Mood Media Migrates Enterprise Workloads to AWS Cloud Platform







Mood Media is a global in-store media solutions company providing overhead and on-hold music and messaging, digital signage content and technology, scent marketing, and integrated audio-visual systems for greater consumer engagement. Based in Austin, TX, Mood's clients include businesses of all sizes and market sectors, from the world's most recognized retailers and hotels to quick-service restaurants, financial services, healthcare, automotive and thousands of small businesses. The company reaches 150 million consumers each day in more than 500,000 subscriber locations in 140+ countries worldwide. For more details, visit www.moodmedia.com

Executive Summary

Mood Media was previously hosting their Oracle eBusiness Suite (EBS), Oracle Business Intelligence (OBIEE), and Oracle Application Express (APEX) environments with a traditional hosting and managed services provider. As a result of performance issues, resource and skill inconsistencies, as well as repeated multi-day outages to the systems causing significant business impacts, Mood Media decided to look elsewhere for hosting and managed services. Mood Media was looking for a partner to migrate their 11 Terabyte Oracle EBS relational database, including the accompanying OBIEE and APEX applications, to a more reliable, scalable, and secure computing infrastructure, such as Amazon Web Services (AWS) and Oracle Cloud Infrastructure (OCI), to host their company's business environments. Mood Media was also interested in expanding and improving their Disaster Recovery (DR) and implementing public-facing, external services. They then began a search for new Managed Services and Consulting partners to support their growing, international business. Based on a competitive evaluation and experience criteria, Apps Associates and AWS were chosen as their cloud infrastructure hosting and managed services vendors. Apps Associates team members architected and implemented an Oracle Physical Standby database using Oracle DataGuard to enhance their Disaster Recovery ability and failover times. Seven (7) site-to-site VPN tunnels were provisioned to connect the Mood Media United States and EMEA offices seamlessly to their new

AWS infrastructure. Additionally, several non-production environments for their EBS, OBIEE, and APEX applications were built with a 28-week, tight turnaround, and Go-Live date of February 28th, 2022. Apps Associates were able to successfully complete Mood Media's migration.

Environments

Mood Media has Oracle EBS, OBIEE and Apex and planned to implement Enterprise Command Center (ECC) as part of AWS Migration. These environments were heavily dependent on the Shared Application filesystem to host the Oracle Application software for APPLCSF (Storage area of log and out files of concurrent jobs) functionality as the deployment is a multi-node application architecture. FSxN (Amazon FSx for NetApp ONTAP) was chosen as the shared filesystem.

Production environment Statistics:

- Products: EBS 12.2.10 with ECC v6, OBIEE 10g (10.1.3.1.0) and 11g (11.1.1.7), and Apex 200100
- Servers: EBS (6), ECC (1), OBIEE 10g (2), OBIEE 11g (3), ftp (1), and Apex (1)
- Size of the Databases: E-Business (11 TB), OBIEE (1 TB)
- Size and IOPS of FSxN: 1 TB with 512 MB/s Throughput and 3072 Provisioned IOPS
- Email system: Amazon Simple Email Service (SES) for handling SMTP and gmail for IMAP.

Driving Factors

Mood Media has grown significantly since its inception in 2004 and expanded its product offerings through several acquisitions across Europe, North America, Asia and Australia. As a result of this growth, they needed a scalable and modern infrastructure to handle the business growth and provide environmental stability and scalability for predictable performance.

High Level Steps of Migration

As part of the AWS Migration assess phase, Apps Associates conducted an Oracle Technology license assessment to map the Oracle licenses to AWS Cloud Platform by analyzing the workload characteristics and choosing the proper Amazon ec2 instance types to run the Enterprise workloads on AWS.

During the AWS migration phase, Apps Associates automated the AWS infrastructure provisioning process and performed three (3) iterations of migrations for EBS, OBIEE, and Apex environments, utilizing data pump export/import because of limited access to the source systems from the incumbent hosting provider. This process of separating data and index exports improved the overall cutover time. During the import, the index creation was run in parallel by splitting the indexes into 12 parallel scripts and each index script was executed with 12 parallel threads during execution. The AWS ec2 instance types were ramped up for the imports to reduce migration time. Disaster Recovery, Amazon SES for workflow emailing functionality, and Enterprise Command Center were implemented and tested post Go-Live.

During the AWS Migration phase, several tests (Unit testing and User Acceptance Testing) were performed as part of the migration and all the functionalities were tested and validated successfully without any issues. Project duration was 6 months.

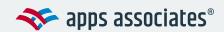
Challenges

The challenges were around the network connectivity between Mood Media network and AWS Virtual Private Cloud (VPC) and from the Legacy Data Center to AWS VPC for transferring the 11 TB data. Apps Associates Network team worked with vendors to setup the Direct Connect for AWS to establish the connectivity with all the Mood Media network locations. There were challenges to access the environments at the legacy data center with contractual obligations. Apps Associates worked with the legacy managed services team to execute the steps, which were explicitly created for them and provide the data exports so that it can be used to build the environments on AWS platform. Additional challenges were the 3rd party integration systems connectivity and testing as well as the high volume of invoices sent (100+k) which was resolved with Amazon SES.

Benefits realized after migrating to AWS Cloud

- Advantage with Cloud agility. Increased the server capacity (vertical/horizontal) as per the requirement.
 Higher instance type during the migration, and the right sized instance during steady state.
- Modernized infrastructure, Improved cloning time and performance
- Achieved shared APPL_TOP and Disaster Recovery requirements.
- FSxN native backups scheduled to run every day with 30 days retention which meets RPO and RTO requirements

About Apps Associates



Apps Associates is an enterprise application services leader with a customer-first focus. Apps Associates has more than two decades of experience helping organizations innovate through digital transformation initiatives. Apps Associates provides Next-Generation Managed Services to its customers leveraging enterprise monitoring software, Cloud Automation, and statistical and Machine-Learning anomaly detection to ensure our customers' systems remain available to serve their needs. To learn more about how Apps Associates, visit: www.appsassociates.com.

