ORACLE ACTIVE DATA GUARD

Stop spending money on disaster recovery (DR) systems that sit idle waiting for a disaster to occur. Stop assuming that complex replication solutions are required to put idle DR systems to work. Stop buying more capacity for read-only workload. Stop wondering if your DR system is really ready to take over the production role when disaster strikes. Start using Active Data Guard to quickly transform your DR system into a reliable, productive asset used to offload read-only workload from your production database.

KEY FEATURES AND BENEFITS

THE SIMPLEST, HIGHEST PEFORMANCE, MOST COMPRENSIVE DATA PROTECTION AND AVAILABILITY SOLUTION FOR THE ORACLE DATABASE

ACTIVE DATA GUARD FEATURES

- Local and remote protection from downtime or data loss due to database or site failure
- Standby databases are open read-only while being synchronized with the primary database
- Oracle data validation
- Fast, automatic database and client failover
- Efficient network utilization
- Very high performance
- Certified with the Oracle Database Machine and Oracle Exadata
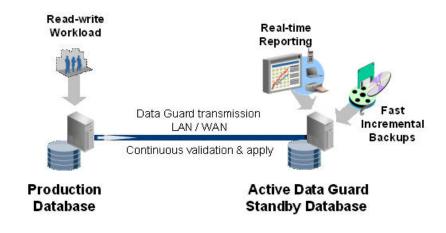- No restrictions on data types, storage attributes, DDL or DML operations

BENEFITS

- Highest possible level of data protection
- High availability for database and site failures
- Real-Time replication regardless of data type, workload profile, or transaction throughput
- Multi-purpose standby with high ROI: ad-hoc queries, reports, testing, backups
- Simple to manage

Oracle Active Data Guard

Active Data Guard provides the management, monitoring, and automation software to create and maintain one or more synchronized replicas (standby databases) of a production database (primary database). An Active Data Guard standby database is an exact copy of the primary that is open read-only while it continuously applies changes transmitted by the primary database. An active standby can offload ad-hoc queries, reporting, and fast incremental backups from the primary database, improving performance and scalability while preventing data loss or downtime due to data corruptions, database and site failures, human error, or natural disaster.

Protection

Active Data Guard is a loosely coupled architecture where standby databases are isolated from failures that can occur at the primary database. Primary database changes are transmitted directly from memory, isolating the standby from I/O corruptions that occur at the primary. The software code-path executed on an active

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standby is different from that of the primary – isolating it from firmware and software errors that impact the primary. Oracle corruption-detection checks insure that data is logically and physically consistent before it is applied to a standby database. An active standby also acts as a "canary in a coal mine" by detecting silent corruptions that can occur at the primary due to hardware errors (memory, cpu, disk, NIC) and data transfer faults, preventing them from impacting the standby database.

Availability

Maintaining an independent replica of a mission critical database provides the ultimate level of high availability. In the event of a planned or unplanned outage, an Active Data Guard standby provides high availability by quickly transitioning to the primary role, either manually or automatically, preventing downtime and data loss.

Return on Investment

Active Data Guard puts idle systems to work improving systems utilization. It is incredibly efficient - its replication process uses less computing resource, leaving more capacity for production applications. It is simple to implement and manage, reducing administrative cost and complexity.

Performance

Active Data Guard is the simplest, highest performance solution for maintaining a synchronized independent copy of the Oracle Database. It is the only replication technology able to support the very high volumes driven by the Oracle Database Machine and Oracle Exadata. Oracle 11g Release 2 tests using an Oracle Database Machine proved Active Data Guard was able to apply changes at a sustained rate greater than 500MB/second.

Confidence

Active Data Guard can do what no other data protection technology can do for the Oracle Database. It provides unique levels of simplicity, performance, reliability and the security of having an independent, exact replica of the production database. It eliminates the unknown by being able to validate the production readiness of the standby database by querying it at any time – without impacting data protection or your ability to immediately transition it to the primary role.

Contact Us

For more information about Active Data Guard, please visit oracle.com/ha or call +1.800.ORACLE1 to speak to an Oracle representative.

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