Infoblox Solutions for Service Providers

Secure the Network
Enhance the Customer Experience
Improve Operational Efficiency

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CONTROL YOUR NETWORK

Critical Success Factors for Service Providers

Mobile, wireline, and cloud service providers operate in the most dynamic and competitive markets imaginable. All of them rely heavily on network technology, and their success depends largely on how securely, effectively, and efficiently they manage network core services.

Success for service providers depends on their ability to do several things—and do them extremely well:

- **Secure the Network**
- **Enhance the Customer Experience**
- **Increase Operating Efficiency**

One of the key technologies behind uninterrupted, high-quality Internet communications is the Domain Name System (DNS). If DNS is down, Internet connectivity is lost—halting access to email, the web, and all Internet-based business, consumer, and social media applications from desktops and smartphones.

Infoblox helps service providers of all types—from the tier-1 global providers down to national and local ISPs and rural telephone companies—by providing carrier-grade DNS solutions that deliver three things service providers can't compete without: comprehensive DNS security, a fast, low-latency customer experience, and reduced operating costs.

DNS Cache Poisoning:
Corruption of a DNS cache
database with a rogue address

TCP/UDP/ICMP Floods:
Flooding the victim's network
with large amounts of traffic

DNS Tunneling:
Tunneling of another protocol
through DNS for data exfiltration

DNS Amplification:
Using amplification in
DNS reply to flood vicitm

DNS Based Exploiting:
Exploiting vulnerabilites
in DNS software

Protocol Anomalies:
Malformed DNS packets
causing server to crash

Top

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DNS Attacks

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DNS Reflection/DrDoS:
Using third-party DNS
servers to propagate
DDOS attack

DNS Hijacking:
Subverting resolution of
DNS queries to point to
rogue DNS server

Fragmentation:
Traffic with lots of small
out of order fragments

Reconnaissance:
Probe to get information
on network enviroment
before launching attack

Securing the Network in an Increasingly Threatening World

DNS has rapidly become one of the most severe points of exposure in service provider networks. In mobile networks, for example, DNS servers were identified as the #1 exposure in 2014.

Infoblox can help you protect your network infrastructure against this rising tide of threats that could significantly damage your customers' business—and your reputation. Infoblox carrier-grade DNS security solutions can withstand flood attacks, block malware communications, and continue to handle legitimate traffic while throttling attacks to keep your services running.

Infoblox protects critical DNS infrastructure against malware and denial of service (DDoS) attacks with state-of-the-art security solutions specifically built for protecting mission-critical DNS infrastructure. Our security response team scans Internet hotspots around the globe daily—detecting new threats and applying updates to our product solutions as soon as they emerge.

"DNS is the #1 exposure in mobile networks in 2014."

Arbor Networks

"Very big NTP reflection attack hitting us right now. Appears to be bigger than the #Spamhaus attack from last year. Mitigating.

Someone's got a big, new cannon. Start of ugly things to come."

Tweets from Cloudflare CEO Matthew Prince during a record-breaking DDoS attack inn February of 2014

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Delivering the Best Customer Experience Possible

As your network is called on to handle more high-bandwidth traffic such as streaming video and games, Infoblox solutions can help you prevent churn and increase revenue per user by ensuring rapid response times and reducing latency.

Operating Closer to Your Customers

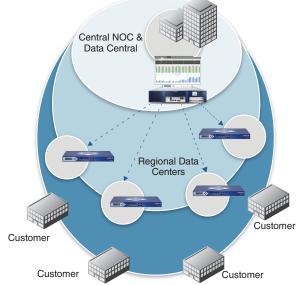Infoblox makes it easier for you to move your media and content servers to the edge of your network to increase quality and responsiveness. Because Infoblox DNS systems are centrally managed and updated—no matter where they are—you can distribute your DNS servers too, keeping latency for Internet traffic low, without increasing management costs.

Improving Operating Efficiency

Consolidation, price wars, and competition from non-traditional players are putting enormous pressure on mobile, wireline, and Internet service providers alike to operate more cost-effectively without reducing productivity or sacrificing service quality.

Reducing OpEx with Network Automation

Infoblox helps to free key technical staff from routine but complex manual updates, patches, configuration changes, and reporting. For cloud service providers in particular, automated IP address management, network discovery, change management, and device provisioning yield big results and help in rolling out services rapidly.

Even in complex, virtualized environments, Infoblox offers the ability to continuously track and detect changes to virtual machines that are no longer tied to physical servers or locations. And Infoblox can automate high-volume provisioning and reclamation of bulk IP addresses to and from VM-based server stacks for VMware, OpenStack, and other virtualization and cloud management platforms.

"I have thousands of clients and the system is so plug-and-play that it is practically running itself. We also have delegated administration to several customers without jeopardizing visibility into other DNS [client] records, allowing us to reduce administration overhead and further optimize our resources."

Jared Martin, Executive VP of Operations at Infoblox customer BigCity Networks

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Join over 220 Service Providers Who Already Rely on Infoblox

Infoblox is helping over 220 mobile, wireline, and cloud service providers around the world secure critical infrastructure, enhance the customer experience, and improve operational efficiency. Contact us today, and let's explore what we can do for you.

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