

Case Study: Implementing Database Archiving for Baan ERP Running on Informix

Diebold Incorporated



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Introduction

- Diebold Incorporated
 - Integrated self-service delivery and security systems and services
 - Founded 1859, based in North Canton, Ohio
 - NYSE: DBD – FY2007 sales of \$2.9b
- Over 17,000 employees
- Global Presence - in nearly 90 countries worldwide

Problem

- Informix/Baan System supporting North America Supply Chain is aging and database is large, causing performance concerns
 - Database had grown to 3TB
 - With development, pre-production, and testing – several instances
 - Performance further impacted by product use of hash indexing which scans the whole database
- Business negatively impacted from increased application availability problems and performance degradation
 - Affecting production line efficiency

Application Environment

■ Technical items

- OS: HP-UX 11.0
- Database: Informix 9.21.fc7
- Application – Baan 4.0c
- Modules for archiving include:
 - Accounts Payable
 - Cash Management
 - Inventory
 - General Ledger
 - Purchasing
 - Sales/ Shipment Management

Objective

- Goals of the implementation
 - Keep the application stable until migration to Oracle E-Business can occur
 - Improve application availability and performance by reducing the size of the production database
 - Maintain availability of the historical data for the business

Alternatives Considered

- Use the Baan archiving tools (problematic)
- Upgrade the environment
- Purge data from the database
- Migrate immediately to Oracle E-Business
- Purchase a commercial database archiving tool
 - Evaluated Princeton Softech and Solix solutions
 - Neither had archiving templates for Baan ERP

Approach

- Solix was selected for their database archiving solution and willingness to partner
 - Solix agreed to invest and build Baan application archiving templates as part of the project
 - Engaged experts in Baan and Informix as part of the project
 - Solix people were on-site at Diebold
 - Project was 80% consulting, 20% software
- Diebold still needed to commit staff with knowledge of the business to project
 - Scoping/ re-scoping the effort
 - Manage production migration
 - Determine who would have access to archive database

Results

- System functioning properly – can now migrate to Oracle per schedule
 - Archiving in production for 4 of 6 modules to-date
- Took several months (Internal resource issue)
 - 4-5 in-house staff for each module, on a part-time basis
 - 1-2 on-site Solix consultants, plus their support staff
- Cost – over \$100k plus database and hardware resources
 - Using additional disk capacity for the archive data

Critical Success Factors: Lessons Learned

- Scope effort and resource availability in determining the project schedule
- Internal project conflicts were the biggest barrier to timely implementation
- Project difficulty was about as expected
- Very cooperative vendor. After testing, minimal production issues occurred
 - Good archive audit records
 - Ability to “de-archive” if needed

Recommendations

- If implementing archiving for an application where archiving templates are not already available, plan for more internal resources for the project and to pay for consultants to assist
- Chose vendor with database archiving tools, experience, and flexibility
- Ensure key internal staff (with business knowledge) are available