INFOBLOX
BLOXONE DDI

The Challenge

,Digital Disruption' is often defined as how technologies such as mobility, IoT and cloud have changed the game. Although it started with the way infrastructures are deployed and managed, it continues to change the way business is done.

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

As a result, networks are expanding, not in the datacenters as one might think, but at the edge. Where the number of distributed locations, and the devices within them are increasing exponentially. While users are demanding greater access, faster response times and more reliable connections to critical business applications and services.

The Opportunity

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, resources, or both to evaluate and implement these improvements. So, easy to deploy, comprehensive solutions, optimized to improve access, availability and performance for distributed environments are now vital tools for success.

The Solution

Infoblox, the industry leader in DNS, DHCP and IP address management (or DDI) core network services, is the first to market with BloxOneTM DDI, an innovative, centralized cloud-managed provisioning, management and control solution for the today's borderless enterprises.

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

BloxOne DDI also utilizes DNS server group and 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

- **Virtual Appliance**
  Consolidated cloud, and on-premises DNS, DHCP and IPAM details in a single interface.

- **IP Address & DNS Integration**
  DNS server name included in object details of related IP Address Management records.

- **Role Based Access & Visibility**
  Additional Manager, Operator and Auditor roles for more granular administrative control.

- **DNS from DHCP**
  DNS host records auto-updated with DHCP IP settings across authoritative zones.

- **High Availability DHCP Instances**
  Active-Active or Active-Passive DHCP instance pairs to ensure reliability of core services.

- **DNS Anycast**
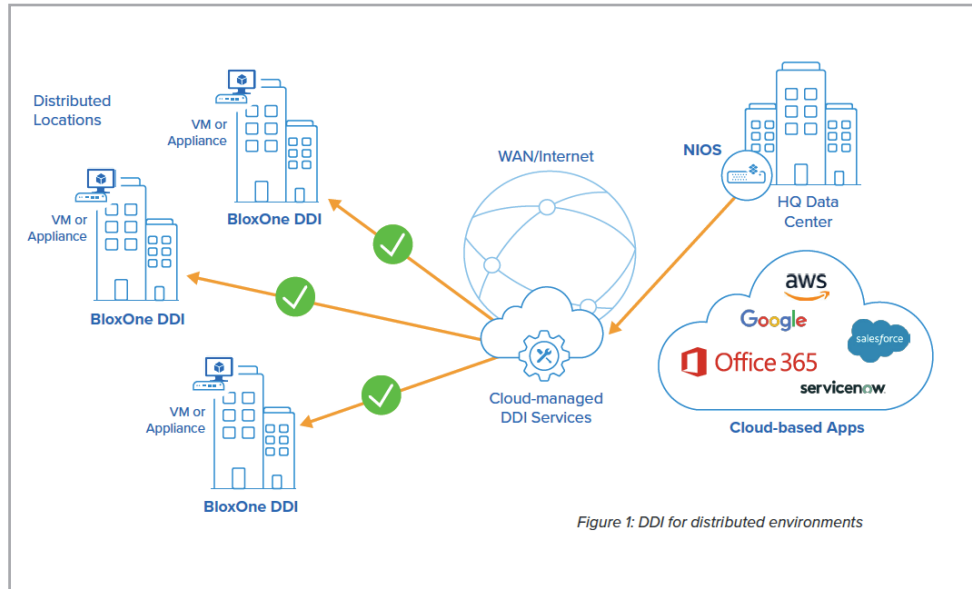 Multi-DNS resolver support for improved resiliency, load sharing and reduced latency.

Figure 1: DDI for distributed environments

BloxOne DDI Product Details

Component Name	Pricing Model	Description
BloxOne DDI Essentials	Per License	• Entry level DNS, DHCP, IP address management and NGC • Entitlement for 500 QPS and 5 LPS
BloxOne DDI Business	Per License	• Core features for DDI across distributed environments • Entitlement for 500 QPS and 5 LPS
BloxOne DDI Advanced	Per License	• Full function DDI with advanced features • Entitlement for 500 QPS and 5 LPS
BloxOne Appliance	Per Unit	• Optional physical appliance

Each license entitlement adds 500 QPS and 5 LPS. For higher performance, multiple licenses are required.

BloxOne DDI System Specifications

Component Name	Specifications
Hardware	• CPU: 4 core • Memory: 8 GB • HDD: 64 GB
Operating System	• Red Hat Enterprise Linux 7.2 or greater • CentOS 7.3.16 or greater • Ubuntu 16.04.2 or greater
Virtual Machine (VM)	• VMware ESXi version 5.5, 6.0 or 6.5
Container App	• Docker version 1.13.0 to 17.08

BloxOne DDI software runs on the BloxOne Appliance from Infoblox, or any commercial off-the-shelf (COTS) hardware with the specifications above.