Oracle Exadata

Oracle Exadata is a family of high-performance, smart-storage software from Oracle and industry-standard hardware from HP that can improve data warehouse query performance by a factor of 10 or more.

Traditional Storage



Key to fast query performance for data warehouses is sufficient processing power, storage capacity, and network bandwidth. Data warehouses can scale on grids with Oracle Database 11g, Oracle Real Application Clusters, and Oracle Partitioning.

Traditional Storage

Oracle Database Server Grid



Storage Network Bandwidth

For large-scale data warehouses, traditional storage network bandwidth averaging 100MB/sec can limit query performance and concurrency, especially when data volumes and user demand continues to grow.

Oracle Exadata



Oracle Exadata employs a massively parallel architecture that dramatically increases data bandwidth between the database server and storage using InfiniBand connections. Query processing is handled closer to the data, and less data is moved through wider network connections.

Oracle Database Server Grid 4GB/sec InfiniBand Storage Network

Each HP Oracle Exadata Storage Server has InfiniBand connections delivering up to 1GB/sec data bandwidth between storage servers and database servers. Incrementally adding HP Oracle Exadata Storage Servers linearly scales data warehouse storage capacity, processing power, and network bandwidth (for example: 4 HP Oracle Exadata Storage Servers equals 4GB/sec).

HP Oracle Exadata Storage Server

The HP Oracle Exadata Storage Server is a fast, reliable, high-capacity, industry-standard storage building block complete with its own processing capacity and smart software that can quickly process database querys, returning only relevant rows and columns to the database server.