

CICS TS Web Services

Duration	4 days.
Participants	This course is designed for experienced CICS COBOL programmers who will be writing new COBOL CICS/ TS Web Services, or wrapping and or modifying existing COBOL CICS/ TS programs as Web Services..
Overview	This course teaches experienced application programmers and developers to code CICS TS (Transaction Server) commands within COBOL programs and to write the logic that supports pseudo-conversational, multi-module, online transaction applications. CICS with DB2 is an optional day with this course.
Objectives	After successfully completing this course, you will be able to: • Understand HTTP 1.1 Support. • Use CICS Channels and Containers. • Use Web Service, SOAP, SOAP header handler. • Learn some XML and WSDL. • Use CICS as a Web Service Provider; CICS as a Web Service Requester. • Be aware of different development approaches: development approach, bottom-up, top-down, and meet-in-the-middle. • Understand Security concepts. (Note: Students will <i>not</i> be writing security handlers.) • Be aware of SOA concepts and REST concepts. (Optional, only if time permits.)
Prerequisites	Knowledge the COBOL CICS API is required, as well as basic COBOL coding experience and ability to use TSO/ ISPF, and modify and submit JCL.
Format	Lecture and hands-on computer workshops.
Topic Outline	Introduction Overview of CICS/ TS 4.2 Web Facilities Brief overview Web Services and SOA CICS APIs for Web Services HTTP 1.1 Support The new date format and the CICS commands to help you use these new formats Chunked and pipelined messages Virtual hosts CICS URIMAP and TCPIP SERVICE New compliancy rules New behavior of the CICS Web Monitor transaction

CICS TS Web Services *(continued)*

Topic Outline

CICS Channels and Containers

- Implementing CONTAINERS in your CICS programs
- GET, PUT and MOVE commands
- How to browse the list of CONTAINER names available within the CHANNEL
- Passing CHANNELs on XCTL, LINK, START and RETURN

WEBSERVICE, SOAP and XML

- Overview of XML
- WEBSERVICE and SOAP support
- SmartBear SOAPUI tool
- Programmer tools for XML messages

CICS as a WEBSERVICE Provider

- Web service assistant DFHLS2WS
- Parameters to the utility
- Rules the application program must follow to have a successful implementation
- The concept of PIPELINE

CICS as a WEBSERVICE Requester

- Web service assistant DFHWS2LS
- Parameters to the utility
- Rules the application program must follow to have a successful implementation
- Review CICS commands available to the programmer to invoke a web service

Security Overview

- A brief overview of the security available in CICS/ TS 4.1
- The changes to SSL support
- Certificate revocation lists
- EXEC CICS VERIFY PASSWORD

SOA (Optional)

- Brief overview of SOA
- Design considerations for a SOA

REST (Optional)

- Brief overview of REST and hands-on example

RDz (Optional)

- Features available for developing CICS Web Services in RD