NetApp®

Financial Services Leader Goes All in with Cloud

An All-In Cloud Strategy

In heavily regulated industries such as financial services, moving to the cloud offers undeniable benefits, with compelling cost and agility improvements. However, the journey must be carefully orchestrated to address security, data privacy, and compliance requirements.

This large financial services company moves quickly when it comes to embracing new business opportunities. When Amazon Web Services (AWS) became available in the region, the company announced an all-in cloud strategy to begin reaping the benefits of cloud as quickly as possible. The agility that cloud offers will enable new business opportunities in time frames previously not possible and will enable the company to shift capital expenditures to monthly operating costs.

The Challenge
Supporting a phased migration

Although the company wanted to transition to the cloud quickly, it faced several challenges. Many applications were not cloud ready, yet still needed to be supported. Also, with 15,000 employees, 9 million customers, and petabytes of storage on NetApp, this company is a custodian of a huge volume of personal data. For regulatory reasons, it needs to know exactly where the data is stored to be able to identify it on behalf of customers. Therefore, using native cloud storage is not an option for certain data.

In addition, the company needs to comply with data recovery standards set by the local regulatory body. It must maintain a tertiary copy of data and retain the ability to restore data under any circumstances. Sometimes it must replicate file system changes to another geographic location minutes after the data is written to disk, a difficult task with elastic block storage. The company also needed to vacate one of its disaster recovery (DR) data centers by the end of the year.

The Solution
Hybrid cloud for compliance and performance

Together with NetApp, the company:

- Provisioned NetApp Private Storage (NPS) for Cloud at the Equinix cloud access facility and Global Switch colocation facility in Sydney.
- Moved data volumes next to cloud service providers, where they could be attached to Amazon EC2 instances and potentially other clouds for low latency and maximum performance.
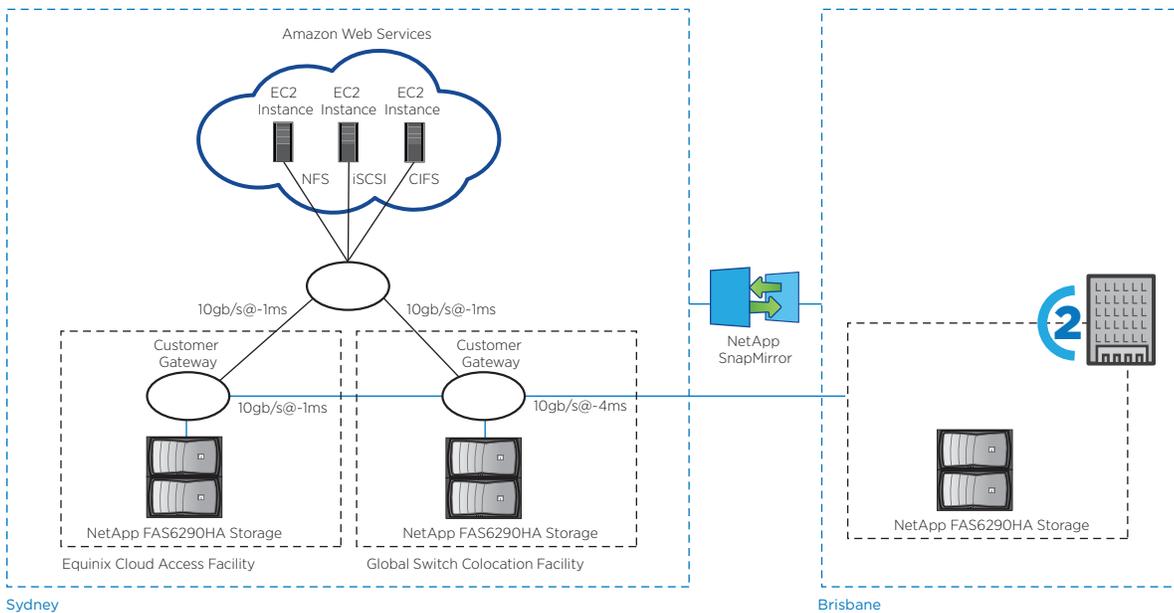
Figure 1) To accelerate its transition to the cloud, the company chose to augment the native storage capabilities of AWS with NetApp Private Storage for Cloud. By storing certain data on NetApp FAS6290 storage systems hosted in world-class data centers with high-bandwidth direct connections to cloud service providers, the company can satisfy regulatory and performance requirements while also providing portability for data and applications.

- Extended its network out to the colocation facilities to isolate the NetApp SnapMirror® replication traffic, enabling it to flow without going through the virtual private gateway to the cloud (see Figure 1).
- Used SafeNet KeySecure k460 for external key management of NetApp Storage Encryption (NSE).

Business Benefits

Measuring success in millions

The company accomplished its goal and vacated the data center by the end of the year, a multimillion-dollar cost avoidance. Now the company is using the cloud as a DR target for virtual desktops and shared file services. By using NetApp Private Storage for user profile data, home drives, and file shares, it can quickly restore desktops and data in the cloud.

The company can now meet its recovery objectives for any workloads it chooses to move into the cloud, enabling customer service to continue uninterrupted. Employee productivity is maintained because DR performance is equivalent to production, allowing users to continue to work at their normal pace following a failover event.

Managing risk and compliance

Keeping customer data secure is essential to maintaining loyalty and trust. With NetApp Private Storage for Cloud, the company is protecting its customers by mitigating the risk of a data breach or supplier failure. It is also meeting data compliance and sovereignty requirements for applications in the cloud, because it knows where the data is at all times.

By adopting multiple cloud resources with the ability to quickly move between cloud instances, the company can take advantage of the best pricing and improve business agility while keeping the data in a single location under its own control.

A clear path forward

The company now has a proven methodology for moving production workloads to the cloud, enabling it to offer new services faster and pass savings along to customers. Because its on-premises storage platform is consistent with its cloud storage platform, making application architecture changes will be faster and easier as the company enters the next phase of its journey, moving enterprisewide production workloads into the cloud.

SOLUTION COMPONENTS

NetApp Products
NetApp FAS6290 storage systems

NetApp Private Storage for Cloud

NetApp Data ONTAP® storage operating system

NetApp encrypted capacity on demand

NetApp Unified Manager

NetApp SnapMirror replication

Third-Party Products
Amazon Web Services EC2

Amazon Web Services Direct Connect

Equinix cloud access facility

Global Switch colocation facility

SafeNet KeySecure k460

Environment
Operating systems: Windows Server®, Linux®

Server virtualization: VMware vSphere®

Desktop virtualization: Citrix XenDesktop

Network: Cisco®

Protocols
iSCSI, NFS, CIFS

Partners
Amazon Web Services
aws.amazon.com

SafeNet
www.safenet-inc.com

Equinix
www.equinix.com

Global Switch
www.globalswitch.com