Oracle *at* Work

The world's largest implementation of Oracle Applications runs at Cisco Systems, Inc., supporting the company's finance, information technology, market management, product development, customer service, order fulfillment, and human resources operations.

CISCO SYSTEMS

From its inception in 1988, Cisco Systems Inc., the leading producer of internetworking solutions for enterprise-wide computer systems, managed its operations with a set of first-generation UNIX manufacturing and financial applications. That was fine when the company's sales were $50 million. Six years later, as sales approached $2 billion and its operations spanned the globe, Cisco found that its information systems were becoming inadequate.

"The legacy applications would not scale to our rapid growth," says Peter Solvik, Cisco's chief information officer. "We simply outgrew them."

So in 1993 Cisco standardized on the Oracle DBMS for all business applications world-wide, and put together a plan to phase in a new enterprise-wide system over a couple of years. But a crisis ensued that convinced executives that they needed the new system as soon as possible: the company's information system crashed for two and a half days, throwing Cisco into momentary chaos.

During the outage employees had to manually control key functions, such as manufacturing and order entry. As a result, Cisco shipped some products late and missed customer deadlines. The new information system could wait no longer.

"We were putting together a plan to migrate over a couple of years," Solvik says. "Then came the outage, and along with it the realization that the current system would become an impediment to our growth. That's when we decided to look at the feasibility of a rapid implementation."

Once the decision to install a new system was firm, Cisco decided to do the implementation in nine months. In fact, Cisco's installation of Oracle Applications turned out to be the fastest ever and today is the largest in the world, spanning the company's headquarters and its operations throughout the United States, 12 European countries, Australia, and Japan.

The Big Bang

Cisco implemented the full suite of Oracle Applications to support all aspects of corporate operations, including finance, operations, information technology, market management, product development, customer

Business Profile

Cisco Systems Inc., is the leading supplier of internetworking solutions for enterprise-wide computer systems. Cisco is one of the fastest-growing companies in the world, with more than 5,000 employees and sales of $2 billion. Cisco's operations span the United States, 12 European countries, Australia, and Japan.

Solution Snapshot

Primary use:
All company operations, from corporate finance to manufacturing, sales, and distribution.

Hardware:
Five Sequent multiprocessing servers, with a total of 100 processors in a clustered environment, running Oracle7 Parallel Server. Macintosh desktop computers.

Oracle products:
Oracle Applications™ 10.4, Oracle7™ Release 7.1, Oracle Forms™ 4.0, Oracle CASE,™ Oracle7 Parallel Server™

Benefits

• Facilitates Cisco's rapid growth

• Improves order fulfillment and customer service

• Improves international operations by supporting multiple currencies

• Reduces by 75 percent the number of redundant reporting databases, bolt-on applications, and point-to-point application interfaces

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service, order fulfillment, and human resources. Cisco's implementation is also the first installation to link a company's World Wide Web site to Oracle Applications. Through Cisco's Web site, customers can inquire about the status of orders, check backlog and shipment status, and make pricing inquiries. Cisco will soon offer product configuration that will be linked directly to ordering on the Web.

Systems for corporate and financial operations in the U.S., Canada, Europe, and Australia, plus manufacturing and order processing and distribution, with more than 1,200 users, all came up at the same time in what Solvik refers to as "a big bang implementation."

Solvik's team selected Oracle Applications because the company needed open interfaces and ease in customization, and because of Oracle's experience and installation base in manufacturing operations. The team selected KPMG Peat Marwick as the lead consultant, along with Oracle Services. Altogether, the project involved more than 100 people.

Cisco implemented Oracle Applications 10.4, using the Oracle7 Release 7.1 DBMS. The company also used Oracle Forms 4.0 and Oracle CASE to develop several other systems, including a Training Registration System.

Supporting Macintosh Users

At the core of the system are five Sequent multiprocessing servers—with a total of 100 processors—running Oracle7 Parallel Server in a clustered environment. The system currently uses about 1,000 gigabytes of disk space, including a 70-gigabyte database containing more than 2,000 tables, which are three-way mirrored. It is connected to hubs in Santa Clara, California; 120 field locations worldwide; and a reporting and disaster recovery site in Raleigh, North Carolina. Solvik says he expects the system to grow more than 50 percent per year during the next few years as Cisco's rapid growth continues.

The system supports 1,200 users, most of whom use Apple Computer Inc. Macintosh computers, of which about 450 are running simultaneously. The system handles order entry and credit checking, then schedules shipments based on commitments from Cisco's suppliers. The orders are then released to manufacturing, which is exploiting the new assemble-to-order capabilities in Oracle Applications. Products are then built and shipped. The system processes all billing and invoicing, along with accounting functions such as general ledger, accounts payable, and fixed assets.

A Smart Move

The new system required extensive user training. But Solvik said Cisco plans to simplify the user interface over the next year by moving to Oracle Applications' SmartClient architecture. SmartClient partitions applications and performs user interface processing on the client computers—presenting an easy-to-use graphical user interface. The server computers do all of the data-oriented processing, which leverages the strength of both platforms: the client computers are optimized for data presentation, while the servers are optimized for data processing and storage.

In addition to facilitating Cisco's rapid growth, the new system also improves the company's order fulfillment cycle and its customer service. The system has made Cisco's international operations more efficient by supporting multiple currencies and languages and making it possible to more easily meet complex reporting requirements. The company has also been able to reduce by 75 percent the number of redundant reporting databases, bolt-on applications, and point-to-point application interfaces.

Cisco has tripled in size since it began the evaluation phase of the project. It has doubled in size since the new system came online. Solvik notes: "Our rapid growth would not have been possible had we not been successful in this rapid implementation project."

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