

Easily Manage IP and domain name services, and extend DNS security across multiple clouds

Executive Summary

Infoblox has partnered with Alkira to offer critical networking and security services that are integrated to enable customers to use them seamlessly across multiple clouds. Infoblox provides centralized, secure DNS (Domain Name System), IPAM (IP address management), NTP (Network Time Protocol), DHCP (Dynamic Host Configuration Protocol) and DNS security services. Their deployment has now been simplified thanks to integration with Alkira's Cloud Exchange Point (CXP).

Challenge

The drive towards digital transformation has taken many organizations in the direction of greater network and IT complexity and a more distributed set of network endpoints. As part of transformational efforts, these organizations are moving applications and workloads on to multiple cloud platforms. One consequence of all this upheaval has been increased complexity in DNS, DHCP and IP address management and ensuring that there is consistent and centralized management of these critical networking services. Migration to multiple clouds and the increasingly distributed nature of workloads and workforces also leads to security challenges. Integrated solutions are needed that replace this complexity and vulnerability with simplicity and security.

Infoblox and Alkira Joint Solution

The partnership between Infoblox and Alkira means that organizations can now deploy Infoblox combined with Alkira Cloud Networking as a Service (CNaaS) and use it to manage DNS, DHCP, IPAM (DDI) and DNS security in multi-cloud, multi-region environments. Many organizations are already familiar with the benefits of Infoblox in their on-premises networks. Now they can extend Infoblox instances over multiple clouds using Alkira CXP secure access to expand and utilize the same services over different cloud environments.

Infoblox's NIOS DDI runs on patented Grid technology that provides a unified platform for core network services.

- Resilient and reliable core network services (DNS, DHCP and IPAM) for connecting all devices, application, and digital resources across the business
- Simplified management of core network services managed from a common console
- Rich, integrated reporting and analytics capabilities for capacity planning, asset management and control
- DNS based security to protect against data exfiltration, ransomware, phishing and more

To deploy Infoblox in a multi-cloud world, separate instances need to be manually deployed and configured for each cloud. Different cloud service providers have different constructs, such as routing tables, subnets, Internet gateways, UDRs and peering, which work in different ways. In a multi-cloud environment, managing and operating these constructs becomes more complex.

Alkira simplifies deployment of Infoblox networking and security through a single UI page of configurations. Customers can deploy multiple instances of Infoblox, assign them different roles, and implement multi-cloud multi-region design with high performance using the Anycast capability of Infoblox. From this single UI, different use cases for Infoblox instances in Alkira can be realized.

Use Case 1:

Disaster recovery across multiple clouds

Organizations may be deploying a primary application on one public cloud and a backup on another, using the DNS service that is native to each cloud. In the event of a disaster affecting the network, and the need for a speedy recovery, it may be expedient to switch everything to one platform. Using Infoblox anycast service and leveraging Alkira's managed multi-cloud area networking, organizations can resolve the emergency by deploying Infoblox in one CXP, with the one service catering to multiple cloud environments.

Use Case 2:

DNS based security and DDoS Protection

More than 90% of malware uses DNS to execute its campaign. In addition, DNS is often used as a pathway for data exfiltration. BloxOne Threat Defense, running on Infoblox NIOS appliances, provides DNS-layer security to protect on-premises and cloud environments using threat intelligence and analytics on DNS servers. This helps detect threats early in the lifecycle before it spreads. In addition, DNS, DHCP and IPAM data provides visibility, and critical device and user attribution to speed up incident response.

An organisation's DNS is essential for mission-critical network connectivity. In the event of a DDoS attack that affects DNS services, losses can be huge. Infoblox Advanced DNS Protection (ADP) offers protection against the widest range of DNS DDoS attacks, maintaining uptime for an organization.

An improved security posture across different clouds is at the heart of what Alkira delivers. Alkira's network cloud model is the first global unified network infrastructure with on-demand hybrid and multi-cloud connectivity, integrated network and security services, end-to-end visibility, controls and governance, all delivered as-a-service. The combination of Infoblox BloxOne Threat Defense service on OnPrem appliance and Alkira's integration security services and Infoblox Trinzi Virtual appliance in Alkira CXP, affords the best possible security, regardless of where workloads are located or how many cloud platforms they are spread across.

Benefits

Solution Components

- ✓ Alkira Cloud Networking as a Service
- ✓ Alkira Cloud Exchange Points (CXPs)
- ✓ Infoblox NIOS DDI
- ✓ BloxOne Threat Defense Business On-premises (running on NIOS appliances)
- ✓ Advanced DNS Protection

Solution Benefits

- ✓ Uniform and simplified core network services across different clouds
- ✓ Improved cloud security
- ✓ Consolidated DNS management
- ✓ Global scale

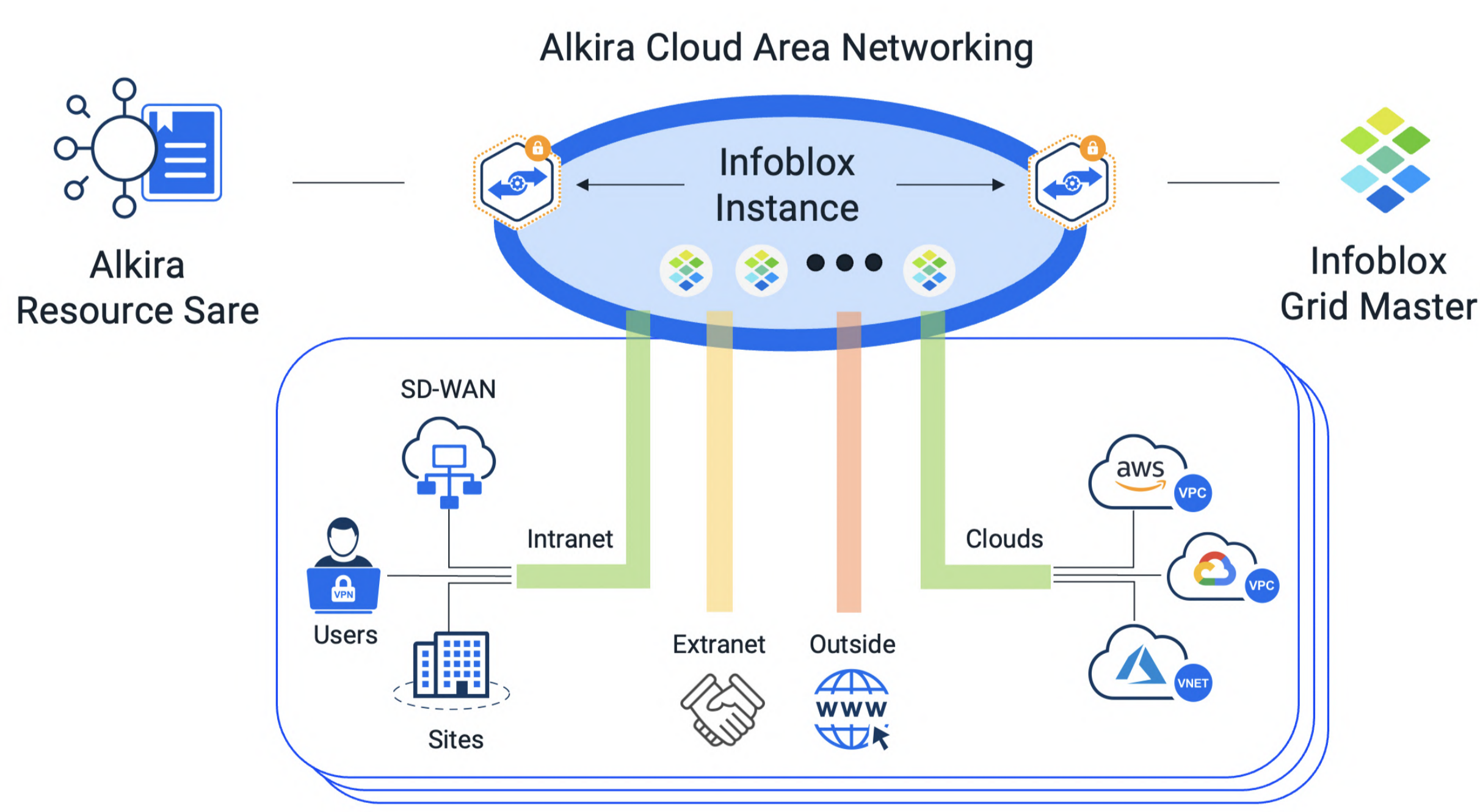


Figure 1: Multi-cloud security made easy with Infoblox and Alkira



About Alkira

Alkira Cloud Networking as a Service (CNaaS) is the fastest way to unify clouds, sites, and users. Alkira automate the entire creation, management, and operation of your network. Need to expand to multiple regions? Or thinking of multi-cloud? Alkira CNaaS unifies your entire network to form a high resiliency, low-latency global cloud fabric managed using the same controls, policies, and security network admins know. One that instantly scales, is delivered as a service with end-to-end visibility and can be deployed via UI or automatically with code.

Learn more at alkira.com and follow us @alkiranet



About Infoblox

Infoblox is the leader in next generation DNS management and security. More than 13,000 customers, including over 75% of the Fortune 500, rely on Infoblox to scale, simplify and secure their hybrid networks to meet the modern challenges of a cloud-first world.

Learn more at <https://www.infoblox.com>.