



Data Conversion

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iTips provide guidance on topics important to the FPA community. They explain the application of IFPUG FPA method in a particular situation. iTips are not rules, but interpretation of the rules, providing guidance using a realistic examples to explain the topic being covered.

This iTip is focused on describing the IFPUG FPA method as it applies to data conversion or one-time processes in a typical enhancement project. This iTip includes a series of examples but is not an exhaustive examination of the subject.

Background

The topic of measuring Data Conversion Functionality was introduced as a separate chapter in CPM 4.3. Prior to that time conversion transaction functionality was only illustrated by a single example. The chapter provided additional discussion and examples. This iTip provides several additional examples for conversion situations commonly encountered in enhancement projects.

Example 1

An enhancement project requires that one or more DETs in an existing ILF be updated with user-defined values based on certain conditional checks. There are no new or altered attributes required for this project. The one-time data content changes are necessary for the new and/or modified transactional functions to meet user requirements. The one-time process is counted as a conversion transaction for the enhancement project because there are user-specified criteria and data which are considered to be crossing the application boundary. Count the DETs representing the criteria to be checked and the DET(s) to be updated.

Example 2

A project requires a one-time data load of migrated data from a newly acquired organization. There are no new or altered attributes required for this project. The input data stream is mapped to the existing data structure and is necessary for the new and/or modified transactional functions to meet user requirements. The one-time process is counted as a conversion transaction for the project because the migrated data is crossing the boundary. There is no existing processing within the

application that can satisfy this requirement. Count only the DETs that are actually mapped and populated to the existing ILF.

Example 3

An enhancement project requires a one-time indexing of data to make sure that the new and/or modified transactional functions do not adversely impact Service Level Agreements. The one-time process is not counted as a conversion transaction for the enhancement project because it is performed to fulfill a non-functional requirement. This paper does not cover non-functional size. For additional perspectives on how to measure non-functional requirements, the reader is referred to the SNAP (Software Non-Functional Assessment Process) framework at www.ifpug.org.

Example 4

An enhancement project requires a one-time modification of associative data for plans linked to existing accounts so that they meet the new associations specified as part of the project. The one-time process is counted as a conversion transaction for the enhancement project. The ILF to be updated is considered to be crossing the application boundary, counting the DETs representing the criteria to be checked and the DET(s) to be updated.

Summary

There are situations where the data values in an ILF must be updated conditionally or additional instances of data are crossing the boundary as a part of an enhancement project even though the structure of the ILF was not altered. Where such modification is part of a functional user requirement, necessary for the completion of the project, a conversion transaction should be counted, regardless of the implementation method chosen (e.g., scripts, SQL, etc.). When modifications are for non-functional reasons such as resolving performance or capacity issues, those requirements should not be included in any function point count.

Further Reading

IFPUG Counting Practices Manual, Part 1, Section 5.5 – Measure Transactional Functions

IFPUG Counting Practices Manual, Part 3, Chapter 5 – Data Conversion Activity

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