**Project Migration Process and Procedures**

Last updated: 10/22/2008 by JW Bowden

**I. Introduction**

This document is designed to be a guide to Developers explaining the Process and Procedures involved in migrating a project or a batch file from Development to Production.

Migrations to Production are done in accordance with the EST Migration Schedule, which may be viewed on the HRSA and Financials Calendars (links available on the EST Web Page). Migration requests must be made using SAM (link available on the EST Web Page). In the event of difficulties with SAM simply coordinate your requests via email.

**II. Definitions**

**General:**

**Project** – A collection of Peoplesoft objects related to a specific function or purpose. This collection may be migrated as an entity from one Peoplesoft database to another. Peoplesoft Application Designer is used to create Projects.

**Project Name** – A project name provides information about a PeopleSoft customization. For example: SYR_PY014

The prefix “SYR_”

The two-letter functional area code, i.e. “PY” for Payroll

The assigned IT number, in this example “014”

Once in production each modification of the original project must be suffixed with 4 digit number incremented once for each successive modification. The first modification of the SYR_PY014 project would be SYR_PY014_0001. More detailed information is available in [PS9 Project Naming Convention](#).

**Unit Testing** – The testing a project undergoes in the Development Database. The elements of the project are specifically tested without the intention of testing its integration with the rest of the system.

**System Testing** – The testing a project undergoes in a Test Database. The only System testing DB is Prototype (PROTO/PROT). This is where the project’s integration with the rest of the system is tested.

**Regression Testing** – The final testing a project undergoes in the RT Database. This is the final test of all the projects, customizations, and patches and their integration with the system. All customizations, patches, and fixes must successfully pass regression testing in order to migrate to Production.
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SAM definitions and terminology:
SAM - Syracuse University Application for Migrations
Request Type - Migration requests may be made for any of three types: Security, Batch (files) or Projects
Application - The major systems: Financials, Campus Solutions, Portal Solutions, Non-Peoplesoft (Housing, Parking, ID Card, BSR, Bookstore, FAMIS, and Resource25)
Status – The various conditions a migration request may be in including:
  • Open – The request has been submitted and either no action has been taken on it or the action is in progress.
  • Complete – The requested migration has been acted upon and completed. The request will no longer appear in the Open Requests queue.
  • RT Pending – This status indicates the project has been migrated into an RT database for regression testing and is pending FBA signoff to go to Production.
  • Deleted – For a variety of reasons a request may be deleted from the queue. The submitter may delete his/her own requests as long as the request is OPEN and NOT LOCKED
  • Denied – This is rarely used but would indicate that the migration could not be completed as requested. There should be some indication via email or in the comment box as to why the request was denied.
  • Locked – A request is locked to indicate that the EST on-call member has seen the request and intends to migrate it. When a request is locked it may no longer be modified or deleted.

Clone – A process whereby an existing request with a status of COMPLETE may be resubmitted to be migrated to the same or a different target database. Typically requests are cloned and resubmitted during regression testing (PROTO/PROT to RT).
III. Migration Process and Procedures

The procedure for migrating a project to Production is a 3-part process.

1. Migration to a test Database (not RT or MAST) for System Testing.
2. Migration to RT for Regression Testing, which lasts one to two weeks.
3. Migration to Production via MAST and FIX according to published schedule.

A. Migrating projects to the TEST environment for system testing

The source Database is the Development database. The target Database is the prototyping database (PROTO/PROT).

1. Develop a project in DEV and do initial Unit Testing in that environment.
2. When Unit testing is completed developers will migrate their project to PROTO/PROT where System Testing will be done. (The same project may be re-migrated to PROTO/PROT any number of times using the “clone” feature in SAM).

B. Migrating projects to the RT environment for regression testing

After System Testing is successfully completed for a project, the project is migrated to RT. Regression Testing will begin on a Wednesday and continue until noon of the Wednesday of the week of the migration to Production.

The source Database is the Prototype (PROTO/PROT) database. The target Database is the Regression Testing (RT) database.

Developer: Make a SAM request with RT as the target Database (use the “clone” procedure).

1. Regression Fixes - If a project fails during Regression Testing, it may be re-migrated by filling out a SAM request (using the “clone” feature”).
2. Regression Testing “Sign Off”
   a. EAST on-call member will migrate the project to RT and, in SAM, change the status from OPEN to RT Pending. **This means the project is being regression tested and is pending approval to be migrated to Production.**
   b. FBA – When ready to “sign off” on the project the FBA should open the request in Edit/View mode in SAM and check the “Approve” checkbox. This approval will cause SAM to auto-generate the appropriate requests to MAST and PROD.
   c. EAST On-Call - Once FBA approval is given the EAST on-call member will see an “Approved: Yes” item in the project’s Edit/View panel.
3. All Regression fixes must be migrated to RT, tested, and signed off by noon, Wednesday of the week migration to Production is scheduled.
C. Migrating projects to the PRODUCTION environment

After Regression Testing is successfully completed for a project, the project is migrated to the Production database according to the migration schedule (see appropriate application calendar – linked on the EAST web site).

The source Database is MAST. (The EST will migrate the project from RT to MAST on Thursday and to FIX on Friday before the Sunday Production Migration).

The target Database is PROD.

Because of the nature of Regression Testing (integrated testing of all the various systems) if any one project fails testing, a decision will be made as to whether that project, or any others, will be migrated to PROD. The migration will take place according to the schedule, either a ‘Customizations only’ move or customizations along with delivered patches.

1. The Functional Areas will sign off on Regression Testing for specific project(s). The signoffs will be done using SAM (See B 1-3 above).
2. SAM will auto-generate the requests for MAST and PROD for each project when signoff is accomplished.
3. After Regression Testing is completed and signed off by all areas, the project will move to Production on the scheduled date.

D. Emergency Migrations

If it becomes necessary to make an immediate fix to Production an Emergency Migration Request is used.

The source Database is FIX or DEV.
The target Database is PROD.

The project is developed in FIX (or DEV) and tested there. When testing is complete it is migrated by the EST to Production. A SAM Request is necessary, with PROD as the target DB and FIX as the source. Depending on the objects being modified the migration may be made immediately or may be made after 5pm.

The following steps should be done:

1. Developer: Obtain documented approval from the client Director or higher for the critical business need for this migration to happen. Work with your IS Development Manager in acquiring this.
2. Developer: Coordinate with the EAST Manager in advance to plan the migration.
3. Developer: Complete an Emergency Migration Request Form. Attach the EMRF to an email to the Developer Manager, the client manager (Functional Business Analyst) EAST manager for approval; copy the EAST team (est@listserv.syr.edu).
4. Make an emergency migration request in SAM:
   a. Developer: Make the request in SAM
   b. FBA: Approve the request in SAM
   c. Developer Manager: Approve the request in SAM
   d. EAST Manager: Approve the request in SAM
   e. EAST on-call member migrate the request
E. Off Cycle Migrations

On rare occasions it may be necessary to move a project to Production before the scheduled move to Production but the need is not urgent.

Follow the procedures in III A and B and then follow the Emergency migration procedures in III D.

The following steps should be done.

1. Developer: Obtain documented approval from the client Director or higher for the critical business need for this migration to happen. Work with your IS Development Manager in acquiring this.
2. Developer: Coordinate with the EAST Manager well in advance to plan the migration.
3. Developer: Complete an Emergency Migration Request Form. Attach the EMRF to an email to the Developer Manager, the client manager (Functional Business Analyst) EAST manager for approval; copy the EAST team (est@listserv.syr.edu).
4. Developer: Ensure the customization/project has been tested in PROTO/PROT.
5. Developer: Make a SAM request for the migration from DEV to RT.
   a. EAST migrate project to RT and, in SAM, changes the status from OPEN to RT Pending. This means the project is in RT and is pending approval to be migrated to Production.
   b. FBA – When ready to “sign off” on the project the FBA should open the request in SAM and check the “Approve” checkbox in the Edit/View mode.
   c. Dev Mgr – After the FBA approval is done the Developer Mgr should open the request in SAM and check the “Approve” checkbox in the Edit/View mode.
   d. EAST Mgr – After the Developer Mgr approval is done the EAST Mgr should open the request in SAM and check the “Approve” checkbox in the Edit/View mode.
   e. EAST On-Call - Once all three approvals are given the EAST on-call member will see an “Approved: Yes” item in the project’s Edit/View panel.
6. When successful testing is completed in RT, the project will be migrated to MAST and PROD in turn. The migration to PROD might have to be done after-hours; especially if there are builds.
F. Miscellaneous

1. Deleting a request from SAM
   a. A request may be deleted from SAM by the submitter as long as the request status is OPEN and the request is NOT LOCKED.
   b. Click the edit/view link of the request to be deleted
   c. Click the “Delete Request” button

2. Modifying a request in SAM
   a. A request may be modified by the submitter as long as the request status is OPEN and the request is NOT LOCKED.
   b. Click the edit/view link of the request to be deleted.
   c. The source, target, migration date, and comments may be modified. If a modification to any other field is required then you must delete the request and submit a new one.