# Migration of Oracle E-Business Suite from On-Premises Exadata to AWS





Paysafe, headquartered in London, United Kingdom, is a leading global provider of online payment solutions and services. Revenue was \$ 1.5 billion for 2021. Paysafe has a workforce of over 3,000 employees worldwide. In recent years, the company has experienced significant growth, driven by the increasing demand for digital payment solutions. With a strong focus on innovation and expanding its product offerings, Paysafe has been able to maintain a steady growth rate in the online payment industry.

# **Executive Summary**

Leading global provider of online payment solutions with revenue over € 1.5 billion for 2021 wants to modernize their IT infrastructure by migrating all EBS-Systems on Exadata hardware to AWS and leverage all AWS infrastructure services functionality. They want to leverage AWS Infrastructure for better performance with RAC option OFF and exit from Exadata DB systems. Paysafe has been working towards a datacenter exit for several years to reduce cost and complexity while also having better business agility. They chose to standardize on Amazon Web Services (AWS) for cloud infrastructure. When it came time to consider moving Oracle, AWS recommended Apps Associates. Paysafe had an existing relationship with SmartDog Services (acquired by Apps Associates in 2019), so there was an existing MSA to leverage, however they were still very skeptical of the project and were concerned that the business users would not enjoy the same performance in AWS as they had on Exadata. Apps Associates was brought in to migrate Oracle E-Business Suite Applications and Database workloads and Hyperion workloads from on-premises Exadata to AWS infrastructure to support and integrate with other source systems.

#### **Environment**

Paysafe was supported by multiple Non-PROD and PROD application and database workloads for EBS and Hyperion applications and securely integrated with multiple source systems Coupa, PBCS, SaaS MDM system, Skrill admin, Integrity, SuccessFactors and Blackline.

Production and non-production:

- Servers: Database (6+), Applications (6+), 27+ Servers
- Setup of Oracle Apex
- Setup of Outlook 365 on EBS and integrate with Microsoft Azure AD
- Implemented Disaster Recovery Options
- Built AWS FSxN Family and Network systems.
- Implemented Terraform for all utilized AWS services
- Provided Consulting on Best Practices and Architectures

## **Driving Factors**

Apps Associates was brought in to migrate Oracle E-Business Suite Applications and Database workloads and Hyperion workloads from on-premises Exadata to AWS infrastructure to support and integrate with other source systems. Apps has designed Disaster Recovery for both EBS and Hyperion stacks to recover more efficiently and quickly without loss of data in case of a complete availability zone (AZ) failure. We also implemented an Outlook 365 setup with Azure AD which is fully integrated with Oracle E-Business Suite. This enabled Paysafe to use full-fledged EBS workflow features to improve process efficiency. Last, we implemented a CEMLI Apex setup and upgraded to the latest available version all while migrating the existing CEMLI DB code with zero impact on code changes. The Apex setup improved their corporate EBS change management deployment process and ensured compliance with audit rules for segregation of duties (SOD) in development and deployment actions.

## **High Level Steps of Migration**

During the migration phase, Apps Associates performed three iterations, including a production round of the Oracle EBS and Hyperion Applications and Databases. This was done to support all application testing and production cutover. Apps Associates leveraged the agility of the AWS cloud and the power/flexibility of the FSxN ONTAP storage service to ensure a speedy and reliable migration. FSxN was leveraged to set up a standby database at AWS for migrating on-premises databases of over 35+TBs to the EC2 target upfront. This approach reduced the overall migration runtime, especially during the production cutover window.

## Challenges

Paysafe wanted to migrate an Oracle Exadata 19c database on AWS EC2 with oracle basic compression of data. The project team realized that there is no direct approach to migrate 35+TBs Database which was enabled with hybrid columnar compression (HCC) with minimal cutover downtime window. Apps Associates provisioned an EC2 server with FSxN storage layers, which is compatible with on-premises of 19c version of the Databases. The 19c Database was first migrated to the target EBS database server by creating an Oracle 19c standby database using Oracle methodologies without impacting network bandwidth. This method was utilized to save restoration time during the cutover. During the cutover, all production-related database uncompression, basic compression and post-application reconfiguration activities were performed.

#### Benefits realized after migrating to AWS

- Leverage AWS Infrastructure for better performance
- Meet high throughput and IOPS requirement using FSx for NetApp ONTAP storage for 35+ TBs of Oracle Database
- The ability to recover both EBS and Hyperion applications and databases more efficiently and quickly without data loss, in the event of a complete AWS availability zone (AZ) failure
- Meet the support criteria on the Operating System,
  Database, and the Applications

# **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. Customers such as Brooks Automation, Hologic Inc., Edwards Vacuum, and Take Two Interactive Software turn to Apps Associates for strategic counsel, system integration and the services required to solve their most complex business challenges - utilizing experience in analytics, application modernization, process automation, digital systems, technology and operations.

To learn more about how Apps Associates, visit: <a href="https://www.appsassociates.com">www.appsassociates.com</a>.



