The Challenge

Business and workplace transformation initiatives are expanding across organizations worldwide. They are driven primarily by rapid increases in mobility, IoT and 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 Service Monitoring Widgets
Provides status and usage for 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.

DNS Flag Day 2020 Support
Provides ability to set key parameters (i.e. "edns-udp-size" & "max-udp-size") to minimize fragmentation and retransmission over TCP.

DHCP High Availability
Replaces one-to-one relationships by allowing multiple DHCP servers to use a single DHCP hub for redundancy.

Copy DHCP & IPAM Objects Between IP Spaces
Allows ability to copy DHCP and IPAM objects from one IP Space to another, or to migrate objects from NIOS to BloxOne DDI.

Figure 1: BloxOne DDI for distributed environments
## BloxOne DDI Product Details

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

Each license entitlement adds 500 QPS and 5 LPS. For higher performance, multiple licenses are required.
BloxOne DDI software runs on any commercial off-the-shelf hardware with the specifications defined in the [BloxOne On-Prem Host Options Datasheet](#).