

Major Biotech Firm's Critical Oracle ERP Environment Refreshed With Oracle Engineered Systems

A leading global biotechnology company specializing in the discovery, development and delivery of therapies for the treatment of many degenerative and autoimmune diseases demands 24x7 access to a substantial Oracle database and application environment to create, patent and deliver medicines that save and improve people's lives. With the environment reaching capacity and the compute, storage and network infrastructure aging, the IT environment was in need of a refresh to meet scalability requirements the company would soon face.

Challenges

Complex IT Environment Needs to be Simplified

Over the years, the number of individual applications and databases expanded to the point where it was too expensive to maintain acceptable service levels. 60 ERP applications and databases needed attention for improved performance and the IT team wanted to consolidate more than 300 non-ERP databases. The complexity of patch updates were a huge undertaking since the biotech company could only afford downtime twice a year and hundreds of patches needed to be installed in a specific sequence over hundreds of applications and databases.

The situation was further challenged by system performance slowdown of critical ERP applications from financials, manufacturing and supply chain, so an ERP update was being considered. The IT organization decided it was time for a significant overhaul to eliminate the complexities associated with managing this aging, fragmented IT environment.

Already running SOA on Exalogic, the firm's IT team wanted to move to a full Engineered Systems environment, but they were not equipped to architect, design, migrate and manage a full system. They needed an Oracle Partner that could lead the upgrade.

Industry

Fortune 500 Biotech

Customer Benefits

- 10X Performance Improvement Across Critical Systems
- Patching Takes Hours vs. Months
- One Team to manage infrastructure refresh, migration and Daily IT Operations
- Experts That Are an Extension of Inhouse Team

Solutions

- Oracle Engineered Systems
- Data Intensity Discovery Services
- Data Intensity Migration Services
- Data Intensity Integration Services
- Data Intensity Managed Services

Solutions

Engineered System Solutions to Eliminate Complexity

Data Intensity conducted an assessment to validate the number of systems needed and to address improved performance, scale and consolidation needs. Several "Exa" machines were implemented to overcome memory, disk and CPU bottlenecks, boost performance and allow the organization to execute key service requirements (including semi-annual patching) in less than half the time, providing a significant cost savings associated with managing this new environment. "Based on Data Intensity's successful track record, experience in Engineered Systems and unrivaled relationship with Oracle, we trusted their team to lead the infrastructure refresh and migration efforts," said the Vice President of IT. "They worked directly with Oracle upfront to develop an Engineered Systems architecture to suit our long-term operations." With the global scale and volume of databases and applications, an enormous amount of upfront work was required to ready the infrastructure to migrate to the Engineered Systems, which included Exadata, Exalogic and Exalytics.

Three-Phase Implementation to Complete New Infrastructure

To implement the complete set of requirements, Data Intensity took a three-phase approach:

- 1 With the addition of Exalytics and Exadata, the entire Engineered Systems environment was going to be managed by Data Intensity including the existing Oracle SOA running on Exalogic. To ensure the new environment ran autonomously with the right expertise, the management of Oracle SOA running on Exalogic was transferred to Data Intensity. This process included establishing a baseline for current processes, documentation, health check and ensuring the system was organized correctly.
- 2 Critical ERP system refresh and migration of 60 ERP databases and applications to Exadata and Exalytics. With all the planning and architecture design work done ahead of time, the success was due to the technical expertise and careful planning.
- 3 Finally, shortly after the Oracle ERP refresh and migration was live, another team initiated the Exadata migration and consolidation for the 300+ non-Oracle ERP and other commodity financial databases.

In total, Data Intensity's project team deployed and managed a total of 6 Exadata, 3 Exalytics and 2 Exalogic systems and the biotech company saw immediate performance improvements.

Results

Engineered System Solution to Provided Huge Performance Boost

The overall improvement in performance was significant and there was a 10x performance gain realized across some critical business functions. Data Intensity's project team had converted the entire Oracle infrastructure ahead of schedule, under budget and in under two years. Patching that used to take weeks to months now took a few hours and the complexity of the compatibility between different patches for each components had been eliminated providing significant efficiencies to the global operation.

The team that led this effort consisted of a full-time Data Intensity project manager and a 24/7 global support team who managed the refresh, migration, and daily IT operations of this large scale environment. With carefully planning and pinpoint execution, the team was able to fit in test runs and validate the migration, while minimizing the impact on users.

"Data Intensity is always available and gives prompt responses. They truly serve as an extension to our own team helping us manage the business operations and providing guidance and insight into our IT roadmap. And when needed their team is willing to go the extra distance to keep our environment up and running. We consider Data Intensity a strategic partner to our company, and have relied on them over the years for insight and guidance as we make our most critical IT decisions. The expertise within their managed services group is a critical element that enables us to support our global business, keeping our systems available and performant for our end user community."

Proven Flexibility to Serve Customer Requirements

Switching to the Engineered Systems architecture, individual database patching no longer took months to complete. In the past, it was important to make sure patches for different components were compatible with each other, which made the process very complex. Now, all the components were compatible and one Exadata environment has the power to patch 100s of databases at once. However, the technical expertise of the "Exa" machine updates were now more complex and required some downtime. Oracle releases updates quarterly, but the Biotech firm's requirement of only semiannual downtime remains. Despite the complexity associated with semi-annual releases Data Intensity implements the semi-annual updates to minimize disruption to the global operation.