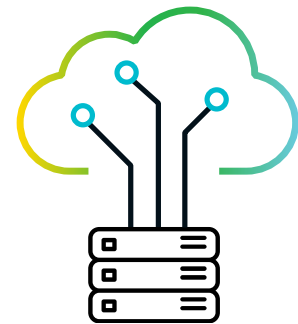


SOLUTION NOTE

THE IMPORTANCE OF ROBUST CRITICAL NETWORK SERVICES IN HYBRID AND MULTI-CLOUD ENVIRONMENTS

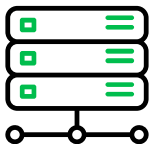
Enterprises are deploying private, public, hybrid and multi-cloud environments to enhance network agility and availability while slashing costs. They have embraced multi-cloud strategies at a larger scale, which further increases the complexity and inconsistencies in their cloud journey. Multi-cloud adoption underscores the importance of considering a single robust set of critical network services in lift-and-shift and refactoring initiatives.



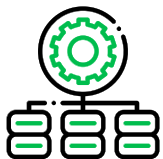
CLOUD ADOPTION HAS MATURED

Hybrid and multi-cloud adoption is gaining momentum. Enterprises leverage cloud platforms to enhance resiliency, comply with regulations and access specialized features like advanced machine learning analytics. Organizations find themselves in hybrid or multi-cloud environments due to mergers and acquisitions, use of shadow IT or to avoid vendor lock-in.

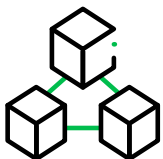
As enterprises embark on their cloud migration journeys, the complexities and challenges involved necessitate guidance and expertise. When an organization decides to move to the cloud, there are three approaches: lift and shift, refactoring and cloud native.



Lift and shift is least disruptive where existing applications are migrated to the cloud with minimal changes. These applications are likely to be legacy and monolithic in nature. They are moved from the existing on-premises environments to a new cloud environment.



Refactoring is a blended approach where specific aspects of existing applications, such as data flow or authentication, are rebuilt and optimized to take advantage of cloud services, such as backup.



Cloud native applications take full advantage of microservices architectures and the cloud computing delivery model, enabling organizations to scale capacity on-demand and provide developers with faster access to the latest tools and application services.

CHALLENGES IN USING A MIX OF DISPARATE SYSTEMS

As organizations increasingly embrace cloud computing, the level of maturity and the challenges they face in managing and securing their infrastructure can vary. Using a single, common, robust set of critical network services across your on-premises data center and cloud initiatives for lift-and-shift or refactoring initiatives simplifies cloud adoption.

Implementing the cloud provider's critical network services in addition to existing data center services leads to fragmented organizational and information silos. Cloud service providers use their own operational models and naming conventions. The disparities between your data center and the cloud can result in costly inefficiencies and, in the worst cases, potential outages and security breaches. Hence, deploying a common set of critical network services across your cloud and on-premises data center that provides consistency in naming conventions and operational models is crucial to simplify cloud migration.

Using the cloud provider's network services may compromise robustness and reliability. Often, critical network services offered by cloud providers lack the depth of user and service attributes required for enterprise-wide naming and address assignments. Furthermore, they have limited flexibility in providing high availability for the critical network services themselves, which can impact the reliability of hybrid or multi-cloud deployments.

BEFORE

Fragmented Visibility

Increases time to troubleshoot, poses audit risk without visibility and has gaps in security such as data exfiltration and imposter domains.

Limited Automation

Exponentially harder to manage critical services in multi-cloud environments and silos cause outages and extensive use of support tickets.

Inadequate Control

Organizational and information silos and reliance on manual processes.

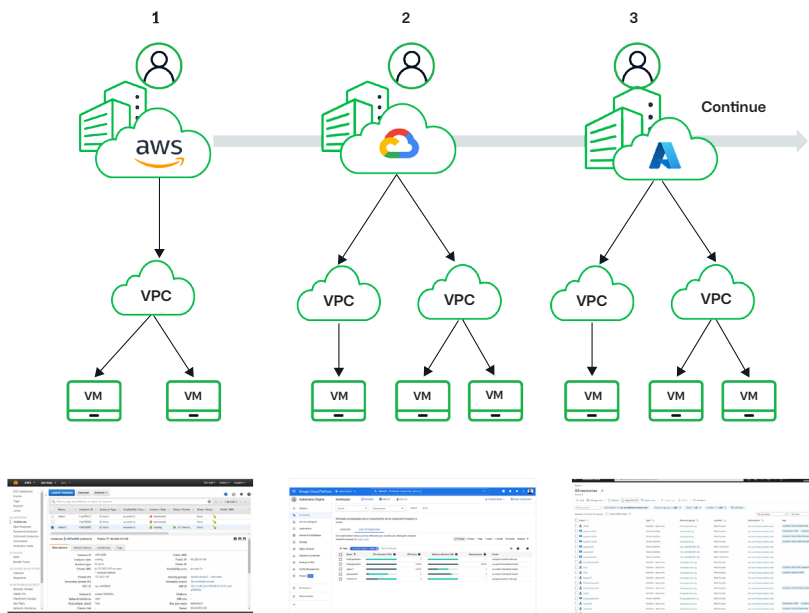


Figure 1: Repeat the process for each datacenter, cloud, VPC, VMs, etc.

INFOBLOX SOLUTIONS FOR HYBRID AND MULTI-CLOUD ENVIRONMENTS

Replace Disparate Systems with a Single Robust Solution

Infoblox centralizes visibility, improves automation and increases control in your lift-and-shift and refactoring initiatives in hybrid and multi-cloud environments. It eliminates organizational and information silo inefficiencies. The Infoblox solution establishes common naming conventions and a single operational model for real-time inventory of what's on your network across your data centers, co-location facilities, cloud services providers and branch locations. This approach helps lower troubleshooting times, minimizes human error and improves uptime. With common naming conventions and operational models, enforcing consistent policies across your distributed enterprise becomes easier, reducing your risk of audit and compliance failure.

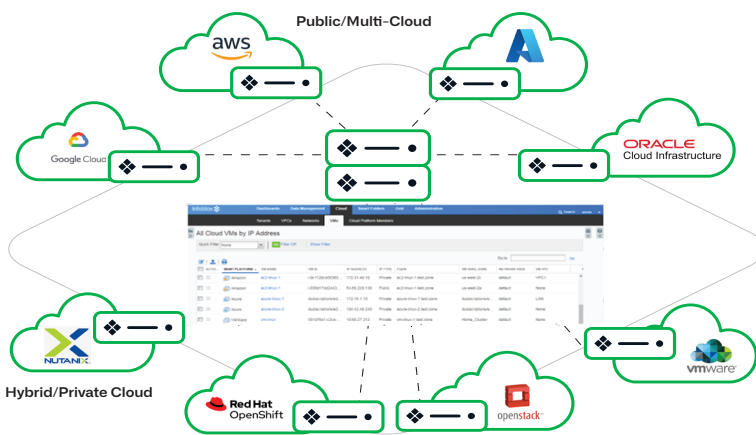


Figure 2: Infoblox provides a single control plane for hybrid and multi-cloud environments.

CONCLUSION

As cloud adoption continues to increase, organizations face varying levels of maturity and encounter unique challenges in managing and securing their infrastructure. The use of different operational models and conventions by cloud service providers contributes to fragmented organizational and information silos, leading to operational inefficiencies, potential outages and security breaches. Implementing robust critical network services and maintaining consistency in naming conventions and operational models between your on-premises data center and cloud is crucial to simplify lift-and-shift and refactoring initiatives. Investing in a strong foundation of critical network services is paramount for organizations to navigate the complexities of hybrid and multi-cloud adoption, enhance resilience and safeguard against potential breaches and disruptions.

AFTER

Complete Visibility

Infoblox lowers operational costs for troubleshooting and maintenance, reduces audit and compliance risks, and closes security gaps, blocks threats earlier and remediates faster.

Enhanced Automation

Infoblox increases the speed of innovation, eliminates potential outages through misconfigurations and avoids costly network outages.

Seamless Control

Infoblox significantly reduces inefficient handoffs between silos and simplifies control with consistent policies.



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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