



## Infoblox Subscriber Services

Expand value-added subscriber services scalably and cost effectively

#### **EASILY DEPLOY VALUE-ADDED SECURITY SERVICES OFFERINGS**

To expand revenue streams, communications service providers (CSPs) can deliver profitable value-added security services for both fixed and wireless access. However, these efforts often fail or underperform due to the high cost of implementation and an inability to adequately compete against over-the-top (OTT) alternatives. In addition, legacy approaches, such as deep packet inspection (DPI) used in subscriber security and parental control services, cannot scale without massive investments. They can also come with huge performance impacts, and the resulting gaps in user details can create blind spots for network adminstrators.

Many service providers often overlook or fail to realize that DNS provides a simpler, more cost-efficient means for deploying value-added subscriber services. DNS is part of the core DDI infrastructure that your network relies on every day. DDI is shorthand for integrating DNS, DHCP and IP address management into a unified service or solution. DDI services play a central role in all communications over an IP-based network. The elements of DDI can be harnessed in your service provider network infrastructure to bolster security, improve performance and increase subscriber revenue streams.

Infoblox offers a robust, highly scalable DNS-based platform for delivering a comprehensive portfolio of subscriber security services for fixed and mobile access. By consuming subscriber management information, Infoblox correlates identity to traffic, enabling policy enforcement and the identification of security incidents at the individual subscriber level for granular visibility. Moreover, the platform enables you to minimize up-front investments and generate a predictable ROI by leveraging a flexible, pay-as-you-grow model.

## LEVERAGE TOP DDI PLATFORM AND FEATURES

Infoblox is the industry-leading secure DDI vendor with a 50 percent market share in the enterprise market. As a service provider, you can leverage our expertise and decades of investment to build service offerings to help with critical features, including DDI management, device discovery, DNS cache acceleration, load balancing, automation and extensive DNS security capabilities.

#### **KEY CAPABILITIES**

- Provides faster ROI by reducing additional up-front investment needed to deliver value-added offers
- Supports a flexible pay-as-you-grow licensing model where you pay only for the number of subscribers using the service
- Reduces negative impact on performance by analyzing only a portion of network traffic at the DNS layer
- Enables cost-effective deployment for both fixed and mobile access for converged services
- Scales from small to extremely large deployments, while requiring minimal footprint
- Improves end-user experience with DNS cache acceleration
- Leverages BloxOne<sup>™</sup> Threat Defense to strengthen and optimize your security

#### PRE-PACKAGED SERVICE OFFERINGS IMPROVE TIME TO MARKET

For simplicity and repeatability, Infoblox has packaged the most common customer deployments into three recommended offerings that speed time to market:

- Infoblox Subscriber Parental Control provides a way to boost consumer revenue with robust content control by allowing/blocking content categories for different subscribers at the discretion of the administrator/parent.
- Infoblox Subscriber Insight improves security by reducing the risk of malware propagation by identifying individual subscriber IDs associated with a malware infection or users visiting specific domains.
- Infoblox Subscriber Policy Enforcement enables you to add value by offering different security packages to subscribers at different levels and prices to protect users and devices.

## **COST-EFFECTIVE DNS-BASED APPROACH**

Infoblox simplifies the creation of value-added subscriber services for both fixed and mobile access, giving you a predictable ROI with the ability to evolve as you transition to network function virtualization (NFV) and as your subscriber base grows.

## Reduce Incident Response Time

Infoblox leverages your existing DDI infrastructure so you can cost-effectively provide extended visibility, content control and security to end users. We do so by reducing the additional up-front investment needed to deliver value-added offers and by eliminating costly, stand-alone tools.

#### Predictable ROI

Powerful DNS-caching capabilities enable a better first- connection experience because only the traffic from specific customers is analyzed, reducing the overall impact. Infoblox lets you minimize up-front investment with a scalable solution and a pay-as-you-grow licensing model so you pay only for the number of subscribers using the service.

#### **FASTER DEPLOYMENT**

Infoblox's scalable, future-ready platform supports physical and NFV on a single platform, eliminating the need for multiple platforms for DNS and subscriber services. With the user-friendly subscriber portal, you can present a branded and differentiated offer that is simple to attach, personalize and use. No software downloads are necessary, so your users are in complete control to manage their solution with little operator intervention.

#### **ENHANCED SPEED AND PERFORMANCE**

With Infoblox, you can leverage powerful DNS-caching capabilities and can provide a much better-first connection experience. Designed to handle the "perfect storm" of future 5G and edge-based applications that require ultra-low latency of 50 microseconds on average, Infoblox enables DNS query rates of up to 5 million queries per second. Through centralized management, network administrators can quickly instantiate, implement and auto-scale network services and manage those services more efficiently through a unified family of devices.

## Higher Scalability

As your number of subscribers increases and resources move closer to the end user, you cannot effectively deploy legacy DPI boxes in a linear fashion to meet demand. A DNS-based approach greatly reduces challenges that plague DPI tools. It is 10 to 100 times more scalable because it is more flexible and has less demanding deployment options. Because it acts on the DNS signaling path and redirects only a small portion of traffic instead of all user traffic, scalability is much improved over traditional approaches that analyze all in-line traffic. DNS-based services further improve performance because they are able to filter encrypted traffic without the traffic having to undergo decryption, a step required of legacy DPI platforms that can slow down the user experience.



## Subscriber Segmentation

With legacy approaches, service providers typically focus on mobile users only and ignore fixed-access subscribers for value-added services because the bandwidth requires an inordinate number of proxies. With Infoblox, only traffic from specific customers is analyzed, reducing the overall impact by not processing unnecessary traffic and freeing you to offer convergent subscriber services for both fixed and mobile access. This capability dramatically improves your revenue potential and enables you to further differentiate yourself from OTT competitors.

## Unified Visibility for Fixed and Mobile Access

A typical challenge adminiatrators face when using legacy DPI or proxy approaches is an inability to identify individual users behind gateways or routers. With Infoblox, you gain complete subcriber visibility. Specific device information can be conveyed to the DNS server, which correlates the subscriber traffic to its profile and thereby enforces appropriate security and con-tent filtering policies. The Infoblox solution supports devices with associated telephone numbers, such as cell phones and tablets, for complete protection of both wireline and wireless devices. The solution enables your administrators to identify users, whether they are behind Wi-Fi routers or in-home hot spots.

#### SUBSCRIBER SERVICES WITH BLOXONE THREAT DEFENSE

BloxOne Threat Defense strengthens and optimizes your security posture from the foundation you rely on every day—DNS and other core network services. It maximizes brand protection by securing existing networks and your key imperatives, such as 5G, loT, network edge and the cloud.

Subscriber Services with BloxOne Threat Defense delivers pervasive, inside-out protection against threats, powers security orchestration, automation and response (SOAR) solutions through rich network and threat context, optimizes your entire security ecosystem's performance and reduces your total cost of threat defense. The solution blocks DNS-based data exfiltration, stops malware communications with command-and-control servers, automatically prevents access to content not in compliance with policy and shares intelligence and indicators of compromise with your existing security infrastructure for orchestration and faster remediation.

# KEY COMPONENTS OF SUBSCRIBER SERVICES WITH BLOXONE THREAT DEFENSE INCLUDE:

## High-Quality Threat Intelligence

Up-to-date, conglomerated threat intelligence from multiple sources greatly simplifies what it takes for you to shut down attacks early before they spread and cause harm.

## **Content Categorization**

This feature enables service providers to offer content categorization at the DNS layer to enable content-based filtering, ensuring that DNS resolutions will not occur with websites whose content is out of compliance with organizational or household policy. You can offer subscribers over 100 pre-defined and carefully curated content filtering categories.

#### **DNS Firewall**

CSPs can automatically mitigate some of the pressing issues that may arise on a compromised network, giving security teams additional time to focus on resolving other urgent network and security issues.

#### Threat Insight

Threat Insight lets security teams get a jump on zero-day threats through analytics based on machine learning. It inspects DNS traffic to detect patterns associated with data exfiltration and blocks DNS requests to those destinations.



## **Rapid Threat Investigation**

Infoblox Dossier enables rapid threat prioritization through context, allowing security teams to drill down into newly acquired data and see precisely what's going on inside your network.

**Advanced DNS Protection** 

This feature automatically detects and stops the most extensive external/internal DNS-based attacks while maintaining DNS integrity and service availability.

To learn more, visit <u>www.infoblox.com/sp</u> or contact your local Infoblox representative today.

## CONCLUSION

With Infoblox, you can more easily and economically boost revenues from value-added security services through our extensive Subscriber Services and industry-leading security capabilities. Moreover, through the command of subscriber management information you gain from Infoblox soluitons, you can easily correlate user identities with traffic, which enables you to enforce policies and identify security incidents at the individual end-user level. Lastly, through Infoblox Subscriber Services, you can lower your up-front costs for launching profitable services and generate a predictable ROI by leveraging a flexible, pay-as-you-grow model.



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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