



Overview

Country: United States and Canada

Industry: Energy

Customer Profile

Suncor Energy, an integrated Canadian energy production and distribution company, is a world leader in mining and extracting crude oil from the oil sands deposits of northern Alberta.

Business Situation

Suncor considered its Sun and Oracle platform to be too expensive and expected costs to climb higher as the infrastructure expanded to meet business goals.

Solution

Suncor is migrating to an infrastructure based on Microsoft® Windows Server System™ integrated server software, including Microsoft SQL Server™ 2000.

Benefits

- Performance up as much as 400 percent
- Availability projected at 99.99 percent
- Total cost of ownership (TCO) projected to drop by 42 percent

Suncor Migrates SAP from Sun/Oracle to Windows, Lowers TCO by 42 Percent

“Windows Server System will deliver substantial cost savings for us at a level of performance equal to or greater than what we saw on UNIX. It is our number one choice for the future.”

Doug Pelton, Director of IT, Suncor

To deliver value to shareholders, Suncor must manage all costs, including costs of information technology. Suncor was running SAP R/3 on Sun and Oracle software, but it sought to cut UNIX costs as part of an effort to replace disparate applications with an enterprisewide environment. To do so, it is migrating to Microsoft® Windows Server System™, including Microsoft SQL Server™. Suncor was able to convert a key R/3 system in a “seamless” move implemented over a single weekend. The company projects that running on the Microsoft Windows Server™ operating system instead of continuing with UNIX will reduce hardware, software, and support costs by 42 percent over six years. As a bonus, performance is up 400 percent on batch jobs and availability is projected at 99.99 percent, ensuring a high degree of satisfaction among end users. Suncor says that Windows Server System has all the scalability it needs to support its planned growth.



“The SQL Server environment is much easier to manage than Oracle was.”

David Massart, Enterprise IT Architect, Suncor

Situation

Suncor was supporting its rapidly growing business on a series of SAP R/3 enterprise resource planning (ERP) software installations. For example, it deployed the SAP modules for financials, materials management, and sales and distribution at its Suncor Energy Products division, which refines crude oil and markets a range of petroleum and petrochemical products to wholesale and industrial customers, as well as to retail customers through the Sunoco retail network. The company was running this SAP system in a UNIX environment based on Oracle database software, the Sun Solaris operating system, and Sun servers.

The solution achieved the necessary level of performance and had the capacity to support Suncor's growth. But its cost—in software licensing, hardware, and maintenance—was excessive and threatened to become even more of a burden as Suncor expanded its use of R/3 to consolidate its inventory of more than 500 applications. A planned adoption of the SAP employee self-service solution would have required new Sun hardware and licensing all Suncor employees for Oracle software. The increase in expense caused the company to look at alternatives, according to David Massart, Enterprise IT Architect at Suncor. As the company contemplated its major initiative to largely replace islands of applications with an enterprisewide environment, it had to reconsider its choice of operating system and database.

“Sun and Oracle were there because they'd been there, but now we had to consider what were the best choices for our future,” says Joe Ciaramella, Vice President of IT and Chief Information Officer (CIO) at Suncor. “We needed a platform that could support our entire company as well as our growth over time, and we needed it to be as cost-effective as possible. This was a question of enormous

significance for us and the cornerstone of our strategy moving forward.”

The company considered and rejected an IBM DB2 database environment because it would introduce yet another system that would add to maintenance costs.

Solution

In choosing its primary operating system and database software for its enterprisewide R/3 solution, Suncor decided to migrate to Microsoft® Windows Server System™ integrated server software—specifically, Microsoft SQL Server™ and the Microsoft Windows Server™ operating system.

“SQL Server and Windows Server can deliver the performance we need at the cost we need to maintain a competitive advantage,” says Doug Pelton, Director of IT at Suncor. “Windows Server System will deliver substantial cost savings for us at a level of performance equal to or greater than what we saw on UNIX. It is our number one choice for the future.”

The company began its enterprisewide adoption of Microsoft Windows Server System by migrating its Suncor Energy Products R/3 infrastructure to Microsoft SQL Server 2000 running on the Microsoft Windows® 2000 Advanced Server operating system. (A move to Windows Server 2003 is planned for next year.)

The new infrastructure has 10 database servers running SQL Server—4 production servers, 4 servers for testing and development, and 2 quality-assurance or “sandbox” servers—plus 5 machines running Windows 2000 Server and serving as SAP application servers. The infrastructure takes advantage of Windows Cluster Service and Network Load Balancing to maximize reliability and availability.

Suncor Energy Products' Windows-based SAP deployment runs Windows 2000 Server on all servers plus SQL Server 2000 on all database servers. The infrastructure takes advantage of Windows Cluster Service and Network Load Balancing to maximize reliability and availability.

Suncor's number one goal for the UNIX-to-Windows Server migration was that it be "seamless," according to Ciaramella. "We did not want to disrupt our users or affect their satisfaction with the infrastructure," says Ciaramella. "And we succeeded in making the migration fast and seamless."

To do so, Suncor put together a team including its own IT personnel as well as experts from solution provider REALTECH and Microsoft Consulting Services (MCS).

"We didn't want to acquire the primary migration resources in-house because the migration is a short-term concern," says Massart. "In REALTECH, we were working with professionals who have completed hundreds of UNIX-to-Windows migrations. And with

MCS, we were working with the ultimate professionals on Windows technology. REALTECH also had a great working relationship with Microsoft, which made their collaboration tremendously effective. It was a perfect team."

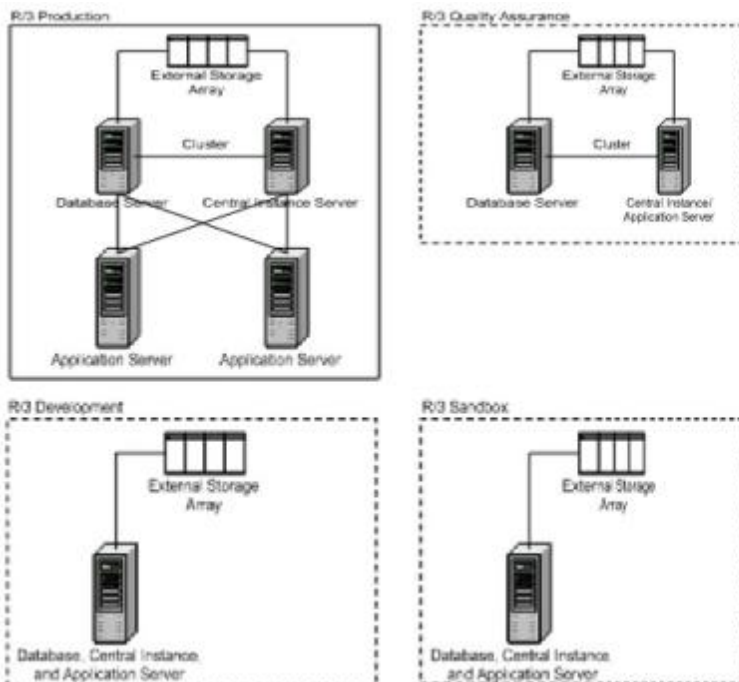
The migration team designed and tested the migration process over a three-month period beginning in early 2003 and implemented the migration over a single weekend. The system went down for the migration on a Thursday evening and was up and running on the Windows Server software by Sunday afternoon.

"Our users were surprised at how smooth the transition was in moving R/3 to Windows Server System," says Massart. "They couldn't even tell that we'd moved them. We planned and executed the migration completely on schedule. Very few issues came up, none of consequence. It was an ideal experience."

As a next step, Suncor has added the R/3 employee self-service portal and a business warehouse to the Windows Server and SQL Server environment. In 2003, when Suncor acquired the Denver, Colorado, oil refinery formerly owned by ConocoPhillips, it used available capacity on the Windows Server System-based solution to host SAP support for that facility, as well. The ability to swiftly incorporate this unit into Suncor's business systems accelerated the benefits and return on the acquisition investment that capital markets demand.

Benefits

With the Windows Server System server software, Suncor says that it will experience higher performance and great reliability at a fraction of the cost that it projected for Sun and Oracle.



“We need to scale out our IT infrastructure and support quickly and economically. Windows Server System enables us to do exactly that—and to do it better than we could on UNIX.”

Joe Ciaramella, Vice President of IT and CIO,
Suncor

Higher Performance and Great Reliability

“We’re seeing higher performance on SAP with our move to SQL Server and Windows Server,” says Massart. “Batch jobs are executing two to four times faster than they were on Oracle and Sun. That’s especially helpful when we get into rerun situations. It means our batch windows are smaller, and we keep our users happy.”

Pelton estimates that Suncor will see 99.99 percent availability in its Windows Server System-based environment, reliability that is comparable to what it experienced on UNIX at a fraction of the cost. He attributes the solid performance to a variety of Windows Server features and technologies, including clustering, network load balancing, and fault tolerance.

Total Cost of Ownership Down 42 Percent

Suncor made the move to Windows Server System to reduce total costs. And that’s exactly what it’s doing. The company estimates that it will achieve a 42 percent savings over the next six years, compared to the costs that would have accrued had it maintained the Sun and Oracle environment.

The majority of savings are achieved at the start of the deployment, thanks to lower hardware and software licensing costs for Windows Server System software, compared to Sun and Oracle. Reduced support costs contribute greatly to the continued savings. Massart estimates that the Suncor Energy Products R/3 deployment would have needed to double its two-person IT staff had it remained on UNIX. By moving to the Windows Server System software, Suncor saves U.S.\$200,000 per year from that portion of the infrastructure alone.

“Since the migration, we’ve heard from our operations groups that the SQL Server environment is much easier to manage than Oracle was,” says Massart. “Oracle was always demanding attention from the database administrator; there were always things that needed looking after. From a management perspective, SQL Server is much simpler. You put it in, and it just works.”

Scalability to Support Future Growth

“Suncor plans to double its business every five years,” says Ciaramella. “To support the growth, we need to scale out our IT infrastructure and support quickly and economically. Windows Server System enables us to do exactly that—and to do it better than we could on UNIX. We can add applications, users, and resources to the infrastructure without having to rework the architecture. We have all the scalability that we envision needing, thanks to Windows Server.”

For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to:

<http://www.microsoft.com>

For more information about Suncor Energy products and services, visit the Web site at:

<http://www.suncor.com/>

Microsoft Windows Server System

Microsoft Windows Server System is a comprehensive, integrated, and interoperable server infrastructure that helps reduce the complexity and costs of building, deploying, connecting, and operating agile business solutions. Windows Server System helps customers create new value for their business through the strategic use of their IT assets. With the Windows Server operating system as its foundation, Windows Server System delivers dependable infrastructure for data management and analysis; enterprise integration; customer, partner, and employee portals; business process automation; communications and collaboration; and core IT operations including security, deployment, and systems management. For more information about Windows Server System, go to:

<http://www.microsoft.com/windowsserversystem/>

Software and Services

- Microsoft Windows Server System
 - Microsoft Windows 2000 Advanced Server
 - Microsoft SQL Server 2000

- Microsoft Consulting Services (MCS)

Hardware

- IBM e-server xSeries servers

© 2003 Microsoft Corporation. All rights reserved. This case study is for informational purposes only. MICROSOFT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, IN THIS SUMMARY.

Microsoft, Windows, the Windows logo, Windows Server, and Windows Server System are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

Document published December 2003

Microsoft