S&P Global Ratings Moves Databases from Exadata to AWS, Selects FlashGrid as the New Platform

Case Study

Challenge

When S&P Global Ratings decided to move their infrastructure to AWS the database team was facing a formidable challenge. Dozens of databases were running on Oracle Exadata systems that provided best-of-breed performance and high availability. How to run these databases in AWS with similar availability SLA and similar performance to the Exadata?

Solution

FlashGrid offered S&P Global Ratings a database backend architecture based on FlashGrid engineered cloud system featuring Oracle RAC database engine.

- Two active-active Oracle RAC database nodes placed in different Amazon EC2 availability zones ensure the database keeps running even when an entire AZ experiences a failure. Data mirroring across AZs in addition to the mirroring at Amazon EBS storage level provides maximum data protection against failures.
- Combining local NVMe SSD with EBS GP2 storage allows the flexibility of having both maximum storage throughput and large storage capacity.
- Infrastructure-as-Code automation with FlashGrid Launcher makes deployment of the database clusters simple, fast, and repeatable, which is important when large number of Prod, DR, Dev, and QA databases must be deployed on a tight schedule.

Results

S&P Global Ratings now runs high-performance mission critical databases in AWS and enjoys flexibility and ondemand agility of the cloud infrastructure. It takes only 2 hours to deploy a new database cluster with a proven configuration. "We had to migrate dozens of mission critical Oracle RAC databases from Exadata to AWS with FlashGrid, and were able to do it without sacrificing performance or availability. Reliable operation and continuous support were the key success factors for us."

> Rama Kolli Sr. Director – Database Management S&P Global Ratings

