

About Seagate

Seagate Technology PLC (commonly referred to as Seagate) is an American data storage company. Seagate is the global leader in data storage solutions, developing amazing products that enable people and businesses around the world. Seagate creates precision-engineered data storage technologies that maximize human potential by delivering superior capacity, speed, and safety.

Problem Statement

Seagate had 29 Applications which included 300 servers in their Oklahoma Datacenter (OKC) which they wanted to move to AWS to achieve their Business and Technical Goals. If not achieved, Seagate will continue to incur heavy capital investment and inefficient handling of their mission critical data center operations. Additionally, there is degradation of their performance and they are facing security issues while securing their data centers.

Business Goals

1. Significantly reduce operational and capital costs tied to their data center operations.
2. Enable efficiency through the visibility of cost, and increase their automated environment management.
3. Be agile through a nimbler platform via automated application pipelines.
4. Combine cloud efforts across the organization to achieve efficiencies through knowledge sharing and combined spending power.
5. Confidence in a plan to exit Oklahoma (OKC) data center.

Technical Goals

1. Combine cloud efforts across the organization to achieve efficiencies through knowledge sharing and combined spending power.
2. Confidence in a plan to exit Oklahoma (OKC) data center.
3. Achieve enhanced security, performance, and ease of use in target state.
4. Train and equip Seagate application and operations teams to use, manage, and operate AWS Cloud.

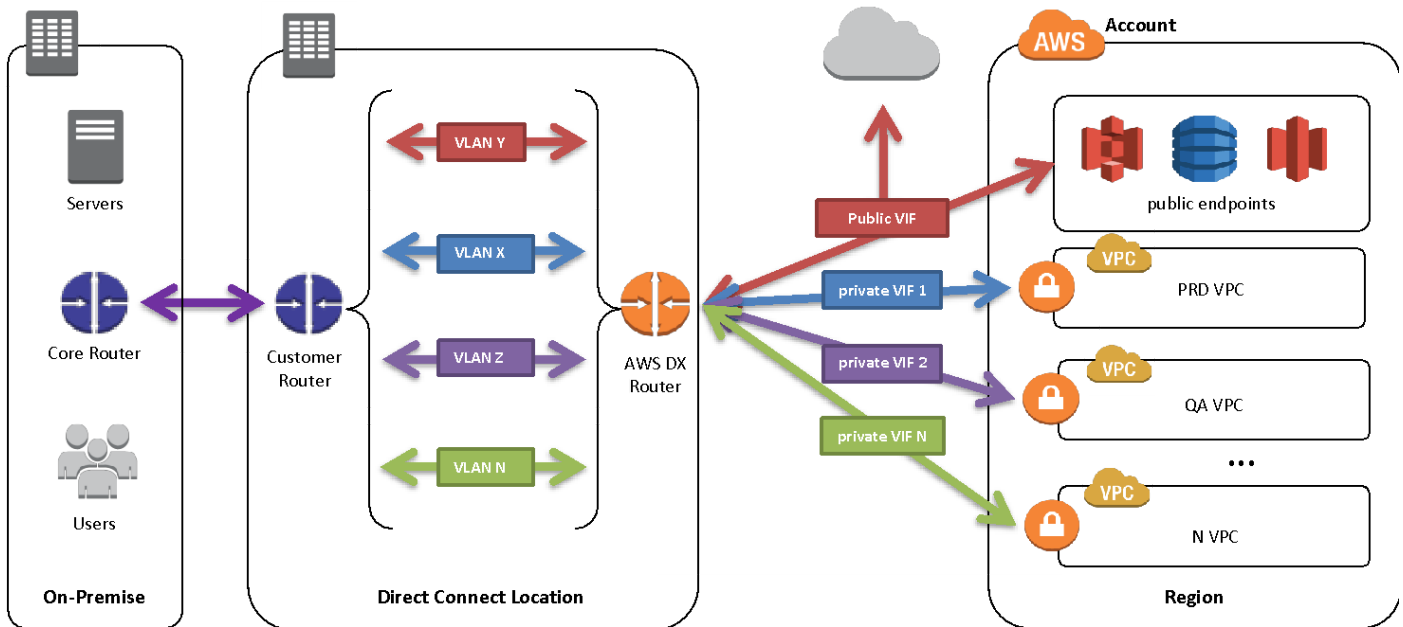
Proposed Solution

Mactores Team had a kick-off call with Seagate IT, including 29 Application Owners, and the Network and Security Teams to understand their workload in a holistic way in order to plan the path forward for their applications residing in an Oklahoma City DC to get migrated to AWS Cloud. This helped both parties to understand what applications should be considered, the priority of the application migrations, and understand the best approach to migrate.

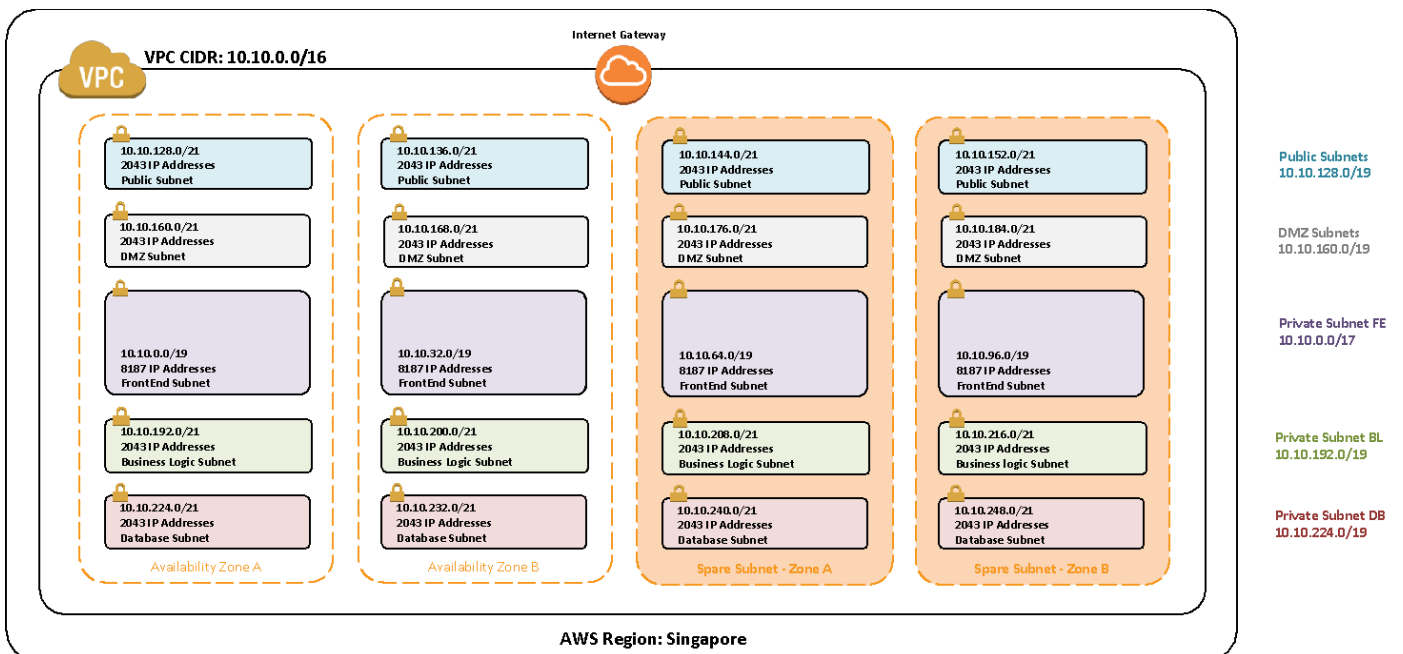
The Mactores team worked closely with the AWS Pro Service team throughout the engagement and implemented the migration best practice documents which we found in the AWS Migration Toolkit confluence portal.

Case study – Seagate DC Migration To AWS

AWS



Direct Connect Integration



Picture 4 – VPC Architecture

Following the successful migration, Mactores encrypted the AMI using the customer managed key and launched the EC2 instances using the CloudFormation script. Once an application stack was launched on AWS, we performed the cutover of that respective application and went live for that application on AWS. The same process is repeated for the rest of the applications. Other services used in this architecture included; Lambda, ELB, ALB, KMS, S3, Organization, Config Rule, and Direct Connect.

Solutions Used

- AWS Direct Connect
- AWS EC2
- AWS CloudFormation
- AWS Lambda
- AWS ELB
- AWS ALB
- AWS KMS
- AWS S3
- AWS Organization

Outcomes & results

Seagate could close their Oklahoma City (OKC) DC by migrating their workload to AWS as per the timeline and save a significant amount of operation and capital cost. Seagate achieved 60% cost savings by migrating to AWS. Also, by leveraging AWS landing zone and the well-architected framework Mactores built a secure infrastructure for their workload hosted on AWS.

By hosting the applications on AWS, Seagate employees experienced a 40% increase in overall performance across the different parts of the world.

Lessons Learned

The following lessons were learned as a part of the project:

1. It was useful to conduct a 3-day project kick off workshop with all the Seagate stakeholders to ensure that everyone was briefed on the project.
2. Ensure that all the information from different stakeholders was collected in detailed design documents.
3. It was valuable to update the stakeholders of the project and steering committee in a systematic manner to control the project delivery.
4. Effective change management could have helped us in project acceleration and avoid the last minute delay in the execution.

About Mactores Cognition Inc

Mactores quickly solves core business problems and drives disruptive change by applying the latest automation technologies and leveraging our Data Analytics, AI/ML and DevOps competencies and experiences. Mactores designs, deploys, integrates, manages rapid migration, and end-to-end data platform transformations. Mactores also offer ongoing managed services and on-demand Concierge Services as needed to support customer success. We help customers achieve their business transformation, save costs and define their path forward by our automation first approach, our extensive collection of accelerators and our result oriented business outcome approach.