

# PeopleSoft Test Framework Overview and Demo For FMS International Project

*Date: 9/30/2016*

# Agenda

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- ❑ Overview
- ❑ Benefits
- ❑ Scope
- ❑ Limitations
- ❑ Implementation Approach
- ❑ PTF Framework Features
- ❑ Live Demo

# PTF Overview

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## What is the PeopleSoft Test Framework (PTF)?

Designed for use by business analysts, developers and system administrators, PTF enables support teams to automate PeopleSoft testing efforts and quickly create transactions, run processes and perform application impact analysis.

## What can I do with PTF?

- ✓ Create, run, administer and troubleshoot automated test scripts
- ✓ Automate data staging and seeding for testing and training
- ✓ Automate manual PeopleSoft testing effort across most test phases
- ✓ Execute thorough and standard Technical Unit Tests of development
- ✓ Reduce the overall effort and cost to:
  - Test new patches and fixes
  - Test new application configuration including workflow
  - Test PUM images and maintenance
  - Test PeopleTools updates
  - Test new PeopleSoft modules
  - Test new 3rd party application integrations

# PTF Benefits

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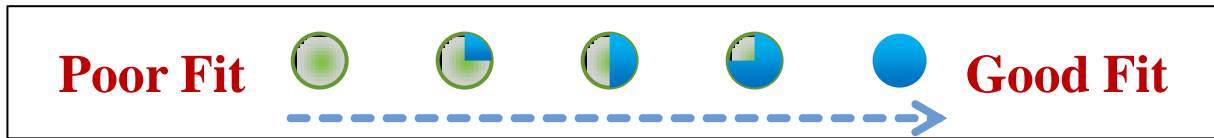
1. More Business Value delivered (fixes & enhancements)
2. Higher quality initial development releases
3. Increase development throughput (less defects / rework)
4. Faster/More Tests = Shorter Test Cycles
5. More consistent and accurate results across environments

# Where can PTF be Utilized?

Test Phase	Use PTF?	Scope Description
<b>UNIT</b> (Tech. & Funct.)	<b>YES</b>	<ul style="list-style-type: none"> <li>• Stage Test data</li> <li>• Validate configuration and business rules</li> <li>• <b>Validate specific transactions and isolated functionality</b></li> <li>• Run PeopleSoft processes and validate process status</li> </ul>
<b>SYSTEM</b>	<b>YES</b>	<ul style="list-style-type: none"> <li>• Stage Test data,</li> <li>• Validate configuration and business rules</li> <li>• <b>Validate transactions and functionality across modules</b></li> <li>• Run PeopleSoft processes and validate process status</li> </ul>
<b>INTEGRATION</b>	<b>YES</b>	<ul style="list-style-type: none"> <li>• Stage Test data*</li> <li>• Validate configuration and business rules*</li> <li>• Validate transactions and functionality across modules*</li> <li>• Run PeopleSoft processes and validate process status</li> </ul> <p><i>* Limited to PeopleSoft side of inbound &amp; outbound interfaces</i></p>
<b>PERFORMANCE</b>	<b>LIMITED</b>	<ul style="list-style-type: none"> <li>• Stage Test data</li> <li>• Simulate individual users</li> </ul> <p>* Not designed to simulate load sizes</p>
<b>UAT</b>	<b>NO</b>	<ul style="list-style-type: none"> <li>• Not recommended</li> </ul>
<b>REGRESSION</b>	<b>YES</b>	<ul style="list-style-type: none"> <li>• Stage Test data</li> <li>• Validate configuration and business rules</li> <li>• Validate transactions and functionality across modules</li> <li>• Run PeopleSoft processes and validate process status</li> </ul>

# Relative Fit Across Test Types & Phases

TEST PHASE	Delivered Application	Retrofit Customizations	Converted Data	Custom Reporting	Interfaces	Batch Processes	Security
UNIT (Tech. & Funct.)							
SYSTEM							
INTEGRATION							
PERFORMANCE							
UAT							
REGRESSION							
PARALLEL or MOCK							



# Examples by Test Phase

UNIT



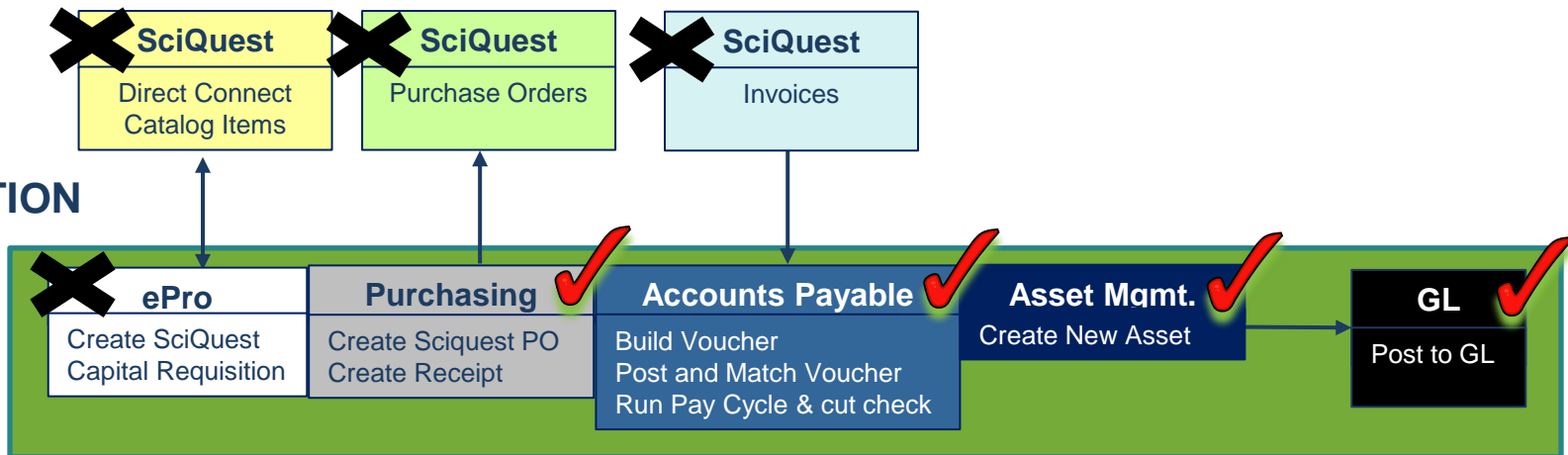
\* Individual module testing

SYSTEM



\* End-to-end process testing strings together module level scripts

INTEGRATION



\* Production simulation testing and includes end-to-end processes + interfaces

# PTF Limitations and Enhancements

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## PTF Limitations

- PTF has matured since debut in PT 8.49, however, limitations still exist
- PTF does not work outside the PeopleSoft Internet Architecture (PIA).
- Manual steps such as File Scanning cannot be automated
- Ability to feed multiple sets of test input data not delivered
- Errors are stored and displayed in the application but reporting is limited
- Summary Test result dashboards and reports are not delivered
- Continue to be on a lookout for Oracle release enhancements on PTF

## Can limitations be addressed and how?

- Yes, the design allows extensions to be developed or purchased
- Test script parameter input values can be maintained in Excel vs PTF client
- Test script input values can be automatically imported and scripts executed
- Summary Test result reports and dashboards can be developed



# PTF Implementation Approach

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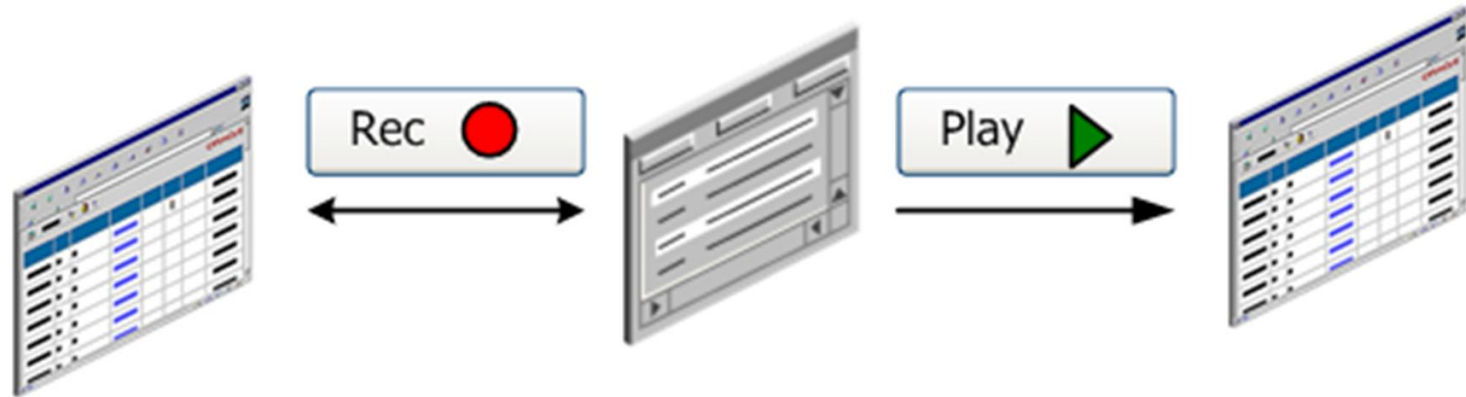
## Resources Required

- Part time PTF Advisor / Expert
- Part time Project Manager or Test Lead
- Functional Leads to evaluate and identify PTF test scope by phase
- PTF script developers (internal, external or mix)

## Overall PTF Implementation or Pilot Approach

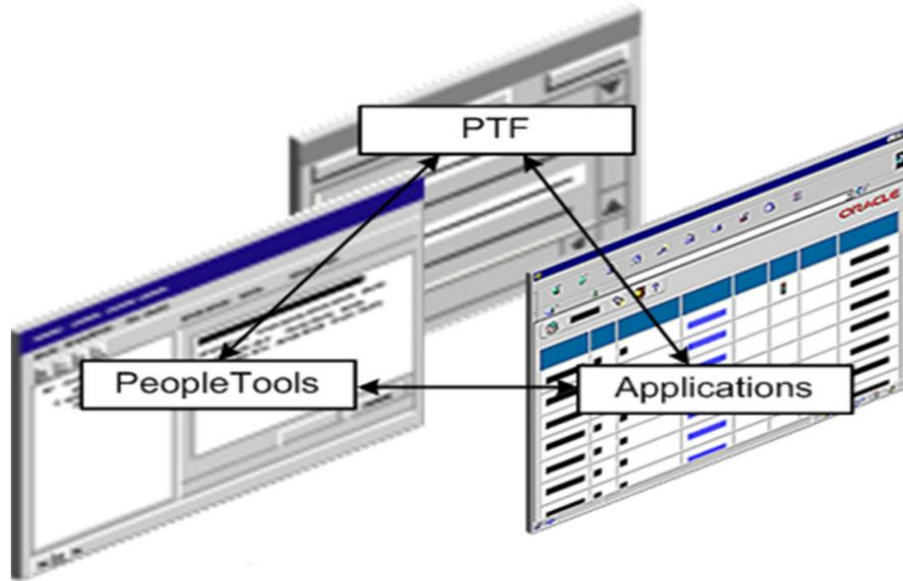
- Update Test Strategy to identify appropriate PTF scope for each Testing phase
- Train appropriate team members on PTF framework and best practices
- Review / update existing test documentation for the current testing initiative
- Evaluate test plans for common scripts and identify PTF automation scope (Test Suites)
- Install and setup PTF client application for each developer or tester
- Optional - Develop or buy “Bolt-on” / ”Wrapper” to extend PTF automation
- Record test suites to be used by Tech. and Funct. project team members
- Execute test suites, review results and iteratively test
- Migrate PTF test scripts across environments per development migration path
- Maintain test suites - Delivered Audit reports identify script updates required when images or new customizations are applied to script objects

# Record and Playback Overview



- Users record manual test procedures by manually executing test scripts and save them within the framework
- Stored in Database as App Designer Objects
- PTF works by replicating the actions of a single user executing steps against the PeopleSoft application
- Users execute the tests against the application to verify whether the application still behaves as expected
- Advanced PTF functionality can increment transaction IDs

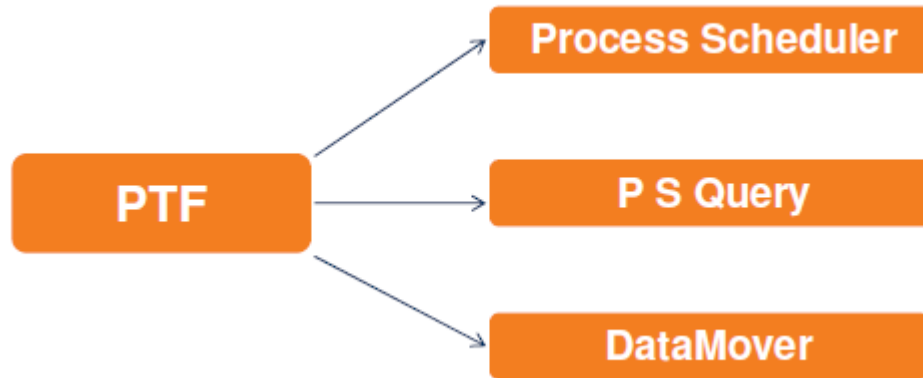
# PeopleTools Metadata



- When PTF records a test it recognizes the metadata (the actual field name rather than the position on page)
- If the field is moved in a subsequent revision, PTF is able to locate it upon test execution, ensuring stability
- If fields are added/removed/modified, audit reports identify discrepancies between objects and script metadata.
- Future releases will integrate and help evaluate PUM images

# Interface with Other PeopleSoft Tools

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- PTF tests can run processes and reports through Process Scheduler, as well as queries and Data Mover programs

# PTF Demonstration

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- Record Test Script
- Run Test Script
- Verify Test Results