CICS/TS: XML, SOAP, and Web Services

Course Summary

Description

XML is fast becoming the method of choice to transfer data to existing applications and CICS now supports this environment too. This course will provide you with: XML basics, introduction to pipeline and web services, Business Transactions Services basics, and, finally, CICS knowledge required to implement this new technology. We will also discuss XML parsing techniques in a COBOL environment, specifically the XML PARSE and XML GENERATE statements. This course will be compatible with SOAP support available in CICS/TS 3.1. For those people with CICS/TS 2.3 and software provided with support pack CA1M for non-TS23 users, we will be discussing the major differences between the 2 platforms and the things you should do in order to make the migration to the new CICS as easy as possible.

Topics

- XML Concepts
- SOAP Basics
- Business Transaction Services
- SOAP and CICS
- Channel and Containers
- Required Resources in CICS

Prerequisites

Students should have a good knowledge of the standard CICS/API and CICS/WEB basics.

Audience

This course is designed for programmers, system programmers and analysts responsible for putting a SOAP/CICS application together

Duration

Five days
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Course Outline

I. Introduction
   A. Overview of the CICS/WEB environment
   B. Description of the implementation of Web
   C. Services in CICS using the Simple Object Access Protocol (SOAP)

II. XML concepts
   A. XML and XML parsing.
   B. XML basics
   C. DTD’s,
   D. XML Schema and Namespaces and XHTML
   E. Changes available in Enterprise COBOL
   F. (XML PARSE and XML GENERATE cobol instructions)

III. SOAP Basics
   A. SOAP as implemented by W3C organization. This will cover the
   B. Relationship between SOAP and XML
   C. SOAP envelope
   D. SOAP message format
   E. SOAP encoding rules
   F. SOAP and HTTP message format

IV. Business Transaction Services
   A. Design efficient CICS/SOAP applications

V. SOAP and CICS
   A. PIPELINES
   B. SOAP containers
   C. Message adapters
   D. SOAP message handler
   E. SOAP error recovery and security issues
   F. How WSED 5.1 can make it very easy to migrate a traditional CICS application into a SOA environment

VI. Channel and containers
   A. Description of this new facility in CICS/ST 3.1
   B. Channel containers are used to transfer information between SOAP/CICS components in CICS/TS 3.1

VII. Required resources in CICS:
   A. URIMAP
   B. PIPELINE
   C. WEBSERVICE