Global Manufacturer Moves Enterprise Workloads to OCI





The customer is a global provider of purpose-built antennas, industrial IoT devices, and network test and measurement solutions that enable wireless connectivity. Trusted by leading two-way radio manufacturers, public safety agencies and critical infrastructure organizations, their Public Safety Network Testing Solution ensures in-building coverage for first responders and business-critical communications.

Executive Summary

The customer's datacenter cooling system was failing, and they needed a fast solution to get out of the datacenter and ensure business continuity and agility. The Apps Associates team assisted in evaluating several laaS hyperscalers and the customer decided to migrate all their application environments to Oracle Cloud Infrastructure (OCI).

The customer opted for a like-for-like migration while gaining key benefits including high availability, security, and scalability from moving to the cloud. They chose OCI and Apps Associates as their cloud infrastructure hosting, migration, and managed services partner.

The customer had an aggressive migration timeline, which spanned 19 weeks. The Apps Associates team was able to deliver this on time and within the budget.

Environment

The customer is leveraging many enterprise business applications including Oracle E-Business Suite (EBS, R12.1.3 with 11g DB), Demantra (Demand Management), Agile PLM (Product Lifecycle Management), Application Integration Architecture (AIA)/Process Integration Pack (PIP), and internet-accessible applications with geographically distributed file systems. They have Hyperion (Planning), Oracle Business Intelligence Applications (Reporting), and ETL Tools consisting of Informatica and Data Warehouse Application (DAC) and Identity Cloud Services (IDCS) for Single Sign-On (SSO) solution.

Environment Details:

- Services: 20 Compute Instances, Block/Object Storage, Base Database, Load Balancer
- Products: EBS 12.1.3 with DB 11.2.0.3, Demantra R12.2.10, OBIA 7.9.6.4, Informatica 9.6.1, DAC 11g, Hyperion 11.1.2.4 with SQL Server 2012, Single Sign on with IDCS, Agile PLM 9.3.5 with AIA 11g, PIP 3.5, Apache as Reverse proxy
- Operating Systems: Windows 2008 R2, 2012, 2016;
 Linux/OEL 6.x, 7.x

Driving Factors

The customer wanted to modernize their infrastructure for E-Business Suite and all its dependent applications by leveraging Oracle Cloud Infrastructure features to reduce costs and eventually retire the on-premises data center. The Oracle Cloud Infrastructure platform was chosen for agility and the need for a scalable and modern infrastructure to handle the organization's growth. Primary selection criteria were stability, reliability, and scalability with predictable performance.

This was a complex project, and we needed a partner we could trust. I knew Apps Associates had the expertise to deliver, and they did. We got the project done on time, and are excited to continue building on our relationship with Apps

- Chief Information Officer.

Migration Summary

Apps Associates architected the client platform on Oracle Cloud Infrastructure, prepared a detailed design including Oracle cloud network and infrastructure resources, and a multi-compartment strategy for PROD, Non-PROD and networking workloads.

Three iterations of migration were executed including two non-production and one production. Each iteration was comprised of Agile PLM, AIA/PIP Integrations, E-Business Suite, Oracle Business Intelligence Enterprise Edition, and Hyperion Financial Management applications/integrations and Single Sign-on.

For the heavy lifting of the migration, Apps Associates leveraged our go-to server migration tool, RackWare. Due to networking related changes some services needed to be re-configured/re-installed/cloned. During cutover, only applications and database backups were transferred to OCI servers using standard operating system tools to save time.

Aggressive timelines and challenges during the first iteration necessitated creative solutions from the project team with UAT being released in phases by application. Testing was performed as part of each iteration and business functions were tested and validated per pre-exiting test cases.

Challenges

Network bandwidth was a limiting factor for the first iteration resulting in challenges for initial data copy from on-premises systems to OCI. It was later mitigated by the internet service provider in time for subsequent iterations.

Agile PLM, AIA/PIP Integrations, OBIEE, and Hyperion HFM migrations had two main challenges of:

- limited support from vendors
- gaps in documentation for customizations

Both of these resulted in the migration hitting unpublished bugs and missing setups.

International Traffic in Arms Regulations (ITAR) requirements were identified during the project and were mitigated with additional staffing to comply with the regulation.

The migration required significant resources to assist with planning, migration, and testing across all environments.

Benefits After Migration to OCI

- Modernized infrastructure, improved cloning time, and performance improvements.
- Advantages with Cloud agility and increased server capacity (vertical/horizontal) as per the requirement.
- Environment Provisioning is faster using Infrastructure as a code.
- · Future readiness for business growth.
- Better price for performance.

About Apps Associates

Apps Associates is a premier enterprise applications and technology advisor, counseling and executing across every stage of the enterprise transformation journey - not just the destination. For more than two decades, Apps Associates has closely collaborated with decision makers across nearly every industry, offering end-to-end integration, modernization, and cloud migration services. By helping to break down the silos within today's most complex business challenges, Apps Associates is unlocking solutions and efficiencies that scale into future opportunities.



