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ORACLE®

CUSTOMER PROFILE

Oracle, the world's largest enterprise software company, provides managed applications to thousands of customers through various Oracle On Demand offerings. www.oracle.com

CHALLENGE

Enhance the reliability and reduce the total cost of ownership (TCO) of the servers used to host Oracle® On Demand's Managed Applications—a portfolio of industry-leading applications that capitalizes on the reliability and scalability of Oracle products including Oracle Grid Computing

SOLUTION

12,000 Dell™ PowerEdge™ servers are in the Oracle Austin Data Center (ADC); the remote management capabilities of Dell servers allow for a high percentage of systems related activities to be done remotely

BENEFITS

Dell PowerEdge servers deliver the performance and reliability Oracle customers require for running Oracle On Demand Data Base servers; the new Dell servers use substantially less space and power; Dell Remote Access Card technology helps to reduce management costs and minimize downtime

Powering Oracle On Demand Applications

Oracle's 82,000-square-foot Austin Data Center (ADC) was built to host Oracle On Demand Managed Applications. Today thousands of Oracle On Demand customers draw on the compute resources of the ADC's 12,000 Dell PowerEdge servers to run a wide range of Oracle applications, from Oracle's Siebel CRM On Demand, Oracle's PeopleSoft Enterprise On Demand, Oracle E-Business Suite On Demand, Oracle Technology On Demand, Oracle Retail On Demand and Oracle Collaboration Suite On Demand.

In response to the continuing growth of the Oracle On Demand business, the Oracle ADC team decided to add 2,000 new servers to the massive data center. "More and more organizations are turning to Oracle On Demand to relieve their IT departments of some of the most time-consuming and resource-intensive tasks so they can focus on more strategic initiatives," says Marc Schwarz, SVP of Oracle On Demand. "Because the ADC is our central resource for Oracle On Demand Managed Applications, we need to be sure that we can deliver the optimal application performance that our customers expect while ensuring that those applications will be available 24/7. We need a cluster of powerful, reliable servers that can be managed and maintained easily. When the thousands of customers and millions of users take advantage of Oracle managing Oracle using our On Demand services, we must provide the highest quality of service."

DELL™

“Dell servers fit our cost model and deliver the performance we need while helping to contain power and cooling costs. In addition, Dell is one of our very strategic business partners and always provides excellent support for its products. Because our customers rely on round-the-clock availability, that support is essential.”

— Mark Sunday, SVP and CIO
Oracle

To keep costs low for Oracle and its customers, the Oracle ADC team also needs servers that can deliver a low total cost of ownership. “We need an efficient method of supplying compute resources,” says Mark Sunday, SVP and CIO. “That means we need to keep real estate, power, cooling, and ongoing management costs under control,” says Sunday.

Dell servers offer excellent performance/watt, global support, and timely delivery

The Oracle ADC team wants to have cost-effective servers that could meet the group’s performance, reliability, real estate, and power consumption requirements. They were looking for servers that could deliver an outstanding performance per watt.

“We’ve used Dell servers in the past, and are pleased with the performance,” says Sunday. “Dell servers fit our cost model and deliver the performance we need while helping to contain power and cooling costs. In addition, Dell is one of our very strategic business partners and always provides excellent support for its products. Because our customers rely on round-the-clock availability, that support is essential.”

Given the large number of servers that Oracle needed to deploy, the ability of Dell to deliver servers quickly also factored into the decision. “Dell has a very efficient supply chain,” says Sunday. “We received the servers quickly, which allowed us to reduce our inventory costs and deploy those servers into production right away.”

Dell PowerEdge servers help reduce space power consumption substantially

A full range of Dell servers, including the ninth-generation Dell PowerEdge 1950, Energy Smart 1950, and PowerEdge 2950 with Intel® Xeon® processors as well as PowerEdge 6950 servers with AMD Opteron™ processors, were racked, stacked, and rolled into the ADC. The servers run the Linux® operating system in conjunction with the Oracle application and database stack.

The ninth-generation Dell PowerEdge servers have helped significantly reduce the footprint of this massive server collection. The ninth-generation servers are much more powerful than the previous generation. With more power in less space, the ADC team reduced the number of servers needed in various areas.

The deployment of the new Dell Energy Smart servers will also help maximize power savings. Dell and Oracle worked together to define the power ratings for the Dell PowerEdge Energy Smart 1950 and Energy Smart 2950 servers. Oracle and Dell have a close partnership that benefits both companies. Their joint work in defining the power profile of the new servers is a prime example of that relationship. The result was that the ADC team could acquire servers with the specifications needed—including much better performance per watt than the standard PowerEdge 1950 and PowerEdge 2950 servers. These servers can each save up to US\$200 per server a year in energy costs. In the data center, those savings can add up quickly. For 2,000 servers, savings could total up to US\$400,000 per year.

The Oracle team intends to use the ninth-generation Dell servers as the foundation for a future virtualization project that will further reduce the number of physical servers. With the ability to do more work in less space while using less power, the PowerEdge 1950 will play a key role in plans to further consolidate the server farm through virtualization.

Remote management capabilities enable Oracle to conduct a substantial portion of its tasks remotely

The Dell PowerEdge servers’ remote management capabilities, enabled by the Dell Remote Access Card (DRAC), have helped the Oracle team to reduce administrative costs by using remote staff. A substantial portion of the server management tasks can be done remotely.

Oracle leverages the capabilities of the DRAC to monitor, troubleshoot, and repair servers remotely. The ADC team uses Dell OpenManage™ software to manage the passwords on the DRAC. DRAC technology has been essential for remote management of the Dell servers. The DRAC lets the ADC team manage multiple servers easily from a remote console. They can access servers after failures to view internal logs and conduct diagnostic tests. Dell has also worked closely with that ADC team to fine-tune DRAC capabilities to meet Oracle’s specific needs.

Dell remote management capabilities help the Oracle team resolve issues faster. If the ADC team has a server failure, they do not have to send someone into a multi-acre data center to find out what is wrong. That can save several minutes per outage and helps to deliver high application availability for Oracle On Demand customers.

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— **Marc Schwarz**, SVP of Oracle On Demand
Oracle



Access to the latest technology provides clear marketing advantages

The ability to quickly obtain and install the latest server technology in the ADC has helped Oracle reduce the time to certify its software on those platforms. The ADC team can go from a device showing up in the lab to full certification and production deployment in less than 60 days. The faster that team can certify and deploy new hardware, the faster they can expand Oracle On Demand business.

By packing more server performance in the data center, the ADC team expects to realize great savings in the total cost of ownership. In the past, they would have needed three racks to deliver the same performance of a single rack of quad-core Dell PowerEdge servers. The single rack uses half the power and air conditioning as the previous servers. In the short term, this has helped the ADC team reduce acquisition costs. In the longer run, this can help them realize additional, ongoing savings in energy and management as well.

HOW IT WORKS

HARDWARE:

- Dell™ PowerEdge™ 1950, Energy Smart 1950, PowerEdge 2950, PowerEdge 1850, PowerEdge 2850, and PowerEdge 6850 servers with Intel® Xeon® processors
- Dell PowerEdge 6950 servers with AMD Opteron™ processors
- Dell Remote Access Card (DRAC)

SOFTWARE:

- Dell OpenManage™
- Oracle's Siebel CRM On Demand
- Oracle's PeopleSoft Enterprise On Demand
- Oracle E-Business Suite On Demand
- Oracle Technology On Demand
- Oracle Retail On Demand
- Oracle Collaboration Suite On Demand

SERVICES:

- Dell Platinum Support

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DELL™

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