



Networking Infrastructure

Simplify Application Delivery in Your Hybrid Cloud with AWS



The Application Delivery Challenge

Customers, employees, and partners rely on your applications and data for real-time updates, new business insights and competitive advantage, but achieving this can push on-premises environments to a breaking point. Scaling limits can be reached with volatile demand, while legacy applications can constrain mobile and web-enabled access. Migrating your workloads to AWS allows you to capitalize on scale, flexibility, and performance benefits, while preparing to modernize your applications. You can accelerate workload migration using a hybrid architecture with AWS and simplify the transition with AWS services and third-party offerings.



The AWS Solution

AWS Application Discovery Service is designed to help you identify your on-premises application inventory and dependencies. Equipped with this insight, you can design your migration plan and architect your Amazon Virtual Private Cloud (Amazon VPC) and Elastic Compute Cloud (Amazon EC2) instances. Based on your application requirements, selectively deploy AWS Elastic Load Balancing, Amazon Route 53, Amazon CloudFront content delivery network, and Auto Scaling, to optimize application delivery.

Extend Your Application Environment on AWS

You can securely, and cost-effectively migrate your application portfolio to AWS, and architect your AWS environment for the data residency and access management requirements of your organization. Host web applications on AWS that are connected to your datacenter, extend your corporate network into the cloud, launch additional webservers, or add more compute capacity to your network.

Amazon Virtual Private Cloud

Amazon VPC enables you to provision a private, isolated section of the AWS Cloud where you can launch resources in a virtual network that you define. You can provision public and private subnets to connect your Amazon VPC to the internet, your datacenter and other Amazon VPCs, based on your application requirements. Alternatively, use AWS Direct Connect for dedicated connectivity between your Amazon VPC and datacenter.

Elastic Load Balancing

Elastic Load Balancing automatically distributes incoming application traffic across multiple Amazon EC2 instances, with two options:



1. The Classic Load Balancer routes traffic based on application or network level information and is ideal for load balancing of traffic across multiple Amazon EC2 instances. 2. The Application Load Balancer routes traffic based on advanced application level information that includes the content of the request.





Manage Application Delivery that Spans AWS and On-Premises

AWS offers a highly scalable, reliable, and secure set of application delivery services, enabling you to design your AWS Cloud application architecture for optimal performance and security.



Figure 1: example hybrid cloud ADC deployment.

For applications that span AWS and on-premises environments you can complement and extend AWS services with third-party Application Delivery Controller (ADC) software deployed in an Amazon Machine Instance (AMI) from AWS Marketplace. See Figure 1.

Three factors help determine this need:

1 Remote Network Security

Internet traffic requires security to detect and deter multi-layer (L3 - 7) attacks that target various network elements, sometimes at the same time, such as DDoS attacks combined with application attacks such as SQL injection. ADC software may support policies and firewall rules for a wide range of legacy application protocols, and can be deployed to enhance your network security posture.



Policies that you already have in place in your on-premises ADC are easily extended to the same ADC software deployed in your hybrid cloud environment with AWS. Control application access and application traffic flow with ADC policies as you migrate your workloads to your AWS environment.

3 Application Visibility

Amazon CloudWatch monitors the AWS Cloud resources and applications you run on AWS. You can complement this service with an ADC AMI pay-as-yougo deployment to extend application monitoring features provided by the ADC, across your on-premises environment and the AWS Cloud.

Third-party Application Delivery Controller (ADC) offerings are available in AWS Marketplace that you can purchase and deploy to manage applications in your hybrid architecture with AWS. Pay-as-you-go pricing means you can change this deployment option without penalty as you complete your workload migration to AWS.

Get Started with Application Delivery Controller Software in AWS Marketplace



Find and deploy the solution you need in minutes



Save money with pay-as-you-go pricing



Scale globally across all AWS Regions



