

# Infoblox for Telecom Network Architects

## Deploy intelligent networks to handle future 5G, edge and advanced broadband workloads

### THE CHALLENGE

Communications service provider (CSP) networks are evolving from static and rigid elements to next-generation network architectures that combine software-defined networking and cloud-native technologies to form a dynamic distributed computing network. Network architects have realized that 5G, edge and advanced broadband architectures are more complex and fundamentally different from earlier generations. But to satisfy tomorrow's consumer and enterprise applications, providers need to rethink how networks are designed and managed.

Provider networks must be agile, integrated, scalable, efficient—and secure. While legacy networks are built on rigid hardware, the telco cloud is built on software to create a flexible foundation for next-generation mobile and broadband services. But many networks may still rely on a patchwork of siloed solutions, costly hardware deployments and manual chaos that create significant inefficiencies, slow operations and trigger errors and outages. Service disruptions, poor performance and security incidents are unacceptable. New concepts like network slicing and its provisioning requirements, as well as the exponential increase of connected devices and data traffic on the network, will make engineering and operations tasks almost impossible without automation. Manual provisioning is no longer feasible.

### THE SOLUTION

Infoblox solutions for service providers enable the crucial IP connections between your subscribers and their digital world. Our cloud-enabled networking technology supplies carrier-grade security, reliability, automation and ultra-low latency—all the capabilities you need to create a better first-connection impression for subscribers and, ultimately, smooth your transition to the 5G future.

Infoblox solutions unite DNS, DHCP and IP address management (DDI) to automate network visibility, scalability and management. Infoblox gives networking teams solutions that provide a modern and agile DDI foundation for the telco cloud. With Infoblox, CSPs gain new levels of speed, automation and security they need to evolve their networks. Infoblox solutions deliver these results through centralized management that automates and simplifies networking and security from the data center to the edge. In addition, Infoblox enables massive scale with the highest levels of availability and resiliency that telecommunications networks demand while delivering total network visibility and automation to streamline, orchestrate and secure distributed network services from a single pane of glass.

### KEY CAPABILITIES

#### **Simplify Deployments**

Gain increased efficiency to simplify and accelerate the rollout of new networks, cell sites and edge locations.

#### **Increase Visibility**

Automatically detect physical and virtual instances for improved visibility for capacity planning and management.

#### **Enhance Subscriber Experiences**

Deploy the industry's fastest authoritative and recursive DNS to support 5G and edge services.

#### **Automate and Integrate**

Automatically detect physical and virtual instances and track resources and relationships with cloud orchestration technology integration.

#### **Scale Massively**

Slash operating costs by scaling elastically. Deploy networks with auto-scaling capabilities while maximizing existing investments.

#### **Reduce Security Overhead**

Leverage threat intelligence and AI/ML-based analytics on DNS for scalable protection against modern malware, DNS threats and more.

## KEY BENEFITS

### Bolster Management Efficiency, Visibility and Control

Consolidate DNS, DHCP and IP address management into a single platform managed from a common console. Access rich, integrated Reporting and Analytics capabilities for capacity planning, asset management, compliance control and auditing. Synchronize IP address management data in near real-time regardless of the environment (data center on-premises, private, public or hybrid cloud). Gain better capacity planning through robust reporting and predictive analytics.

### Deploy Secure, High-Performance DNS

Leverage the industry’s fastest authoritative and recursive DNS. Sub-millisecond DNS caching and advanced threat protection maintain a low latency and a secure subscriber experience—ensuring fast network responses while shielding subscribers from growing malware threats and service disruption.

### Improve DNS Scalability and Resiliency

Decrease the number of physical and virtualized network functions while maintaining uptime. Improve reliability with automated HA/DR and reduce downtime by eliminating slow, manual, error-prone upgrade processes. Become more responsive to changing business needs with a distributed approach that enables rapid upgrades via Infoblox Grid and more flexible responses to network architecture/topology changes.

### Increase Network Automation and Tools Integration

Dynamically detect physical and virtual instances and track the resources and relationships within a single platform. Streamline and orchestrate distributed network services with industry-leading cloud orchestration technologies through a RESTful API for integrated container/VNF lifecycle management. Save time and reduce errors using automated workflows and templates.

### Enhance Network Security

Leverage infrastructure you already use, DDI, as a highly effective control point, helping to identify and remediate cyber threats and protect your subscribers and the network they rely on more quickly. Maintain critical DNS service availability in rapidly evolving networks with growing traffic.

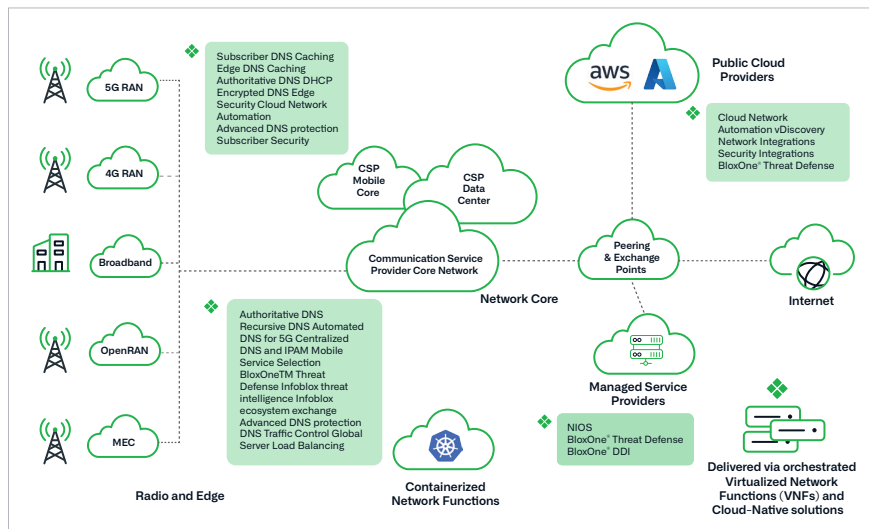


Figure 1: Infoblox helps service providers deploy intelligent networks



Infoblox unites networking and security to deliver unmatched performance and protection. Trusted by Fortune 100 companies and emerging innovators, we provide real-time visibility and control over who and what connects to your network, so your organization runs faster and stops threats earlier.

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