



Focus On: Oracle Exadata Storage Server

Billed as "The World's Fastest Database Machine", Oracle claim that their new HP Oracle Exadata Storage Server can run Oracle Data Warehouses at least 10x faster.

The HP Oracle Exadata Storage Server is essentially a HP ProLiant DL180 G5 server preinstalled with Oracle Exadata Software. It looks good, and with related literature claiming "extreme performance", "unlimited scalability" and "high performance", could Exadata really be an IT-Department's thrill ride?

Exadata principles

The Exadata Storage Server is designed to improve query performance using a parallel architecture to offload query processing from database servers. This means that less data is sent over fast Infiniband interconnects and processing occurs close to the data itself.

The pre-installed Exadata software enables the server to process queries and only return the rows and columns that are relevant. Furthermore, if SQL processing is pushed to the Exadata Storage Server, all of the disks can work in parallel, which significantly reduces bandwidth usage and CPU consumption.

Scalability is also featured as a key selling point of the Exadata Server: an unlimited number of additional Exadata Servers can be added to scale storage capacity, processing power and network bandwidth as required.

Technical Specs

- 12 x 3.5 inch SAS or SATA disks
- 2 Intel 2.66 Ghz quad-core processors
- 8 GB memory
- Dual InfiniBand ports
- Redundant power supplies
- Oracle Exadata Storage Server Software
- Oracle Enterprise Linux

Summary

With its ability to easily analyse internal data stored in multi-terabyte data warehouses, Oracle Exadata Storage Server could prove a particularly useful Business Intelligence tool. As the ability to utilise internal data becomes a key differentiator for the development of competitive advantage during tough economic times, Oracle Exadata Storage Server may be worth its weight in gold.