Creating a Development Environment, Worthy of Withstanding Stringent Controls and Audits

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What We Will Cover

Our process for:
- – Project tracking
- – Production change control
- – Customer sign off
- – Configuration management
- – Audit controls

Who We Are

- Raytheon is an industry leader in defense and government, electronics, space, information technology, technical services, and special mission aircraft.

- PeopleSoft
  - Application Version 8.80
  - PeopleTools 8.47.08
  - Oracle 10.2.0.3 (10g)
  - Unix Sun Solaris
  - STAT Version 5.2.1

PS/HCM at Raytheon

- Centralized US Payroll that pays:
    - More than 60,000 Employees Bi-Weekly
    - More than 2,000 Employees Weekly
- 15 Payroll Subsets (groups) with largest subset paying 14,000 Employees
- 49 total company codes
    - 10 international companies
    - 39 domestic companies
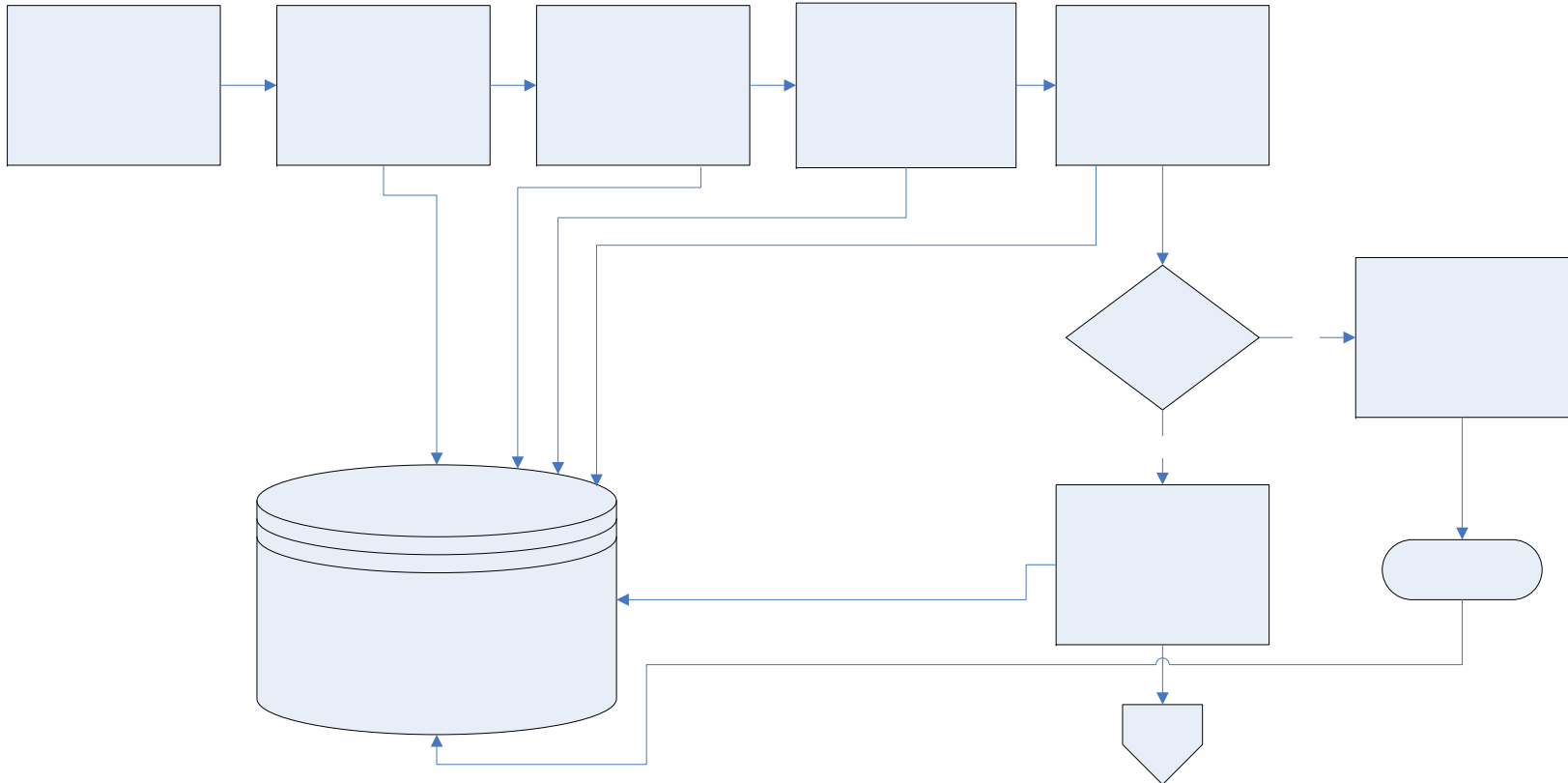
PS/HCM at Raytheon

- International sites use PeopleSoft for HR
- Employee Self Service for:
  - On-Line Paycheck View
  - PTO
  - Direct Deposit
  - State and Federal W-4
  - Emergency Contacts
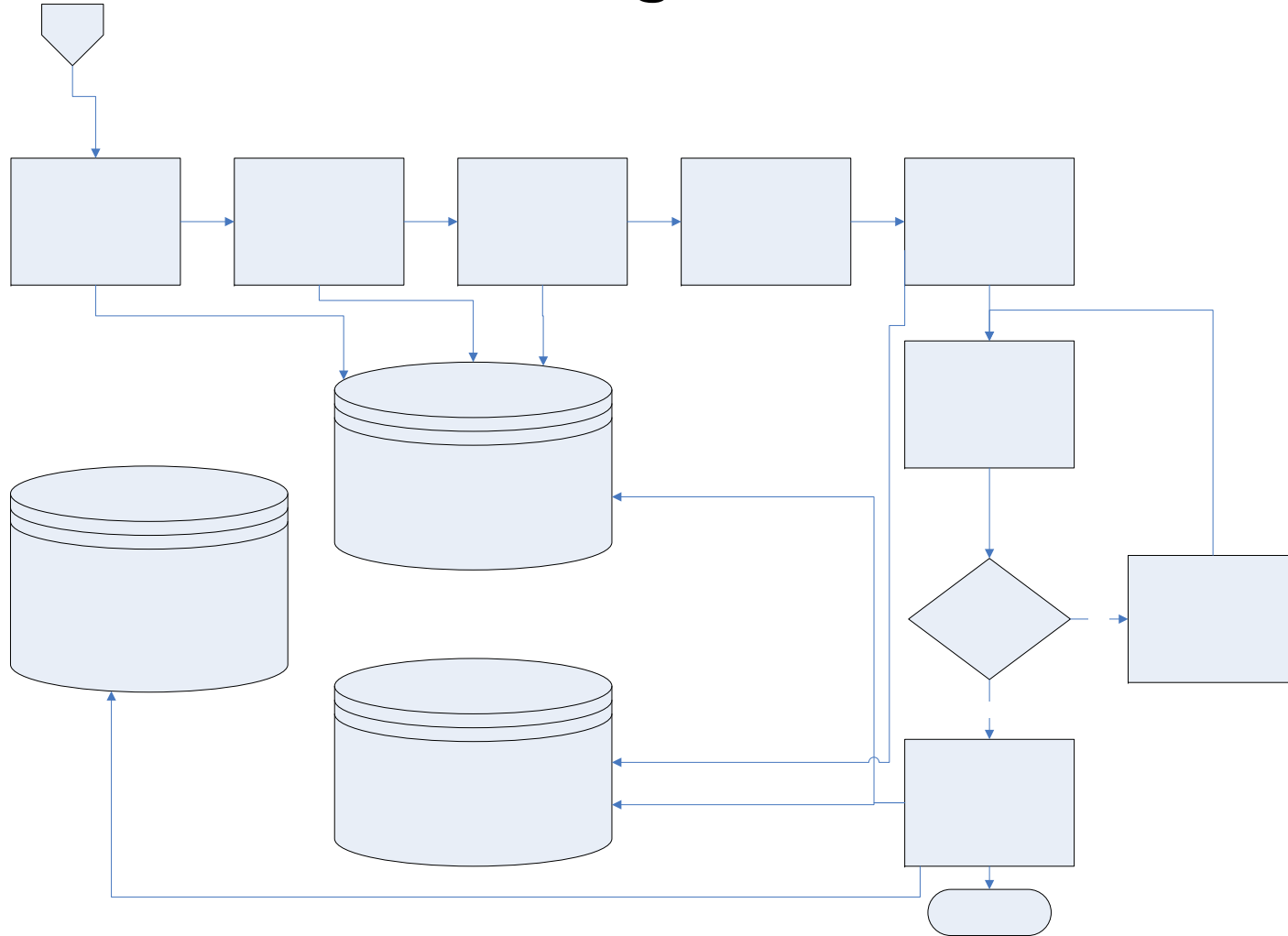 - Education
  - Employee Fact Sheet

Tools of the Trade

We use 3 main tools for our process life cycle:

- – Change Request Database
- – STAT Migration Tool
- – Production Change Notice (PCN)

Change Request Flow

Stat/Production Change Notification Flow

Process Life Cycle

- Client Request is sent and received by IT
- Request is documented in Change Request Database
  - A unique Project Number is assigned to this request
  - An automated email notification is sent to management to alert that a new project was added
  - Request is assigned to developer for estimate
- Developer estimates effort and updates Change Request Database
  - Status is updated to Ready for Review
  - An automatic email notification is sent to management with updated status

Process Life Cycle

- Management takes the estimated request to the Change Control Board (CCB) for client approval and prioritization

- Management assigns approved request to a developer

- Developer creates STAT entry
  - A unique STAT Number is assigned to this request
  - Project Number is included

- Developer completes Unit Testing and requests migration to User Acceptance Test (UAT) environment

- Configuration Manager performs migration to UAT environment; developer does not have access to migrate to the UAT environment

Process Life Cycle

- Customer approves testing in the UAT environment
- Developer creates Production Change Notice (PCN)
  - Project Number and Stat Number are included
  - Automatic email notification is sent for Peer Review, Quality Assurance Review, On-Call Notification, Customer Approval, and Management Approval
- Developer updates status to Install on the Change Request Database
- An automatic email notification is sent to management with updated status
- Developer requests migration to production via STAT

Process Life Cycle

- Configuration Manager
  - Receives email notification only after Peer Review, Quality Assurance Review, On-Call Notification, Customer Approval, and Management Approval are complete
  - Migrates request to Production using STAT
  - Updates status to Complete on the Change Request Database

Project Tracking via Change Request Database

On-Line PeopleTools customization tracks:

- Customer requests
- Cost estimates/Funding Approval
- Resource planning
- Functional and technical requirements
- Project Status
- Testing and Test Results
- Automated email of project status to developers and management

Change Request Database Edits

- IT Resource
- Customer Name
- Charge Number
- CRL (Customer Relationship Lead)
- Project Status
- Work Type
- Project Priority
- IT Lead
- Application Name
- Functional Spec

Change Request Database Reference Tables

- – Customer name
- – Status
- – Application name
- – Work type
- – Charge Number
- – IT Resource

Additional Change Request Database Functionality

- Audit trail is available for:
  - Last updated information
  - Before and after values
  - Time and date stamp
- Automatic Late Notification Reporting is produced weekly to notify developers of past due dates
- PS Query is used to produce reports such as:
  - Weekly Customer Relationship Lead Reporting
  - Weekly Resource Reporting
  - Monthly Change Control Board Reporting
  - Audit Reporting on demand

Change Request DB Page

Change Request DB Page

Process Improvement? ☐

Benefits of the Process Improvement

IT Resource Tracking   Find   First ◄ 1 of 1 ► Last

                                                                                                    +

Sequence number   1

Estimated Hours   16.00

Actual Hours   *IT Resource   🔍

Hours to Complete   16.00   Task Status   Ready to Test   🔍

IT Description/Comments

1/2/08 - QDS - DW will no longer need the pay_comp file that is produced as part of the TASOUT. They
want a dump of the PS_COMPENSATION table using the same type of logic that is used when we
dump the PS_JOB and PS_JOB_JR tables. Write a SQL similar to DW_PS_JOB.sql or
DW_PS_JOB_JR.sql. They will also require a one type dump of the PS_COMPENSATION table that
contains all records.

Run a Query

🖫 Save   🔍 Return to Search   ↑📋 Previous in List   ↓📋 Next in List   📇 Add   📄 Include History
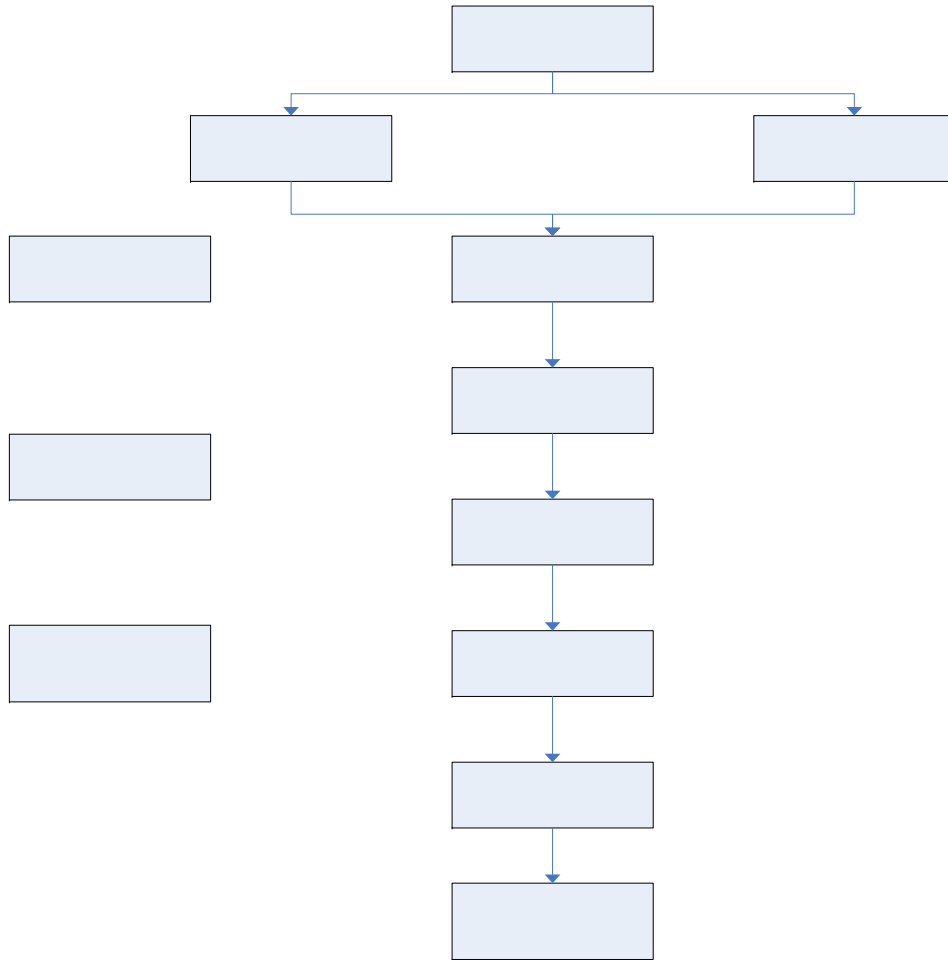
New Project

Production Change Notification (PCN) Overview

Customized Lotus Notes workflow application sends email approval requests to:

- Peer Reviewer
- Quality Assurance Reviewer
- Customer
- On-Call Support
- Management
- Configuration Manager

PCN Roles

- Developer initiates the PCN
- Peer Reviewer verifies documentation and modifications
- Customer approves migration to production based off completion of acceptance testing
- Quality Assurance Reviewer verifies test plans and test results are documented in the Change Control Database
- On-Call Support is notified of migration to production
- Management approves migration to production
- Configuration Manager migrates request to production after verifying that all approvals are complete
- Developer verifies changes were successfully migrated to Production

Overdue PCN's

- Emergency migrations can occur when verbal client approval is given, but formal completion of PCN must occur within 2 business days

- Email reminders are sent automatically to ensure the PCN is complete within the accepted time frame

- If PCN's are not complete within 2 business days, they are reported as an exception in the audit process

Production Change Notification

Production Change Notice (PCN)
Installation Routing Form

Application Name: PeopleSoft
Change Request Number: 4400
Change Request Description: Tracking Australia Pay - Send Compensation data to the DW

Type: ☑ Batch ☐ On Line ☐ Scheduling ☐ Data Patch ☐ Other

Requested Implementation Date: 02/13/2008
External or International Access: ☐ Yes ☑ No
Normal Implementation: ☑ Yes ☐ No

PeopleSoft STAT CSR#: HR-726

|		Date	Comments
Reviewed and tested changes		01/31/2008	
Peer Review - Reviews documentation and software changes.		01/31/2008	
QA - Reviews changes and testing results.		01/31/2008	
Customer - Verifies that Acceptance Testing has been completed.		02/08/2008	
hfc_support On-Call Support - Acknowledges Changes		01/31/2008	
IT Management - Acknowledges Changes		02/01/2008	
Configuration Manager - Moves Changes to Production		02/13/2008	20080213 - btw - migrated final from hrqa to hrmspro, batch sql customized text.
Originator - Verifies change in Production		02/13/2008	
Configuration Manager - Change Request completed and notifications sent		02/13/2008	pen complete

Comments/Instructions:

Migration Tool via STAT

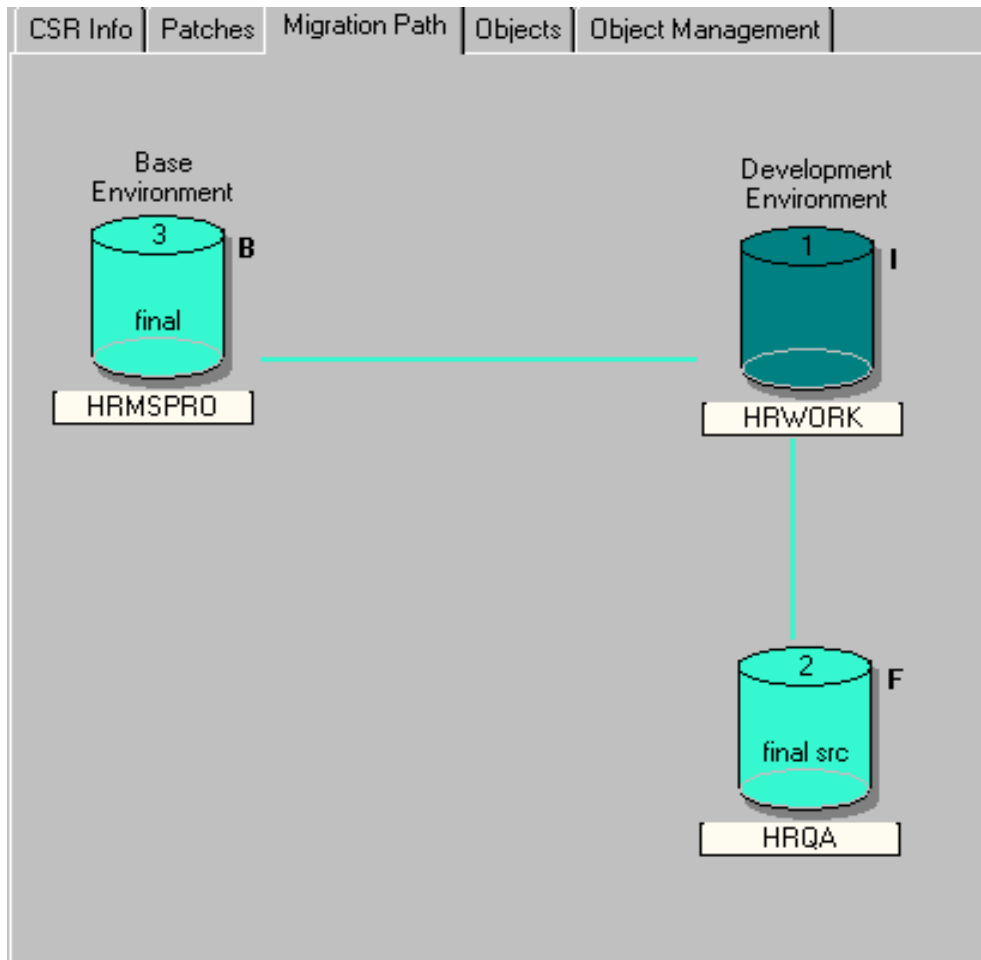STAT is used to migrate batch and on-line requests to UAT and production

- – Migration path is defined in STAT
- – Configuration Manager role is defined in STAT and is required to migrate to UAT and Production environments
- – Version Control is maintained by STAT

STAT Workflow
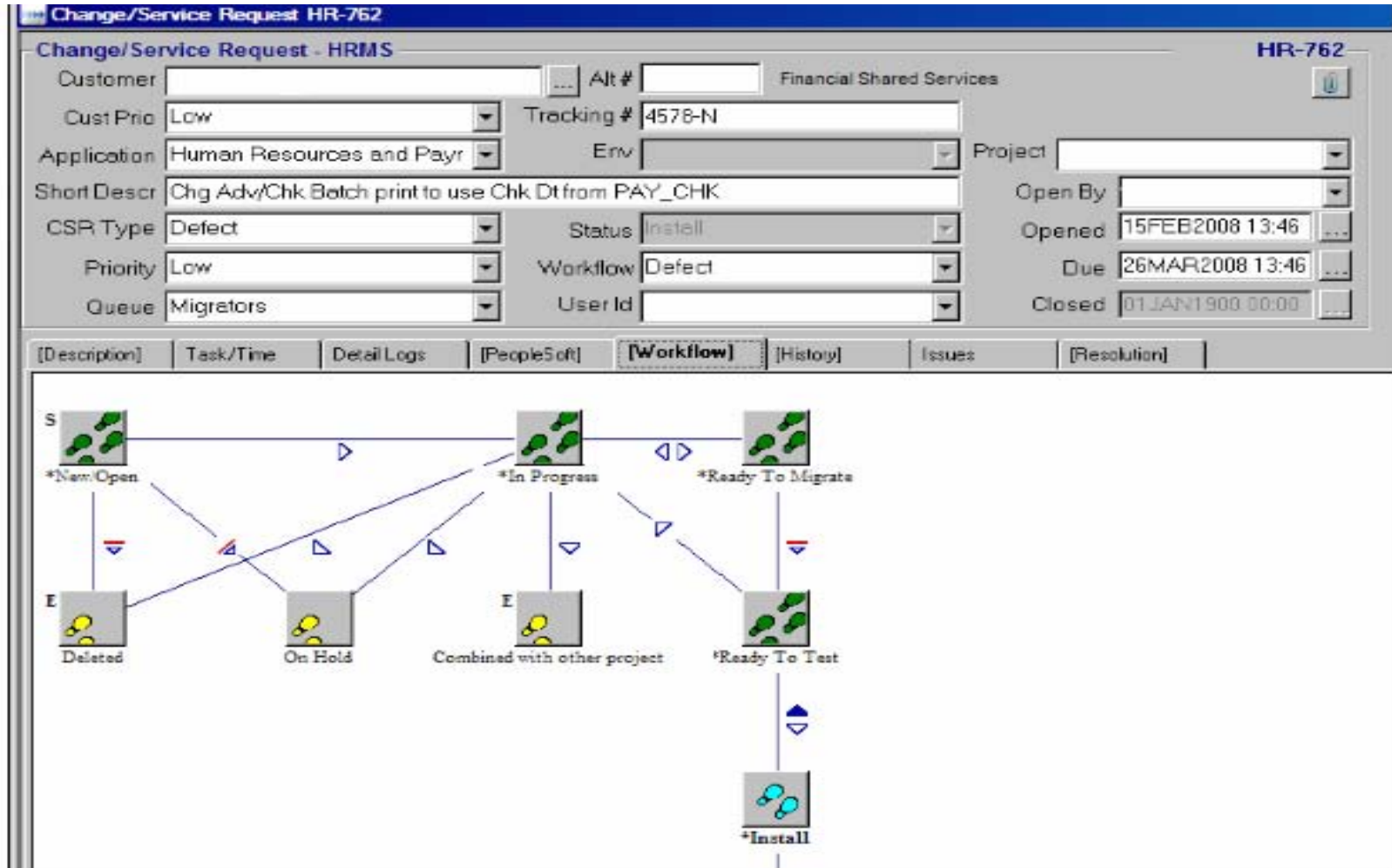
STAT Migration Path

Audit

- PeopleSoft HCM is in scope for the Sarbanes Oxley Act – Section 404 due to potential for affecting the financial bottom line

- IT has specific audit control activities that must be followed

- A combination of the Change Request Database, Production Change Notification, and STAT Migration Tool allows us to meet the IT requirements and pass the Sarbanes Oxley audits

Questions?