Ensuring DNS Consistency and IP Address Visibility in AWS Public Cloud

SUMMARY

Enterprises are increasingly deploying workloads in Amazon Web Services (AWS) Elastic Compute Cloud (EC2) to gain increased agility and elasticity. However, public cloud deployments add unplanned risks including manual processes, policy inconsistency, and lack of visibility across the enterprise. Infoblox DDI for AWS extends our industry-leading DNS and IP address management solution to AWS EC2. Fully integrated with industry-leading Infoblox Grid™ technology, this solution increases cloud agility, supports consistent network policies across the enterprise, and improves visibility into public cloud workloads.

Avoid “Clouded” Views When Deploying in AWS

Application delivery infrastructures are changing rapidly. It was once IT organizations are increasingly utilizing AWS EC2 as a public cloud platform, hoping to increase agility, elasticity, and flexibility for their growing workloads. However, too often, the hype and promise of cloud is a far cry from reality because of the differences between simply spinning up a new compute instance and actually getting a working instance onto a production network, into service, and in sync with the traditional network infrastructure.

Core network service automation such as DNS and IP address provisioning often lags behind compute and storage processes within AWS, delaying application rollout and increasing inconsistency of network policies. Without centralized management for DNS and IP addresses in a public/private cloud, IT teams often have incomplete and out-of-date visibility of the networks, virtual private clouds (VPCs), IP addresses, and DNS records being assigned. And if there are multiple platforms, there is no correlation and consistency of common resources such as DNS zones and networks.

Forecast: Perfect Visibility and Control with Infoblox DDI for AWS

Infoblox Actionable Network Intelligence helps enterprises deploying AWS (or multi-platform hybrid clouds) with control, security and visibility. Instead of standing up a basic DNS server in the cloud that needs continuous updates and patches or using the Route 53 service that doesn’t integrate with your traditional network and DNS policies, Infoblox DDI for AWS provides the industry-leading platform to ensure agility, consistency, and visibility for AWS workloads—and correlated views with other platforms.

Infoblox provides fully automated allocation of IP address and DNS record creation for AWS workloads and automated discovery of virtual instances and VPCs within AWS deployments. Whether IT teams are testing AWS for a single application, using AWS for disaster recovery, or deploying a widespread public or hybrid environment, Infoblox has multiple deployment options for scale and high availability.

By bringing industry-leading, enterprise-grade core network services together with AWS public cloud in a single management interface, Infoblox eliminates many of the challenges raised by the complexity of public-cloud or hybrid cloud environments and overcomes the insufficiency of traditional approaches and processes for managing network services in a cloud environment.
Four Major Benefits

Infoblox DDI for AWS provides automated virtual instance discovery, IP address allocation, and DNS provisioning, empowering organizations to improve agility, reduce provisioning errors, and enhance visibility of virtual machine network infrastructure inside AWS deployments. Benefits of the solution include:

- **Extending Industry-leading DNS and IP Address Management into AWS EC2**
  The Infoblox unified solution for DNS and IP address management ensures a uniform and consistent policy of DNS naming conventions and network/IP address provisioning. In multi-cloud environments, Infoblox reconciles disparate terminologies such as tenants, VPCs, VMs, etc. to eliminate the challenge in maintaining consistency across complex deployments.

- **Faster, Automated AWS Workload Provisioning**
  By using automation to eliminate multiple handoffs between cloud and network teams and manual provisioning of DNS records, Infoblox dramatically shortens the time needed to provision new workloads in AWS. And when the virtual resources are decommissioned, Infoblox handles the non-glammourous work of reclaiming IP address and DNS records so overburdened staff are not doing manual, tedious processes.

- **Automated Discovery, Visibility, and Auditing for AWS**
  Keeping track of dynamic public cloud instances and workloads is hard with legacy management approaches. With Infoblox’s automatic discovery and visibility of VPCs and instances, IT teams have complete visibility and can greatly reduce the time needed to audit DNS and IP address information across networks and geographic regions for compliance or executive reporting.

- **Flexible Deployment Options**
  Infoblox DDI for AWS is tightly integrated with the industry-leading on-premises virtual and physical appliance options. The comprehensive DDI platform can support AWS public cloud, private cloud environments (including VMware, OpenStack, Microsoft, and others), and traditional networks—or any combination in a hybrid deployment. The unified solution ensures maximum flexibility, scale, and service availability.

Optimize Your AWS Public or Hybrid Cloud

Visit [www.infoblox.com/aws](http://www.infoblox.com/aws) or contact us to learn more about Infoblox DDI for AWS. Infoblox can help you make your cloud environment orders of magnitude easier to operate and manage.

![Diagram](image)

*Figure 1: Infoblox is the only vendor supporting traditional networks and private/public/hybrid clouds with Actionable Network Intelligence.*