

Consolidating DPMS Product Portfolio with Unified Data Model and Microservices

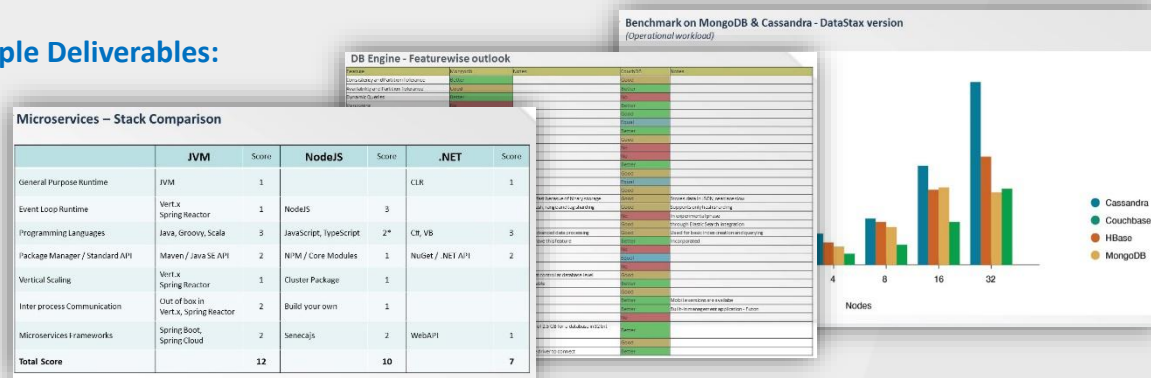
The client is a leading diagnostic software and dental practice management solution (DPMS) provider with separate portfolios for imaging and CAD/CAM solutions. With more than 100 years of experience, the client has several acquisitions, partnerships and mergers bringing in a wide suite of applications below them. Having disparate systems with no standardization, mobility, proper encryptions, audit logs, replication or enterprise-level analytics, the client initiated an effort to unify and consolidate the products with a cloud-first solution approach.

The team from OFS worked with representatives of the different products to build a unified data model and design a microservices-based, multitenant cloud architecture. A MDM solution considering operational, master data and analytical requirements was also proposed.

Business Benefits:

- The cloud-based solution with better accessibility and resilience for customers eliminated the need for infrastructure maintenance.
- The consolidated product portfolio and Everything as a Service (XaaS) allows for customer-tailored selling.
- There is a lower cost for product sustenance, maintenance, deployment and infrastructure.
- The products have global outreach.

Sample Deliverables:



Key Highlights

- A two-week interactive workshop with client product managers from around the world provided an understanding of pain points.
- OFS created a unified data model consolidating the needs of DPMS and other products.
- We established a cloud-first architectural approach.
- A microservices-based architecture enabled us to...
 - Use different technology stacks on the same platform to optimally satisfy client needs
 - Deploy and maintain different versions
 - Provide better system resilience
- The MDM solution standardized transaction data, distribute master data and extract analytics.
- We evaluated technology candidates for a microservices framework, unstructured DB.

Technologies Considered

- **Cloud:** AWS Cloud
- **Database:** Mongo DB, Cassandra, Couch DB & PostgreSQL
- **Microservices Stack:** Spring Boot (JVM), NodeJS & .NET
- **API Management:** Kong API Management, WSO2
- **Service Registry:** Netflix Eureka, Apache Zookeeper, jUDDI
- **Messaging:** Rabbit MQ, Apache Active MQ, Neuron ESB & CT.ABB