May 26, 2009

BEATRICE CARDONA

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Re: Release: 1862
Service Requests: 82205
Programs: PPDELTS(new), PPGETTIM, PPWEDHC, PPWIDTC, PPXMLPRS(new), PS002(new), PPWEBSEC(new), UC0$WBST(new), UCROUTER. UCWABND
Copy Members: CPPDEDHC, CPPDFLT(new), CPPDTOKN(new), CPWSFLT(new), CPWSPTRW, CPWSTOKN(new), CPWSTRIF, CPWSWEBS(new), PS002(new), PS002I01(new), PS002O01(new)
Bind Members: PPDELTS(new)
Table Updates: PPPMSG, UC0CFN, UC0PGM
Web Service Artifacts: PPSPROV(new), PPSbasicSOAP11provider.xml(new), ps002.wsdl(new), PS002.wsbind(new)
Urgency: Not Urgent (see Timing of Installation below)

This release addresses the following Service Request:

**Service Request 82205**

Service Request 82205 asks for a web service interface between the Payroll/Personnel System (PPS) online time reporting system and any time/attendance collection application.

Service Request 82205 provides the following background information:

In 2007, the ESI Planning Committee requested that the Payroll/Personnel Services unit design and develop a generic Payroll/Personnel System (PPS) web service to support various time collection applications in use throughout the University of California system.

The web service was to provide the ability to process a time transaction, execute existing PPS edits, post error-free time data to PPS, and return appropriate messages back to the time collection application.

The scope of the project is limited to the intermediary service that would provide a link between PPS time reporting components and a time collection application.

**Programs**

**PPDELTS (new)**

PPDELTS is a new program to delete all PPS temporary storage queues associated with the token passed in the Commarea.

**PPGETTIM**

PPGETTIM retrieves data from the PPPTIM table for online use, specifically for the time reporting roster screen. It has been modified to enable processing of a single row from a web service call.
PPWEBSEC (new)
PPWEBSEC is the web security interface program. It is invoked as part of the SOAP header processing. It validates and processes the user data and certificates.

PPWEDHC
PPWEDHC is the entry screen program for the time reporting function, for entry of detail time data, after the roster is specified on the IDTC screen. For the web service it is called by UCRouter using data passed from PS002. It has been modified to improve the processing of error messages in support of the web service.

PPVIDTC
PPVIDTC is the first of the two CICS screen programs in the time reporting function. For the web service, it is called by UCRouter using data passed from PS002. It has been modified to detect a web service call and bypass certain conditions which are not related to web service processing.

PPXMLPRS (new)
PPXMLPRS is a new program to parse XML for PPS web services. It locates the user ID, password and/or token tags and returns them to the calling program, PPWEBSEC.

PS002 (new)
PS002 is a new program which is the time reporting web service driver program. The shell for this program was initially generated by RADz from PS002.wsdl and then modified for the PS002 service. This program calls UCRouter multiple times to simulate the IDTC/EDHC process and passes the results back to the calling web application.

UC0$WBST (new)
UC0$WBST is a new assembler language program which is a clone of the IBM-supplied program DFH$WBST. It is used to "maintain state" in a CICS environment. This is done by creating a token and storing user data in main storage to be retrieved by a later task. The original IBM program was modified to call PPDELTS when deleting a token so that all temp storage queues associated with that token can also be deleted.

UCROUTER
UCROUTER is the main driver for all PPS CICS processes. It has been modified to support web services with no changes to existing CICS functionality.

UCWABND
UCWABND is the abend handling program for the online applications system. It has been modified to bypass sending a CICS map when processing a web service.

Copy Members
CPWSWEBBS (new)
CPWSWEBBS defines a new external area for passing data between the web services related programs.

CPWSFLT (new)
CPWSFLT is the work area for processing SOAP faults. It's associated with Procedure Division copylib member CPPDFLT.

CPWSTOKN (new)
CPWSTOKN is the work area for dealing with tokens. It's associated with Procedure Division copylib member CPPDTOKN.

CPPDFLT (new)
CPPDFLT contains code for processing a SOAP fault. It's associated with Working-Storage copylib member CPWSFLT.

CPPDTOKN (new)
CPPDTOKN contains code for processing tokens. It's associated with Working-Storage copylib member CPWSTOKN.

PS002 (new)
PS002 defines the input and output structure for the web service. It is used only to generate the wsdl and is never copied into any Cobol program. Any changes to the structure require that the wsdl be re-generated.
**PS002I01 (new)**
PS002I01 is the PS002 web service input data structure. It was generated by RADz from PS002.wsdl at the same time as the PS002 shell program was generated.

**PS002O01 (new)**
PS002O01 is the web service output data structure. It was generated by RADz from PS002.wsdl at the same time as the PS002 shell program is generated.

**CPPDEDHC**
CPPDEDHC is the Procedure Division logic related to FAU for the EDHC screen. It has been modified to obtain the FAU from the data passed from the web service instead of using the screen input area.

**CPWSPTRW**
CPWSPTRW is the common work area for the time entry CICS functions. Two fields were added to facilitate passing data between the web service and the time entry programs.

**CPWSTRIF**
CPWSTRIF is the interface area for the PPGETTIM program. It was modified to support a new mode for PPGETTIM which causes the program to retrieve data for a single employee rather than a roster.

**Bind Members**

**PPDELTs (new)**
This bind member contains the package bind statements for PPDELTs.

**Table Updates**

**System Messages Table (PPPMSG)**
Error Messages 36-125 and 36-127 have had the message text changed per the Service Request.

**UC0CFN**
UC0CFN is an infrastructure table in the Process Control Database (PCD) which contains all of the screen function codes and their associated programs. A new function, WDTC, has been added to this table which is used instead IDTC for the web service call. This allows for function-specific overrides which have been added to the UC0PGM table.

**UC0PGM**
UC0PGM is an infrastructure table in the Process Control Database (PCD) which contains the mapping of logical program functions to actual programs for the PPS CICS applications. Records have been added to it to override the default behavior of some of the UCROUTER "logical functions" when processing the PS0002 web service.

**Web Artifacts**

**PPSPROV (new)**
PPSPROV is the web service provider pipeline used for PPS web services. This is defined to CICS using RDO.

**PPSbasicSOAP11provider.xml (new)**
PPSbasicSOAP11provider.xml is a customized version of the standard pipeline configuration file, basicSOAP11provider.xml. It was customized to include the header program PPWEBSEC which is the PPS web service security module.

**PS002.wsdl (new)**
The wsdl is the true interface for the web service. The wsdl describes the service so that web application developers can successfully call the web service. PS002.wsdl was generated in RADz using the PS002 copylib member as input.

**PS002.wsbind (new)**
The wsbind file defines the web service to CICS. The wsbind file is generated from the wsdl.

**Installation Instructions**
A separate Installation Instructions document is provided for this release.
**Test Plan**

A separate Test Plan document is provided for this release.

**Timing of Installation**

The timing of this release is **not urgent**, however all future web service releases will rely on components from this release, so as usual, campuses are encouraged to install this release in as timely a fashion as possible and in the normal numeric sequence.

If there are any questions, please send electronic mail to maxine.gerber@ucop.edu, or call 510-987-0422.

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