

## SOLUTION OVERVIEW

# NIOS 8.5/8.5.1

NIOS 8.5/8.5.1 is the newest version of Infoblox's Network Identity Operating System (NIOS). By continuously investing in NIOS, Infoblox enables organizations to deploy robust, manageable and cost-effective DDI services to networks of any size today and into the future.

### BENEFITS OF NIOS 8.5

- **Extended integration**  
NIOS 8.5 adds support for Nutanix Acropolis Hypervisor (AHV), complementing existing support for VMware, Hyper-V and OpenStack Platform.
- **Evolution toward the cloud**  
NIOS Grid Connector makes NIOS/ Infoblox Grid™ data visible in the BloxOne® Cloud Services Portal. A BloxOne administrator can monitor IP and DHCP data from NIOS 8.5 appliances, continuing Infoblox DDI evolution toward the cloud.
- **SD-WAN visibility**  
NIOS 8.5 leverages Infoblox Network Insight to discover Meraki SD-WAN devices on a network. This capability unifies IPAM visibility while making IP address and network management more comprehensive.
- **Meeting customer needs**  
As with all versions of NIOS, 8.5 encompasses numerous customer enhancement requests. NIOS 8.5 is tomorrow ready with a containerized architecture that facilitates extensibility, portability and cloud connectivity.

### BENEFITS OF NIOS 8.5.1

- **DNS Flag Day 2020**  
This feature exposes two settings that help make DNS more reliable and secure while avoiding fragmentation and potential security risks associated with transmitting large packets.
- **Service provider high-performance Query Logging**  
Using dnstap, providers gain high-speed query logging visibility without a major performance tradeoff so they can deliver a safe, reliable, and fast first-connection impression to their subscribers.

## Business challenges

Organizations rely on high-performance networks that run at top efficiency. This reliance puts pressure on DNS, DHCP and IP address management (DDI) services to adapt and accelerate time to value by supporting changes in network technology, growth and cloud adoption. DDI needs to be enterprise grade not just today but tomorrow as well.



## Key features

### vNIOS for Nutanix AHV

Virtualization is the bedrock of private and hybrid clouds. Infoblox leads the way in offering enterprise-grade DDI support that is optimized for key virtualization platforms, including VMware, Hyper-V and OpenStack. NIOS 8.5 adds vNIOS for Nutanix Acropolis Hypervisor to the menu, giving users another choice for network services delivering high performance with greater operating efficiency.

### NIOS Grid Connector

The promise of “single pane of glass” visibility is realized in NIOS 8.5 with the NIOS Grid Connector. It makes NIOS/Infoblox Grid data visible in the BloxOne Cloud Services Portal. A BloxOne administrator can monitor IP and DHCP data from NIOS 8.5 appliances. This is a foundational step in the evolution of enterprise DDI to the cloud.

### Meraki SD-WAN Discovery

NIOS 8.5 in conjunction with Infoblox Network Insight discovers Meraki SD-WAN devices on a network. The outcome is a unified, comprehensive view of IP address management for organizations adopting SD-WAN technology for remote office connectivity. This feature also discovers Cisco SDN devices on a network.

### Terraform Support

This is an Infoblox plug-in for Terraform running in VMware and Microsoft Azure environments. It allows management of DNS and IPAM services, streamlining and simplifying access administration while improving operating efficiency.

### Enhancements to DNS Traffic Control

DNS Traffic Control status is refreshed every 10 seconds, allowing the administrator to see traffic status 12 times faster than previously possible. DNS Traffic Control has also been scaled up in NIOS 8.5 to support 4,000 pools and 4,000 Load-Balanced Domain Names and its persistency is quadrupled to two hours.

### DNS Flag Day 2020

IP fragmentation of large DNS messages sent via UDP can cause transmission failure, unreliability and security risk. NIOS 8.5.1 helps solve this problem by exposing two default settings:

1. the maximum size of a UDP datagram a recursive DNS server can accept; and
2. the maximum data amount an authoritative DNS server will put into a UDP-based DNS message. On Flag Day 2020 (targeted for the Fall), DNS community members will reduce the size of UDP-based DNS messages, and NIOS will be ready to help customers minimize DNS fragmentation and improve reliability and security.

### Service Provider High-Performance Query Logging

While traditional query and response logging provides a valuable source of data for both security and operational analysis, this can add significantly more I/O load to DNS servers in service provider environments, negatively affecting the subscriber experience. This latest version of NIOS includes high-speed query logging through dnstap—a fast, lightweight protocol enabling service providers to gain valuable DNS server and data insights without a significant performance tradeoff. High-speed query logging gives service providers even greater visibility and insight into their DNS while retaining the optimal ultra-low latency they expect.



Infoblox is the leader in modern, cloud-first networking and security services. Through extensive integrations, its solutions empower organizations to realize the full advantages of cloud networking today, while maximizing their existing infrastructure investments. Infoblox has over 12,000 customers, including 70% of the Fortune 500.

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