Accelerate AWS Cloud Adoption with Vcinity

BENEFITS

- Accelerate data migration to AWS; 90% reduction in time to production.

- Accelerates time to data insights and business value by eliminating time and effort required to move data to AWS.

- Empowers users to leverage compute in AWS against data that can't be moved off premises due to regulations, security concerns, or lack of adequate connectivity.

"Time is Money" is an aphorism originated by Benjamin Franklin to mean—Time is a limited, non-renewable resource and, as all limited resources, holds immeasurable value. As an example, productivity and revenue are calculated against a measure of time. It is thus no surprise that organizations seek to gain maximum utilization of available time to generate the greatest value.

If time is a limited resource, then organizations must seek ways to generate maximum value per every increment of time. Unfortunately, existing on premises infrastructure is limited in its elasticity; there are only so many compute resources available. Data centers have limited floor space, power and cooling capacity, and network bandwidth. Yet, data continues to be created and the need to monetize it, consume it, and transform it is putting pressure on existing data center resources. It is not cost effective to deploy resources in support of intermittent usage needs; this is where cloud has a compelling value proposition. AWS designed infrastructure services to address the need for resource elasticity. Deploy what and when you need it and only pay for what you consume.

Barriers to Cloud Adoption

AWS offers many resources to simplify running applications in their cloud. Unfortunately, migrating applications has encountered challenges:

- Today, running an application in AWS requires data to also be in AWS. If data is not created in AWS, it must be moved there. Whether using TCP/IP or accelerating with UPD-based tools, moving data to the cloud takes time. A terabyte of data using a 1 Gbps link will take more than two hours to upload. Using UDP-based tools would reduce that time by 25%-35%. The time it takes to move the data is wasted time.

- Once data is in AWS, storage resources must be allocated for every copy of data. Though bulk storage tier is priced at only $0.01 per GB per month, higher performance tiers of storage are priced higher and in aggregate may represent a significant expense. These costs are necessary only because data must be moved to the cloud.

- Data generated from the processes run in AWS are moved back to storage on premises. These are egress costs that are often overlooked when determining the total cost of ownership.

- Some organizations, due to regulations or security concerns, are not able to move data into the cloud, period. In these instances, AWS is not an option. The end user is not able to take advantage of resource elasticity.

The following example helps put these challenges in perspective.

To accelerate bringing projects to market, a media and entertainment studio is looking to use cloud resources to expedite a rendering job. Before any compute resources are fully deployed, the studio must move 10 TB of data into the cloud across a 1 Gbps link. Once the rendering job has completed, the resulting product must be moved back to the data center.

- Using a 1 Gbps connection with latencies associated with a WAN, it would take more than 20 hours to move 10 TB into the cloud. That is 20 hours of delayed productivity and time to project completion. In a time sensitive market where timing is everything, a delay may result in revenue loss.
- Once data is in the cloud, it requires storage resources to support the data and the application. The duration of the job and the data size will drive duplicate storage costs.

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The three main obstacles to cloud adoption are: time to move data into the cloud, additional storage resources required for copies of data, and regulatory and security concerns that may preclude cloud adoption altogether. Vcinity's solution, powered by its patented Vicinity Data Access Platform™ (VDAP), shatters the barriers to cloud adoption.

Figure 1. Vcinity accelerates AWS cloud adoption

Moving Data to AWS—VDAP, deployed in a virtual machine in AWS, connects compute resources to data on premises or anywhere. It eliminates the effects of intermittent latency after the first byte and delivers consistent access to data, making running an application in AWS with data on premises possible even over a 1 Gbps connection. No changes to data, storage, or application are required and any data may be accessed regardless if it is deduplicated, compressed, or encrypted.

Storing Data in AWS—Deploying applications in AWS against data on premises using Vcinity's VDAP eliminates the need for data copies in the cloud. Fewer copies assures greater control and security over data and its access.

Regulatory and Security Concerns—Organizations unable to move data to the cloud may now deploy compute resources in AWS without having to move data. Since data stays on premises, organizations may retain regulatory compliance. Security concerns are also addressed by having data remain on premises.

Summary

Eliminate barriers to AWS cloud adoption using Vcinity's VDAP-based solution. Applications deployed in AWS run against data on premises; no data movement is required. As a result, organizations improve productivity, accelerate business outcomes, and eliminate unnecessary complexity and costs. Organizations that aren't able to take advantage of AWS services due to regulations or security concerns may now take advantage of AWS' resource elasticity and advance business objectives knowing their data is not compromised.

For additional information or sales inquiries please contact: sales@vcinity.com or visit our website www.vcinity.com.