



# Seagate Technology Improves Data Consistency and Eliminates Manual Coding with Human Resources Data Hub Based on Informatica Data Integration Platform

## CHALLENGE

Replace a complex legacy point-to-point human resources (HR) data infrastructure supplying data to more than 100 downstream applications with a streamlined HR data hub to reduce the time and cost of custom SQL integration coding and improve HR data availability and consistency

## INFORMATICA SOLUTION

Informatica® PowerCenter®

## BENEFITS

- Projected savings of \$1.2 million in development and maintenance costs
- Enhanced data availability and systems performance
- Improved data consistency
- Ensured extensibility for future growth and changing needs

## NUTS AND BOLTS

- Data Integration: Informatica PowerCenter
- Source: Oracle HRMS application
- Targets: Oracle 9i data hub and more than 100 downstream applications
- Platform: Sun Solaris 8 E6500, 10 CPUs (400Mhz), 16GB Memory

“With PowerCenter, we’re able to replace a high-maintenance legacy infrastructure with a high-performance data hub that improves HR data consistency across the globe. We’ll save about \$1.2 million over three years just by eliminating all the manual maintenance and development chores of the old system.”

— Carin Komer, HR Data Hub Program Manager, Seagate Technology

Founded in 1979, Seagate Technology is the world’s leading manufacturer of hard disc drives for enterprise, consumer, desktop, and mobile systems. In 2004, Seagate shipped more than 82 million 1-inch, 2.5-inch, and 3.5-inch units representing 6.6 petabytes of total storage, and was named 2006 “Company of the Year” by Forbes magazine. With annual revenues of \$7.6 billion, Seagate is based in Scotts Valley, CA, with 15 manufacturing, R&D, and customer service facilities in the U.S., Europe, and Asia.

## The Challenge

With more than 44,000 employees in seven countries across Asia, North America, and Europe, an effective human resources data infrastructure is vital to Seagate’s ability to manage personnel acquisition, compensation, and benefits across the globe. As the workforce continues to grow amid a booming market for disc drives in cameras, MP3 players, cell phones, TiVos, and vehicles, Seagate recognized the need for a next-generation HR data infrastructure—an HR data hub—that would reduce integration costs, improve data consistency across multiple units, enhance data availability, and provide cost-effective flexibility.

Over more than a decade, Seagate had knitted together an HR patchwork of legacy and third-party outsourced applications for such HR business functions as payroll, benefits, headcount, stock options, and more. As Seagate's HR system of record, an Oracle HRMS application feeds five localized legacy data stores (homegrown and packaged software atop Oracle databases), which in turn feed more than 100 downstream applications around the world.

In all, Seagate found itself struggling to maintain more than 100 custom-coded integration touch points between multiple data stores and a blend of homegrown and packaged downstream applications. The company bore a high cost burden to maintain this intricate system with custom SQL coding, and time-consuming development chores often resulted in a backlog of work for Seagate's human resources information technology (HRIT) developers and frustration

for business users. As applications were added, updated, or removed, inherent problems with inconsistent data and redundant extraction logic multiplied. And the system took up to 48 hours to reflect new information to end users—an unacceptable lag time in a fastmoving global marketplace.

To reduce costs and streamline HR data distribution, Seagate envisioned an HR data hub that would:

- Slash time and costs of custom-coded SQL integration
- Improve data consistency across multiple systems
- Reduce Oracle HRMS integration touch points from many to one
- Accelerate data distribution and reduce latency
- Enable legacy systems retirement to reduce operational costs

## The Solution

In developing a solution strategy, Seagate recognized an opportunity to capitalize on its success using Informatica PowerCenter for data warehousing by extending PowerCenter into the operational arena to execute complex data integration among its myriad enterprise applications requiring HR data. Seagate envisioned a concept similar to the customer data hub, designed to create a single view of a customer by integrating information from disparate sources.

Seagate chose PowerCenter for its proven ease of use, mapping templates, and reusability of definitions across projects and platforms. A fast learning curve was particularly important. Although Seagate had highly skilled SQL developers and Oracle database administrators, none of its 10 team members had experience with PowerCenter.

Moreover, Seagate had set an aggressive sixmonth timeline to go live with the first phase of its data hub and had no budget for external consultants. With a globally distributed development team, Seagate could not afford months of training for its programmers to master a complex tool.

In February 2005, Seagate embarked on a four-phase project that would replace the complex point-to-point data integration network with a single data hub, based on the Oracle 9i database. PowerCenter would be deployed to serve two integration functions: 1) extract data from the Oracle HRMS system of record application into the Oracle 9i data hub, and 2) distribute data from the hub to more than 100 downstream applications.

## Secure Data Infrastructure

Seagate took advantage of code and version control, migration management, group/folder permission standards, and other PowerCenter security features in building a

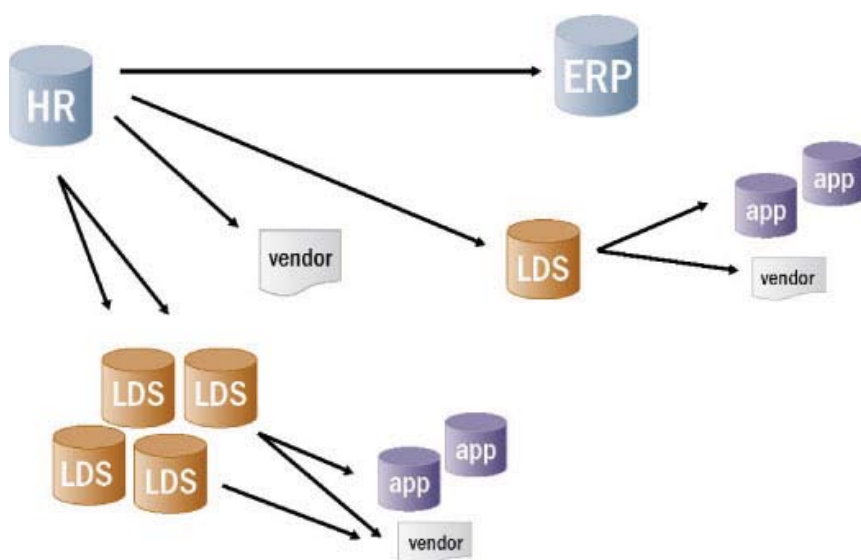


Figure 1: Complex Legacy Point-to-Point HR Data Infrastructure was Expensive to Manage

three-tier integration environment consisting of development, testing, and production. With PowerCenter's component-based reusability, a team of 4.8 FTEs collaborated on parallel activities across the three tiers, including defining data models, installing the development and test environments, and developing hub and interface mappings.

The compartmentalized approach enables Seagate to govern who has access to what code and data to protect employee privacy, abide by best practices in the COBIT IT governance framework, and provide auditability to meet Sarbanes-Oxley and other regulatory requirements.

### Enhanced Performance

The team customized a PowerCenter template to build in granular field-level change detection by which PowerCenter would extract and move only data changed since the prior mapping run. In the development environment, the reduced data volumes enabled by field-level change detection slashed load time from 2.5 hours to 15 minutes compared to previous time/date detection techniques, and minimized performance impact on source, targets, and the Seagate network.

### Rapid Deployment

In less than six months—on time and within budget—Seagate went live with the first phase of its HR data hub deployment, covering 10 downstream applications. As it progresses through three additional phases in 2006, Seagate will have consolidated into its HR data hub roughly 100 integration touch points, and virtually eliminated the expensive SQL coding needed to adapt and maintain the proliferation of integration points.

## The Results

### Projected \$1.2 Million Savings in Development and Maintenance Costs

Over three years, Seagate HRIT estimates it will save \$1.2 million in development and maintenance costs previously spent on custom SQL coding across its complex and disparate integration touch points. It also expects significant cost savings through the retirement of legacy HR systems in the U.S. and Asia, reduction in change request backlogs, and a standardized integration environment that fosters shared skills among developers and helps eliminate reliance on specialized skills.

### Enhance Data Availability and Systems Performance

With PowerCenter orchestrating integration between the data hub and source and target applications, Seagate is exponentially improving the availability of data to the more than 100 target applications and their business users. With the legacy system, data was extracted from the Oracle HRMS

application just once a day, and it took up to 48 hours to reach the downstream targets. PowerCenter now executes four data transfers per day from Oracle HRMS to data hub, each in less than 10 minutes. And it delivers data from hub to downstream targets between one and four times a day (according to business needs), so that information is updated in as few as two hours. For instance, it makes available to new employees a stock plan application within six hours of their hire.

### Improve Data Consistency and HR System Efficiency

In the past, the five localized data stores that routed information from the Oracle HRMS application applied varying transformations before distributing the data to downstream applications. The result was differing data semantics and definitions across the downstream network, with discrepancies in headcount and other problematic issues. The PowerCenter-driven data hub eliminates the problem by applying a common set of transformations to all HR data before distribution and helps ensure the efficiency and accuracy of HR systems, as well as workforce productivity

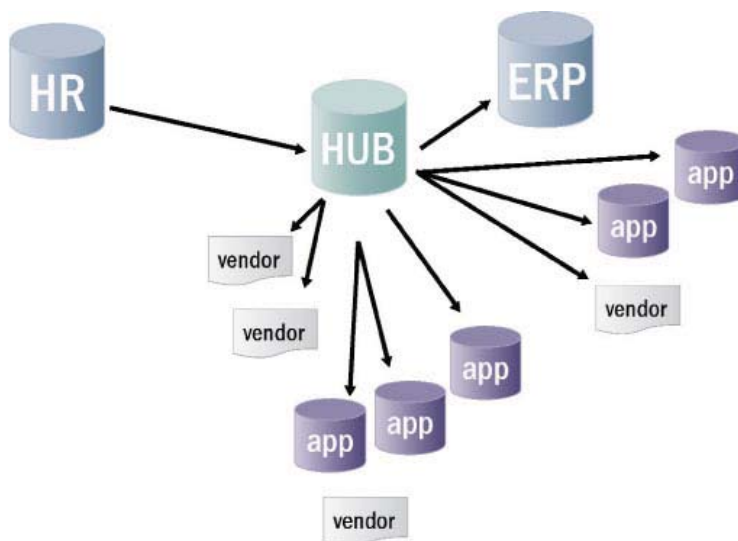


Figure 2: Streamlined Data Hub Built on PowerCenter Saves Development and Maintenance Costs and Provides Extensibility for Future Growth

## Ensure Extensibility for Future Growth and Changing Needs

As illustrated by a rapid six-month implementation by 4.8 FTEs, the flexibility inherent in PowerCenter positions Seagate to rapidly respond to changing IT and business demands and fully leverage its global development resources. For instance, the central HR data hub may be readily extended to accommodate new business applications or additional outsource vendors.

### ABOUT INFORMATICA

Informatica Corporation delivers data integration software and services to solve a problem facing most organizations: the fragmentation of data across disparate systems. Informatica helps organizations gain greater business value from their information assets by integrating their enterprise data. Informatica's open, platform-neutral software reduces costs, speeds time to results, and scales to handle data integration projects of any size or complexity. With a proven 13-year track record of success, Informatica helps companies and government organizations of all sizes realize the full business potential of their enterprise data. That's why Informatica is known as the data integration company. For more information, please visit [www.informatica.com](http://www.informatica.com).



Worldwide Headquarters, 100 Cardinal Way, Redwood City, CA 94063, USA  
phone: 650.385.5000 fax: 650.385.5500 toll-free in the US: 1.800.653.3871 [www.informatica.com](http://www.informatica.com)

Informatica Offices Around The Globe: Australia · Belgium · Canada · China · France · Germany · Ireland · Japan · Korea · the Netherlands · Singapore · Switzerland · United Kingdom · USA

© 2008 Informatica Corporation. All rights reserved. Printed in the U.S.A. Informatica, the Informatica logo, and The Data Integration Company are trademarks or registered trademarks of Informatica Corporation in the United States and in jurisdictions throughout the world. All other company and product names may be trade names or trademarks of their respective owners.

First Published: 2005

6688 (09/16/2008)