Infoblox

BloxOne® DDI

Simple, Reliable and Flexible Core Network Services for the Expanding Distributed Enterprise

KEY CAPABILITIES

Centralized Operations
Cloud-managed interface for automated DNS, DHCP and IP address management, and policy control across multiple locations.

Flexible Packaging
Available as both physical and virtual deployment options, with subscription based pricing.

Enhanced End-User Experience
Local DNS resolution to ensure all traffic goes to the closest application endpoints.

Local Survivability
DNS and DHCP services so business operations can continue with minimal or no downtime if disaster occurs and WAN services are disrupted.

Improved Reliability
DHCP instance pairing with automatic failover available for each site for seamless, uninterrupted operations.

The Challenge

Business and workplace transformation initiatives are expanding across organizations worldwide. They are driven primarily by rapid increases in mobility, IoT and the cloud, which have changed not only expectations but also the way business is done.

Mobile devices are a significant part of daily life. Anywhere, anytime access is now an absolute requirement. IoT growth in surveillance, manufacturing, healthcare and smart offices continues to expand. And business-critical applications and services are rapidly shifting to cloud-based alternatives like Salesforce, Microsoft 365 and Dropbox.

As a result, networks are expanding, primarily at the edge where the number of distributed locations and the devices within them are increasing exponentially. Additionally, users are demanding greater access, faster response times and more reliable connections to critical business applications and services.

These trends and the expectations behind them are pressing organizations to rethink their processes and deployment models to improve the level and quality of services they deliver. However, many lack the time or resources to evaluate and implement these improvements. As a consequence, vital tools for success now must include comprehensive solutions that are easy to deploy and optimized to improve access, availability and performance in distributed environments.

The Solution

Infoblox, the industry leader in DNS, DHCP and IP address management (DDI), is the first to market with a cloud-managed solution for these critical network services. BloxOne DDI centralizes the provisioning, management and administration of DDI for enterprises with distributed environments.

Mobile, IoT and cloud solutions are sensitive to latency and depend heavily on reliable DDI infrastructures. BloxOne DDI consolidates the visibility, administration and control of distributed locations into a single interface, directs traffic to the closest SaaS entry point to improve application performance and ensures survivability of distributed locations in the event of lost connections to data centers.

BloxOne DDI also utilizes DNS server group and access control list (ACL) templates and leverages an extensible microservices and container-based platform to simplify deployments, streamline operations and minimize overall total cost of ownership. A full complement of APIs is also available for secure, programmatic access to supported features throughout the solution.

Key Features

Real-Time IP, Instance & Service Monitoring Widgets
Provides status and usage details for active IP addresses, instances, DNS query responses, DNS queries & DHCP leases per second.

DNS & DHCP Activity & Status Reporting
Includes trend reporting of DNS queries per second, activity and responses and DHCP clients and DHCP leases reports.

Anycast Support for DHCPv4
Configure a single set of parameters to enable any server in the nearest Anycast group to respond to all DHCP queries, regardless of client location in network.

Secure Updates to Microsoft Servers
GSS-TSIG Integration with Microsoft AD for secure content updates to DNS, including support for multiple target domains.

On-Premise Host Support on AWS
Native support of on-premises host in Amazon Web Services (AWS), without the need to manage an OS or Docker.

DevOps Automation with Ansible
Ansible automation is now supported for DNS, DHCP and IPAM operations. Modules and sample playbooks are also available on the InfobloxOpen GitHub.
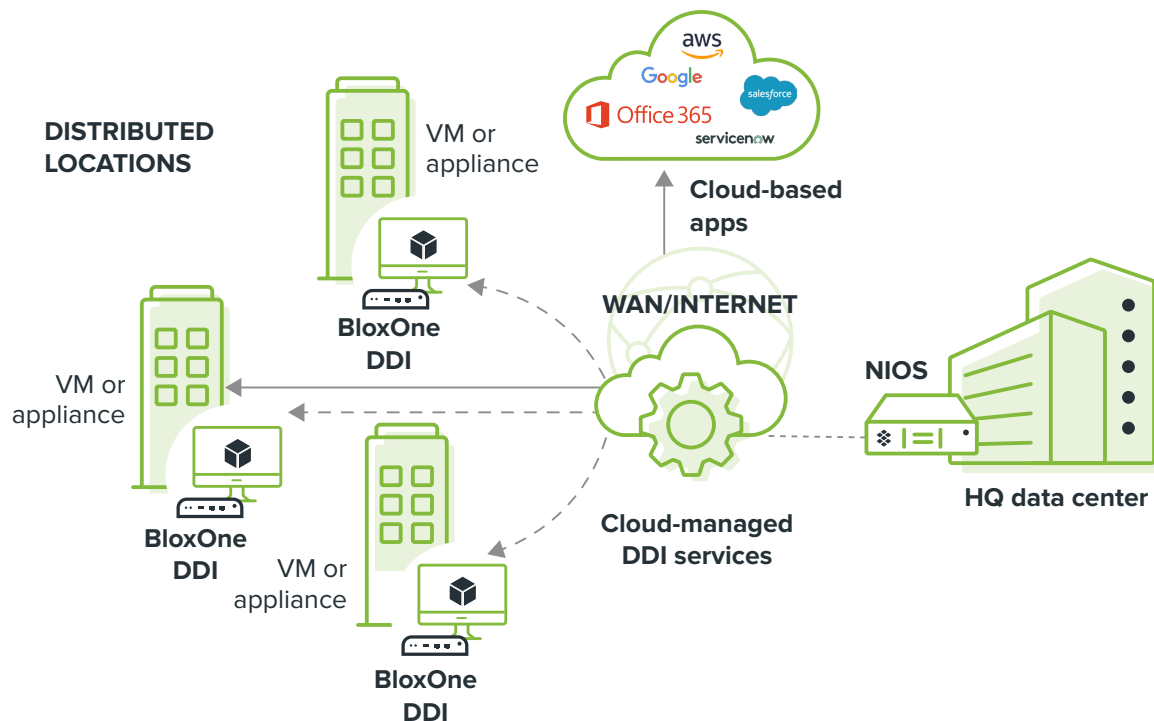

Figure 1: BloxOne DDI for distributed environments

BloxOne DDI Licensing

BloxOne DDI for internal services is licensed by the number of active IP addresses and the number of instances deployed. Licensing also includes a DNS query threshold based on the number of IP addresses licensed. External DNS is licensed as a separate SKU by QPS or number of external zones.

BloxOne DDI Product Details

Component Name	Pricing Model	Description
BloxOne DDI Essentials	Per License	• Entry-level DNS, DHCP, IP address management and NGC
BloxOne DDI Business	Per License	• Core features for DDI across distributed environments
BloxOne DDI Advanced	Per License	• Full function DDI with advanced features
BloxOne Appliance	Per Unit	• Optional physical appliance

BloxOne DDI software runs on supported virtual or commercial off-the-shelf on-premises hosts, with detailed specifications defined in the BloxOne On-Prem Host Options Datasheet.