

## Name of Solution:

Mapping: Automated Testing Framework For ETL

## Business Requirement:

This automated testing framework is a generic framework which can be used for both system testing & regression testing.

## Solution URL:

<https://community.informatica.com/solutions/3187>

## Supported Versions:

Informatica PowerCenter 9.6.1.

Microsoft Excel.

## Description:

### Overview

In a data integration project the QA process involves multiple steps which includes

- Setting up the source and target systems
- Populating source and target test data
- Running of the PowerCenter & other dependent jobs
- Validating the results
- Logging the test results

In a typical project these are done manually and repeated multiple times throughout the project lifecycle. The automated framework presented here provides a way of automating these steps.

The components of this framework are

1. An excel interface to capture the steps described above. The test steps that can be configured are
  - Connect and execute database Queries
  - Run Informatica jobs
  - Define variables
  - Execute OS Command
  - Define the Success conditions
  - Create & Append file contents
  - Attachment of Log files (if any)
2. An engine that processes the excel input and generates and executes the test steps. (Built using the Informatica Platform)
3. Automatic Logging & Email notification of Test Results.

The Major features include

- a. Repeatability of Test case Execution.
- b. Ease of use.
- c. Provides high degree of Flexibility /Scalability
- d. Can work with both Windows & UNIX environment.
- e. Complete Logging & Email functionality.
- f. Can perform a wide variety of tasks.
- g. Converts the Test case into an OS script, hence better performance.
- h. Excel Utility helps to quickly generate test cases.

### Download file contents:

- PowerCenter mapping XML
- Oracle scripts to create a target.
- Sample XML file source data to run the mapping.
- Excel to generate Test Case.

### Steps to implement the solution:

1. Please follow the instruction to generate test case using the Excel file attached in download contents "GenerateTestcaseXML from Excel.docx".
2. Place source file in \$PMSourceFileDir folder. Compile the script in the database to create target table.
3. Import workflow using the Repository Manager. Select the appropriate folder from the repository and resolve the conflicts by choosing suitable option.
4. In the PowerCenter Designer, study the mapping and how transformations are designed.
5. The Java transformation is used to execute the "pmcmd" start workflow command to run the test case mapping and for email notification.
6. Place the parameter file in the \$PMPParamFileDir folder.
7. Open the workflow in Workflow Manager. Assign the integration service in Workflow -> Edit -> Integration Service.
8. Edit session and assign valid connection object for the source and target.
9. Edit source file load to indirect, in order to execute multiple test cases.
10. Execute the workflow and observe the output in the target table. The summary of the test cases is listed in the target output file.

### Other Useful links:

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[Workflow Bundles](#)

[Informatica Tools Bundles](#)

[Informatica for Social Media Bundles](#)

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