



Job Ticket Application Programming Interface

Software Development White Paper

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Abstract

The Job Ticket (JT) subgroup of the Free Standards Group – Open Printing initiative will complete their Application Programming Interface (API) in January 2005. The following White Paper outlines a proposed project for development of a Reference Implementation Software (RIS) of the JT-API specification. The proposed project includes associated project management activities along with software engineering design, development, test and verification activities. The work products from this project include, but are not limited to, the Reference Implementation Software and supporting documentation, Unit and Integration Test Suites, Unit and Integration Test Report and a Final Report. Based on similar software development projects, the projected level-of-effort for this development is 22 person-months over 12 calendar months.

Executive Summary

The purpose of this white paper is to provide an estimated level-of-effort for the development of a Reference Implementation Software (RIS) package for the Free Standards Group (FSG) – Open Printing (OP) Job Ticket Application Programming Interface (JTAPI). As supporting information, a brief background is provided on JTAPI, followed by summary project planned estimated level-of-effort for the development. The project encompasses design, code, test and delivery of a RIS package based on the JTAPI Version 1.0 specification (to be completed in January 2005). The project consists of 9 major activities with an estimated level-of-effort equal to 22 person-months to be completed in 12 calendar months.

What is a “job-ticket” for printing? A job-ticket for printing is defined as a machine-readable electronic file containing job control, print instructions, finishing instructions and print content references at a page, document and job level. There is currently one existing public standard for a job-ticket developed by CIP4 called Job Definition Format (JDF). The PWG is currently developing a job-ticket format based on XML and the PWG Semantic Model. Other job-tickets would be considered proprietary to a print-vendor or printer-manufacture.

The JTAPI Version 1.0 specification is not a new job-ticket definition or format. The JTAPI Version 1.0 specification defines an interface with a capability to receive an existing job-ticket in some specified format or create a new format neutral (internal) print job-ticket; the functionality to modify the job-ticket attributes and to write the job-ticket in a specified format. Within the scope of this whitepaper project, only the JTAPI interface, internal representation of job-ticket information and methods to modify attributes are considered. Specific job-ticket parsing and/or encoding are outside the scope of the proposed RIS package. Any solution provider using the RIS package would add the additional processing for parsing and/or encoding of one or more specific job-ticket format.

Technical Overview

To understand the scope of the JTAPI specification we begin with some fundamentals; namely,

What is print job?

“A print job is < see ira >.”

What is a job-ticket?

A job-ticket is a machine-readable electronic file replacement of a manual human-readable hard copy instructions and information. A job-ticket contains *instructions* describing how to process and/or print a print-job. Job-tickets contain *references* to the print content of a print-job. Job-tickets are self-documenting by providing *information* about the results of a print-job as it processed and/or printed.

Job-ticket vary from print-jobs in . . .

Where is a job-ticket used?

Who uses a job-ticket?

Do job-tickets exist today in the real world?

There is currently one public standard for a job-ticket developed by CIP4 called Job Definition Format (JDF). The PWG is currently developing a job-ticket format based on XML and the PWG Semantic Model. Other job-tickets exist but are proprietary to individual print-vendors, print-shops or printer-manufacture.

Project Plan