multi-cloud networks

SUMMARY

Simplify management of Microsoft DNS and DHCP without replacing existing infrastructure.

Organizations rely on Microsoft DNS and DHCP to support critical network services, but managing them across hybrid and multi-cloud environments creates complexity, risk and operational drag. Infoblox Universal DDI™ for Microsoft Management extends centralized management, visibility and control to Microsoft DNS and DHCP via a lightweight, native agent with bidirectional synchronization. Teams maintain familiar tools while improving scale and efficiency, and gain resiliency through bidirectional synchronization, centralized visibility and multi-server management that reduce drift, prevent conflicts and shorten recovery times. This reduces administrative effort and supports a more unified network strategy.

OVERVIEW & CHALLENGES

Organizations are modernizing infrastructure across hybrid and multi-cloud architectures. Yet Microsoft DNS and DHCP are typically deployed as Windows Server roles and closely tied to Active Directory Domain Services (AD DS). These services are critical to operations but remain anchored to on-premises Microsoft infrastructure, which makes them hard to scale and manage across distributed environments.

As many organizations adopt cloud identity platforms, such as Microsoft Entra ID or Okta, DNS and DHCP often remain on Microsoft servers, making consistent, scalable management even more critical.

Microsoft DNS and DHCP are often configured and managed individually, increasing the risk of errors and slowing operations. Ownership is often split: Microsoft Active Directory (AD) administrators manage server infrastructure while network teams are accountable for service delivery, creating gaps in handoffs and inconsistent change control. Siloed views across data centers, branches and cloud make it hard to reconcile intended configurations with actual behavior, and records, scopes, leases and reservations lack a unified inventory. Teams fall back on spreadsheets and ad hoc tools, adding delay, conflicts and technical debt. Because Windows Server DNS and DHCP roles lack an infrastructure-light deployment path, scaling requires more servers, patching and coordination, which hampers adaptability as demand grows.

USE CASE: CENTRALIZED MICROSOFT DNS AND DHCP MANAGEMENT

Organizations running multiple Microsoft DNS and DHCP servers face fragmented control, complex updates and inconsistent policies. Infoblox Universal DDI for Microsoft Management enables unified discovery and control

KEY CAPABILITIES

Unified Management

Extend the Infoblox cloud-native interface to include Microsoft DNS and DHCP servers. Support multi-server management via a lightweight, native agent. Bidirectional synchronization keeps zones, records, scopes and leases consistent across Microsoft, public cloud and Infoblox NIOS, and NIOS-X within Universal DDI.

Extended Visibility

Monitor and validate assets in real time by combining Microsoft DNS and DHCP data with IPAM data in Universal DDI and Infoblox Universal Asset Insights™. Deliver an authoritative, consistent view across sites while reducing visibility gaps, configuration drift and troubleshooting time.

Cloud-Native Management

Manage Microsoft DNS and DHCP through the Infoblox Portal without infrastructure replacement or elevated access. A lightweight native agent provides secure integration and coexistence with existing Microsoft servers, enabling incremental modernization across hybrid environments.

Seamless Integration

Integrate with the Universal DDI Product Suite, including Universal Asset Insights and flexible NIOS-X deployment options, while preserving admin workflows with RBAC and least-privilege access.

of these services through a cloud-native interface. Through bidirectional synchronization and lightweight agent integration, changes to DNS zones, records, DHCP scopes and leases are automatically reflected across platforms.

AD administrators can monitor and configure distributed deployments without accessing individual server consoles, improving efficiency and reducing the risk of manual errors. This approach eliminates reliance on PowerShell scripts, manual updates or elevated domain-level access. Infoblox supports multi-server management through a lightweight, native agent, which makes it easier to scale operations securely and consistently.
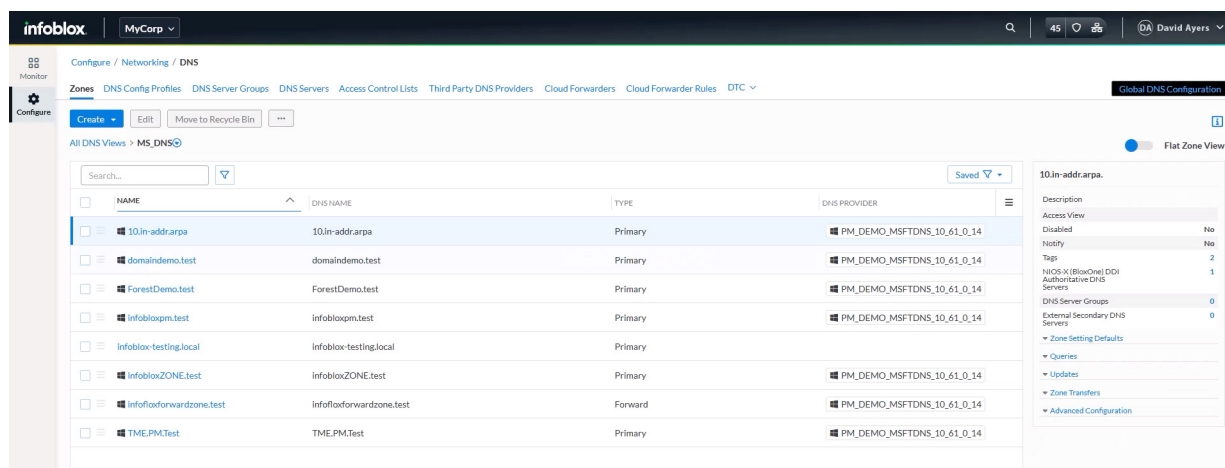

Figure 1. Cloud-native portal showing unified view of Microsoft, NIOS and NIOS-X DNS/DHCP resources

USE CASE: REAL-TIME VISIBILITY AND CONFIGURATION VALIDATION

Teams often track allocations and changes with spreadsheets, PowerShell scripts, configuration management database (CMDB) exports and ticket notes. Server tools such as DNS Manager and DHCP Manager in the Microsoft Management Console (MMC) show only one server at a time and often suffer from performance issues. This isolates zones, records, scopes, leases and reservations, which makes cross-server correlation slow and unreliable. As a result, it is hard to spot duplicate or conflicting entries, confirm that usage actually matches declared settings or see scope utilization across sites.

When paired with Universal Asset Insights, Infoblox Universal DDI for Microsoft Management unifies Microsoft DNS and DHCP with IP address management (IPAM) to deliver a consistent, real-time view of assets and network activity, including which users are using which assets. Bidirectional synchronization keeps updates aligned across Infoblox and Microsoft systems. Teams validate configurations faster, resolve conflicts sooner and maintain accurate records without relying on manual tools.
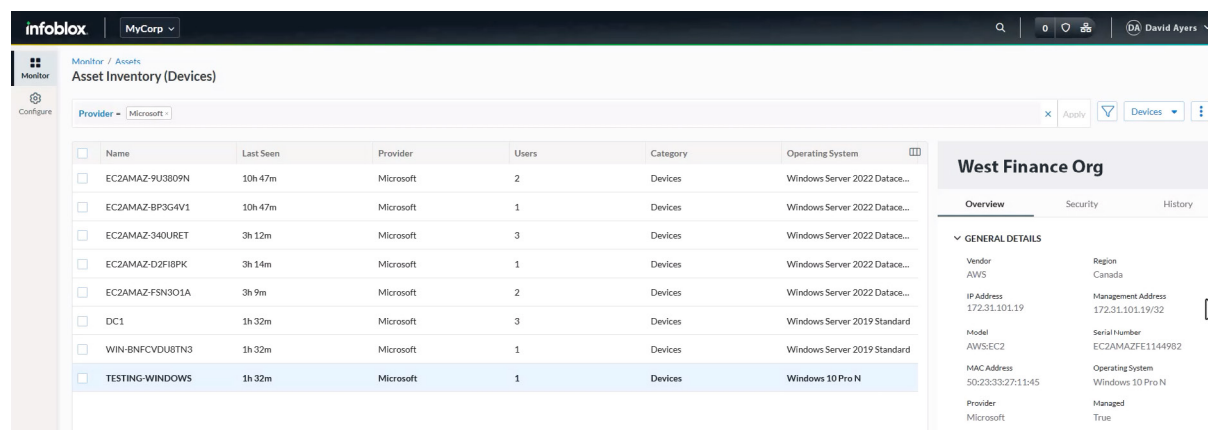

Figure 2. Populates Universal Asset Insights with asset and user data pulled directly from Microsoft Environments

infoblox.

USE CASE: MANAGING MICROSOFT INFRASTRUCTURE WITH SECURE DELEGATION

Teams responsible for Microsoft DNS and DHCP often need to delegate administrative access without granting unnecessary elevated permissions. Infoblox Universal DDI for Microsoft Management applies role-based access control (RBAC) to servers, zones, scopes and related resources so administrators can limit actions by role and location while keeping operations consistent.

A lightweight, native agent Microsoft admins install locally connects environments to Infoblox without requiring enterprise or domain admin permissions, domain controller access or infrastructure changes. AD admins retain ownership of their servers while Infoblox provides centralized oversight across DNS and DHCP for NetOps, IT operations and security teams. Bidirectional synchronization keeps updates consistent across both platforms, which reduces operational friction and supports least-privilege policies at scale.
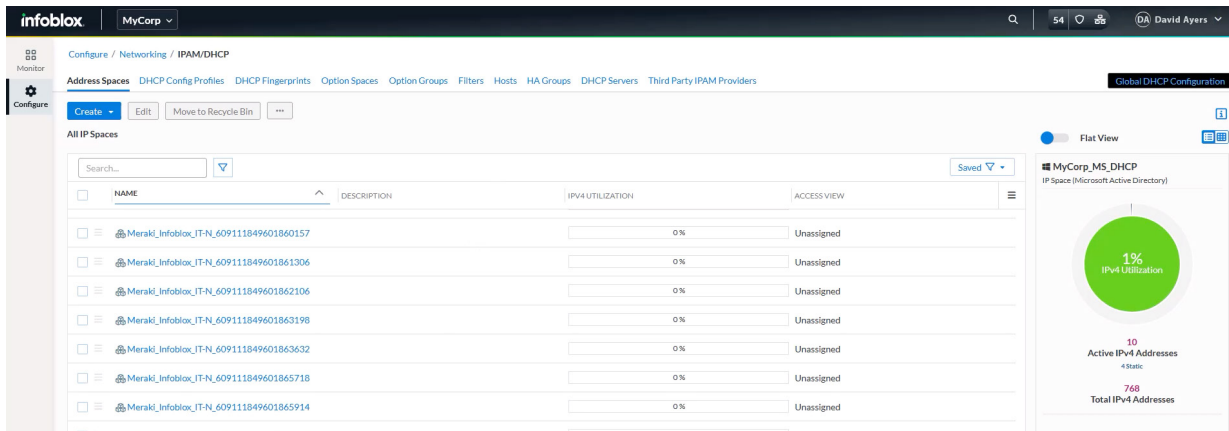

Figure 3. A single interface for DNS and DHCP removes multiple user interfaces, simplifies workflows and reduces overhead

BUSINESS VALUE

Organizations moving to hybrid and multi-cloud environments often continue to use Microsoft DNS and DHCP roles deployed on-premises with AD DS to support critical network services. Managing these services across distributed locations increases administrative burden, limits scalability and introduces risk.

Infoblox Universal DDI for Microsoft Management extends Infoblox Universal DDI by bringing Microsoft DNS and DHCP services under centralized, cloud-native control, without replacing it. With a lightweight agent and native integration, organizations avoid costly re-architecture while gaining visibility, consistency and control across their network stack, reducing the risk associated with managing critical network services.

Teams no longer need to manually track IPAM data, keep records or maintain scripts and spreadsheets to understand what is running where. Microsoft DNS and DHCP services can be monitored, managed and aligned with modern delivery and automation workflows, all through the same Infoblox interface already used for NIOS, NIOS-X and public cloud platforms. The result is a faster, lower-risk path to modernizing network operations without disrupting Microsoft workflows or requiring unnecessary elevated access:

- Maintain existing Microsoft infrastructure while gaining centralized control.
- Maintain consistency through bidirectional synchronization across DNS and DHCP.
- Avoid delays and disruption with agent-based integration and phased rollout.
- Improve visibility and accuracy by eliminating manual tools and siloed consoles.
- Reduce administrative effort and enable modern operations across teams.

CONCLUSION

Infoblox Universal DDI for Microsoft Management brings Microsoft DNS and DHCP into the Universal DDI control plane while preserving existing administrative ownership. Agent-based integration and bidirectional synchronization keep zones, records, scopes and leases consistent across environments. Organizations reduce manual effort, strengthen operational continuity and modernize at their own pace across data centers, branches and cloud platforms. AD administrators continue to use familiar workflows while managing services from a single portal alongside NIOS, NIOS-X and public cloud DNS. This establishes a stable foundation for delivering critical network services across hybrid and multi-cloud environments.

infoblox.

Infoblox unites networking, security and cloud with a protective DDI platform that delivers enterprise resilience and agility. We integrate across hybrid and multi-cloud environments, automate critical network services and preemptively secure the business—providing the visibility and context needed to move fast without compromise.

Corporate Headquarters
2390 Mission College Blvd, Ste. 501
Santa Clara, CA 95054

+1.408.986.4000
www.infoblox.com