EUROPEAN FINANCIAL SERVICES INSTITUTE

MOVES TO POSTGRES FROM ORACLE TO SUPPORT VIRTUAL ENVIRONMENT

CHALLENGES

- Operating in a highly competitive market, the company needed to respond more dynamically to business opportunities.
- Moving to a virtualized environment would be too expensive with Oracle, because of Oracle's approach to licensing in a virtualized environment.
- Data protection is of paramount importance, because financial services institutions are bound by strict regulations.

BENEFITS OF EDB POSTGRES

- EDB gave this financial services institution the confidence to adopt Postgres.
- EDB's Support Services and tools ensured that its database applications remain available, reliable and scalable.
- EDB Postgres provided a more affordable, easy-to-use approach for virtualized database environments.
- The compatibility of EDB Postgres with Oracle's PL/SQL commands simplified the transition to Postgres.

A leading financial services institution in the Nordics faced a host of decisions for a major digital transformation initiative. With more than 10,000 employees working in over 20 countries to provide banking services to private and corporate customers, the company needed to respond quickly to customer requirements with new financial products. Achieving this meant an overall transformation of the company's IT infrastructure, and ultimately, the strategic decision to move to a virtualized environment and to migrate from Oracle® to Postgres.

Originally, the financial services institution primarily used the Oracle Database, but having examined Oracle's licensing for virtualized environments, it felt it would be too costly and complex to remain on Oracle. Consequently, it has decided to move from Oracle to Postgres, wherever possible.

However, it is only comfortable adopting the open source-based platform, because of support from EnterpriseDB (EDB). EDB is enabling the financial services company to accomplish its transformation goals:

New application implementation:
Today, the company operates a mixed environment of Oracle, IBM DB2®, and Postgres databases, but it is aiming to move as many systems as possible to Postgres. There are some applications, which will remain on Oracle, because they are legacy applications with significant customization. But today all new applications are built on EDB Postgres™ as the preferred database. There are already 50 databases using EDB Postgres and 8 – 10 of these databases are production systems. The company's approach is to use the same database platform during three key stages – function testing, production testing, and production

go-live. One example of an EDB supported database is a system to track all trades on the national stock exchange. Currently, it is managing approximately 303 million transactions per year and it is growing rapidly, handling 1 – 2TB of data at this stage.

This financial services institution had just completed a hardware refresh and created a virtualized environment on VMware® to ensure scalability to meet peak demand from customers. The virtualized environment is hosted in two dedicated locations, but it does not failover from one site to the other. There are two nodes on one site, with one acting as the master and one the backup, while there is one node at the other site.

Crucial Support from EDB

EnterpriseDB is providing the company a range of services and tools to assist the organization in achieving the highest levels of availability, reliability, and security for its mission critical database applications. The company is using:

- EDB Postgres Backup and Recovery Tool (BART) for full and incremental backups, because it is essential that data remains available at all times. The user interface for EDB Postgres BART simplifies how the company prepares information and passes it on to its first and second level support teams.

- EDB Postgres Failover Manager for high availability, creating multiple Postgres clusters with one system working across two locations.
- EDB Postgres Enterprise Manager for alerts and to monitor usage patterns of the database.
- The EDB Support Portal for migration and deployment support and to identify fixes when needed.

Additionally, EDB Postgres supports the Generic Security Services API (GSSAPI) for secure enterprise level authentication and authorization models, including Kerberos. This is a secure authentication system suitable for distributed computing over a public network and provides secure authentication with secret-key cryptography.

The company is also benefiting from additional security offered by the LDAP (Lightweight Directory Access Protocol) method of authentication, which is useful in situations where there are a large number of users and passwords to be managed from a central location. This makes security more manageable and gives users a unified password experience across the infrastructure.

EDB Postgres also supports SSL certificates for the traffic between the client and server to ensure data is secure at all times.

EDB™

"Having EDB as a partner to help us on this journey to the cloud will be vital..."

- Systems Software Engineer

"As a financial services institution we cannot afford any compromise of our data, because it is the lifeblood of our business," said a systems software engineer at the company. "We do not want to engage the open source community directly, that is not our strategic aim, but we do intend to use open source more and more if we can put the appropriate support agreements in place. Consequently, we are only comfortable moving to Postgres because EnterpriseDB is our support partner."

Another key advantage of EDB Postgres is that it provides Oracle PL/SQL compatibility, which makes the retraining of Oracle Database Administrators (DBAs) much easier: "We only gave our DBAs very basic training on how to connect to Postgres and they were up and running very quickly. This significantly reduces the costs of migration, because it cuts down the amount of downtime necessary to re-engineer applications and re-train our IT team."

In the future, as the financial services institute rolls out Postgres, it will be looking to deploy a Database-as-a-Service (DBaaS) platform using EDB Postgres, because this will give it even more flexibility for new application development. However, the customer will not consider a public cloud implementation. It is more likely they will consider a private cloud within its data center, because it must ensure the security of its data.

"While the cloud has the potential to offer many advantages, such as flexible deployment and cost savings, protecting our sensitive company data is of paramount importance. Having EDB as a partner to help us on this journey to the cloud will be vital, because the EDB DBaaS platform will enable us to migrate when we are ready and easily shift applications as workload demands change."

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- Systems Software Engineer

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