



# BLUECAT ENTERPRISE DNS SOLUTIONS FOR CLOUD

## BlueCat Address Manager (BAM) for AWS

BlueCat Address Manager (BAM) for AWS is part of BlueCat DNS Integrity portfolio of solutions, enabling IP Address Management capabilities on the AWS Cloud, providing an authoritative source of information about the network. BAM for AWS provides valuable insight to enable informed management and security decisions for the enterprise. It allows strategic insight and rich integration with core network services to the AWS public cloud environment, enabling more reliable service delivery, greater agility, improved security and lower manual effort in administration throughout the corporate network environment.

Providing powerful, software-driven IPAM capabilities for AWS in both hybrid and cloud-only environments, it delivers network intelligence and insight into the relationship between devices, users and IP addresses that can be put into action to improve security and ensure reliable, always-on business connectivity.

### No Compromise IPAM

Quickly and easily manage, track and assign IP addresses, networks and hostnames, all from a single web-based interface.



### Seamless Integration

Seamlessly integrates with BlueCat DNS/DHCP Services to provide a unified solution for managing your IP address space and core network services, whether deployed on-premises or in the AWS cloud.



### Increase Agility

Expedite the completion of IT tasks and processes and make the most of IT resources by automating configuration activities and workflow to deliver services rapidly and reliably.



# BlueCat DNS for AWS | BlueCat DNS for Azure

BlueCat DNS enables a virtual appliance on the AWS and Azure public clouds, allowing customers to configure, manage, and deploy enterprise-scale DNS services throughout their corporate network environment to the public cloud environment. BlueCat provides powerful, software-driven DNS capabilities for AWS and Azure in both hybrid and cloud-only environments.



## The Power of DNS, for the Cloud

Get the same level of agility, secure operation, simplification, and dependability that our customers have come to expect on their enterprise-class networks running BlueCat DNS Integrity solutions.



## Scalable, Cohesive and Consistent Architecture

Easy integration with on-premises BlueCat Enterprise DNS Services, unifying into current network infrastructure while simultaneously maintaining a consistent architecture that allows your network to effortlessly scale while saving cost and time.



## No Compromise Network Service

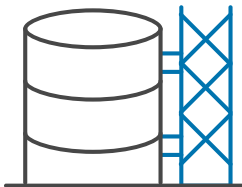
Ensure a reliable, resilient and highly available DNS solution for your cloud deployment that also facilitates DNS service with support for cloud-based applications. Safeguard your DNS services while maintaining a highly efficient and agile network infrastructure.

## BlueCat Enterprise DNS Solutions for Cloud: Use Cases



### Data Center Replacement

Many organizations are looking to move on-premises infrastructure to the cloud while remaining consistent with on-premises architecture. A prime example is using the cloud for Infrastructure as a Service (IaaS); moving on-premises infrastructure to the cloud is an obvious service that's often considered by most enterprises. In these cases, it's critical to remain consistent with your on-premises architecture.



### Data Center Expansion

Data center expansion is a common initiative, either through a hybrid cloud strategy or through simply adding additional compute in a virtual data center running in the cloud for workloads where additional jobs need to be run. Much like data center replacement, for DNS this approach is also similar to adding another physical data center - that is, augmenting DNS servers by adding servers in the public cloud. In a hybrid cloud strategy, where compute might be used only as an overflow mechanism when there is not enough compute or storage in existing data centers, DNS servers running in the cloud can be more cost effective, as they don't need to be running all the time - only on-demand. In this situation, they can be configured for the workload that gets moved to the cloud for that period of time to prevent exposing or running services all the time in the cloud.

Often organizations add cloud infrastructure in a phased approach and in the case of BlueCat Address Manager for AWS, they can build redundancy by deploying BAM in the cloud during those extension stages.

## Anycast Implementation



In the IaaS use cases where DNS servers are being migrated into the cloud, they can also be used as part of a global Anycast strategy. In Enterprise DNS environments, Anycast is often used to create a single IP address that can be accessed for DNS across the entire enterprise. Cloud-based DNS servers can be added into the Anycast pool and are controlled from the BlueCat Address Manager and administered like any other DNS server.

Moving on-premises DNS infrastructure to the cloud as part of an Anycast pool adds additional resistance; if DNS failure occurs on the short path (e.g. public cloud client to cloud-based DNS), the client is instantly re-routed to the long path DNS service (in this example, on-premises DNS service). Creating an Anycast pool with both on-premises and cloud-based DNS services lowers latency, enabling a short path option for both on-premises and cloud-based DNS clients.

## Cloud-Based applications



Public clouds like AWS and Azure are used for much more than just IaaS. Enterprises are building their own custom applications on the cloud because it provides a great depth and breadth of platform services. There may be databases, API layers or other capabilities that enable them to create and innovate with new compute running in the cloud take advantage of the scalability and elasticity that it offers. In these cases, cloud-based DNS can be implemented to service and support DNS requirements for cloud-based applications, such as when the application needs to access something on datacenter.

## Implementing a Beachhead



A common occurrence when enterprises start building applications in the public cloud is that the app builders sometimes create their own DNS service using the cloud-based DNS service or open source. Inevitably, the app builders run into issues where they need to resolve internal hosts or access the enterprises broader DNS zones. When that happens, they have to start copying records they need locally and it's only a matter of time before it breaks the application, creating issues that are hard to debug and cause potential security issues.

In these cases, it's critically important to create a scalable way to allow the platform-based applications to utilize the enterprise's DNS without copying or creating security holes - and that means augmenting Enterprise DNS with cloud-based servers. In a situation where the different private cloud instances can't communicate with each other east and west, a beachhead DNS implementation can be implemented so that they can all communicate with the Enterprise DNS infrastructure. Services can then easily be deployed via the beachhead, acting as the conduit between the private cloud instances and the data center.

## Disaster Recovery



Implementing cloud-based Enterprise DNS solutions is a smart approach for robust disaster recovery, saving significant time and resources, and providing a highly reliable backup and recovery solution.

## About BlueCat

BlueCat is the Enterprise DNS company™. We provide software solutions that centralize, automate and leverage DNS services and data for optimal visibility, compliance, scalability, security. BlueCat works with the world's largest and most recognizable brands - including SAP, Facebook, Disney, Toyota, Apple, Dell, 3M, and Nike - to manage and secure their networks so that employees can access the computing resources they need, when they need it.