Thiess expedites JD Edwards EnterpriseOne upgrade and improves application service levels by managing data growth.

Overview

Challenges

■ *Reduce the production dataset size to complete the JD Edwards® EnterpriseOne upgrade within one weekend. Address application data growth and delayed online and batch processing to improve service levels. Provide more control to easily define the business policies for archive and purge processing integrated within the JD Edwards EnterpriseOne functionality.*

Why IBM?

■ *IBM® Optim™ provides comprehensive archive capabilities that help minimize costly downtime during an upgrade, allowing companies to speed the deployment of new application functionality.*

Solution

■ *IBM® Optim™ Data Growth Solution for JD Edwards® EnterpriseOne*

Benefits

■ *Reduced database size and accommodated target goals for completing the upgrade and production cutover in a single weekend. Improved application service levels to support business users and daily operations. Implemented fully integrated archiving capabilities aligned with business policies for managing data.*

Quality construction generates business growth

Established in 1933, Thiess has become one of Australia's and Asia's largest construction, mining and services companies and is credited with some of the most significant projects throughout Australia, the near Pacific and Southeast Asia. Thiess is committed to delivering high-quality projects that support sustainable economic growth, health and safety, as well as positive environmental and community outcomes.

Thiess manages a wide range of diverse building, civil, mining and process projects and provides environmental and utilities services, as well as facilities operations and maintenance. Thiess is noted for its

significant role in developing Australia's essential infrastructure, with projects ranging from highways and airports to dams, ports and hospitals. With over 18,000 employees, Thiess is committed to maintaining high standards and quality.

To support continued business growth and improve operational efficiencies, Thiess implemented JD Edwards EnterpriseOne V8.0 as its only ERP application. Thiess relies on JD Edwards EnterpriseOne Financial Management, Procurement, Asset Management, Inventory, Project Management, Human Resources and Payroll to support and manage its daily business activities throughout all areas of operation. The application is in constant use by the

majority of the Thiess staff, including accountants, engineers, managers and administrative personnel.

Focus on improving business process performance

Maintaining application performance remains a high priority. Over time, the IT Group at Thiess was challenged to manage the continued data growth and its impact on the performance of JD Edwards EnterpriseOne Financials. If these applications do not perform to support operations and meet user expectations, degraded service levels would impact over 180 sites throughout the organization.

"Some of our JD Edwards data tables were becoming quite large and the accumulation of current and historical data was impacting processing times. In particular, response time for General Ledger (GL) online transaction processing declined noticeably, and longer batch processing windows made it more difficult to meet service levels for month-end close and other financial business processes," said Brett Milton, Information Systems Manager at Thiess. "We were also planning an upgrade to JD Edwards EnterpriseOne V8.12 to take advantage of the new functionality. To ensure minimal outage time for the conversion process, we needed to reduce the amount of data that we would need to convert during the upgrade."

The IT group recognized the need to reduce database size by archiving to separate current from historical transaction records, and then removing the archived historical records from the production environment. "We investigated writing our own procedures based on the default purge and archive processes that are defined within JD Edwards EnterpriseOne," Milton explained. "However, we had little desire to reinvent the wheel. If a product existed that would meet our requirements, experience has shown that it makes better commercial sense to buy rather than build."

Only Optim satisfies all requirements

"From a technical perspective, we needed to ensure that archive processing preserved the referential integrity of the data and provided the flexibility to automate or schedule archive and purge processing. We also wanted assurance that the JD Edwards EnterpriseOne application would remain available, with minimal impact on our business users, while the archive and purge processes were performed," said Milton. "To satisfy our business requirements, we wanted to find a solution that would allow us to easily define the business policies for archive processing. For example, to archive financial data based on age and status. In addition, once archived, the historical financial records had to remain accessible to our business users."

Milton added, "With regard to our upgrade project, we needed to reduce the JD Edwards EnterpriseOne dataset to enable us to complete the upgrade from V8.0 to 8.12 and the conversion process over a weekend. This procedure needed to be tested well before the cutover weekend. In order for us to meet this demanding schedule, we knew we had to get started on the archive project as quickly as possible."

The IT Group had learned about IBM® Optim™ and had spoken to representatives from the company at many different JD Edwards EnterpriseOne user conferences, including Collaborate 2006. The team also reviewed the capabilities of another competing product.

"We had staff from the Software Development, ERP Applications and Technical Infrastructure teams participate in the evaluation process. Our selection criteria focused on the ease of implementation, ease of use, product/process fit to our financial GL business processes, history of JD Edwards EnterpriseOne implementations, local support, local successful implementations and price," Milton recalled. "IBM Optim performed very well against our criteria. The competing product was not as easy to use, did not provide adequate support and the vendor had little prior experience with JD Edwards EnterpriseOne. Optim aligned most closely with our needs."

Implementation completes ahead of schedule

"We worked with Optim's Professional Services experts for the initial installation, on-the-job training and knowledge transfer to support our internal resources going forward,"

Milton explained. "As part of this process, we implemented and trialed archiving for the GL module, which provided our on-the-job training. Optim was put through a rigorous test plan, and we were able to use the standard JD Edwards EnterpriseOne summarize functionality to verify that data integrity was maintained after the archiving."

At Thiess, members from the software development team and their ERP Applications Specialists are Optim's primary users. There was also some involvement from key business process owners, such as management accountants and plant management accountants. They all worked together to implement Optim during the initial phase.

"We consider Optim to be fully implemented from a technology standpoint. We wanted to ensure that our business users were happy with the process and had signed-off on the integrity of the solution," Milton noted. "We set a schedule to archive enough data to enable the JD Edwards EnterpriseOne upgrade to proceed. Optim has been fully tested and will be used to incrementally archive and remove the GL data from production after we go live."

The actual archive processing focused on JD Edwards EnterpriseOne Workflow, Procurement and General Ledger data. Archiving reduced the volume of audit trail and workflow activity records by 63 percent, from 13.1 million to 4.8 million rows. Similarly, Procurement records were reduced by 44 percent, from 77.2

million to 43.2 million rows. The GL Detail file contained 100 million rows, including 50 million Time Entry transactions. The business users agreed to summarize and archive all Time Entry transactions, about five years of historical data, up to the end of June 2005, reducing the size of the GL Detail file by 25 percent to 75 million rows.

"As it turned out, we were aiming for the production dataset to be archived by mid-July. This was actually completed by the end of May," said Milton. "Since the archiving project finished well ahead of schedule, we will be conducting our first trial conversion run by mid-July. This reduction in data volume will enable us to test the JD Edwards conversions and ensure that the dataset is small enough to allow the actual upgrade conversion to proceed within the timeframes that have been allowed."

Optim delivers benefits for upgrades

"We needed a solution to do the archiving for two reasons. First, to reduce the size of the JD Edwards EnterpriseOne production dataset to a point where the upgrade conversion cutover could happen in a pre-determined timeframe," said Milton. "Although there was quite a bit of data to be archived as far as record count goes, the real concern for us was the time it was going to take to convert all of the data as part of the upgrade. Fewer records equals a faster conversion."

"Secondly, we wanted to consistently improve application performance by managing data growth to keep some of

the larger database tables in check," Milton added. "We are still actually progressing with the first production archive. Apart from the fact that the cutover timeframes should be now achievable, it is envisaged that our ERP business users will see noticeable performance increases when using JD Edwards EntepriseOne applications that reference the tables that are being archived."

"We have seen some real benefits in using Optim's automated and scheduling capabilities. We have huge volumes of historical data that must be archived, so archive processing has been planned incrementally over a period of weeks. Being able to schedule archive processing and to be assured that each process is repeatable and reliable has made this task a lot easier," said Milton. "By implementing Optim, we have been able to create an archive framework that allows us to safely archive enough data to move forward with our JD Edwards EnterpriseOne upgrade and minimize business outages during the cutover weekend. Without the Optim technology, any effort to develop and implement an in-house archive framework would have taken much longer, and I doubt whether the resulting solution would have been as effective."

Optim going forward

"Moving forward, our priority is to complete archiving in preparation for the upgrade and conversion process. We then expect to be using Optim's test data management and subsetting capabilities

to create the testing and training datasets," Milton explained. "We will also consider archiving from other tables within the JD Edwards EnterpriseOne dataset that have not been looked at during the conversion process. This effort will provide a more holistic view of archiving, as opposed to doing only what was required to get the upgrade conversion completed successfully."

"Our IT technical team, directly involved with implementing Optim, is very happy with the results. They reported that Optim's processing capabilities performed as well or better than what was demonstrated throughout the evaluation phase. There have been no major issues from a technical perspective," Milton commented. "I am happy with how the project has progressed and that the 'owners' of the data have signed off on its integrity, post archive."

"I can honestly recommend the IBM Optim Data Growth Solution for JD Edwards EnterpriseOne! Everything that was promised in pre-sales eventuated after the Purchase Order was signed. The product does everything it was supposed to and can be managed with internal resources," said Milton. "The Optim team is great to work with.

Everyone was very keen to understand our requirements and then propose both technical and financial solutions to meet those requirements. The post-sales support has also been excellent."

About IBM Optim

IBM® Optim™ enterprise data management solutions focus on critical business issues, such as data growth management, data privacy compliance, test data management, e-discovery, application upgrades, migrations and retirements. Optim aligns application data management with business objectives to help optimize performance, mitigate risk and control costs, while delivering capabilities that scale across enterprise applications, databases and platforms. Today, Optim helps companies across industries worldwide capitalize on the business value of their enterprise applications and databases, with the power to manage enterprise application data through every stage of its lifecycle.

For more information

To learn more about IBM Optim enterprise data management solutions, contact your IBM sales representative or visit: **www.optimsolution.com.**

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