
Course Code: ES73G

Course Title: IBM System z Parallel Sysplex Operations

Description:

This course is designed so that students can learn how z/OS systems operate in a Parallel Sysplex environment through discussion topics and hands-on lab exercises. Students learn problem determination skills, practice enhanced sysplex operations, including management of the coupling facility (CF), and use recovery capabilities provided by the System z servers.

The course consists of six units and 12 hands-on lab exercises.

Objectives:

- Describe common sysplex terminology, concepts, and benefits provided by a Parallel Sysplex configuration
- Identify the basic hardware and software components that make up the Parallel Sysplex environment and how they are used
- Use z/OS MVS commands to identify XCF signaling and sysplex shared couple data set usage and to determine current operational status
- Describe CF operation; how and when the CFCC is loaded on a System z LPAR, the various CF link definitions and how they can be used
- Identify CF structure types, definition and allocation process, and how they are used in the CF
- Use z/OS MVS commands to display structure status
- Use CF operator commands to display and change the operational status of a CF
- Describe and demonstrate recommended procedures and typical z/OS MVS commands to manage sysplex members, coupling facilities, structure rebuilds, and couple data sets
- Identify potential problems during system removal, CF structure or CDS usage, and determine appropriate operator action
- Explain the differences and benefits of having stand-alone CF and internal CF configurations
- Describe the purpose and use of Sysplex Failure Manager and how SFM can be used to address sympathy sickness
- Explain why time synchronization is important and how server time protocol is used
- Describe console usage and mode of operation for a system and a sysplex
- Describe the IPL sequence and identify where and when sysplex activation is done during IPL
- Identify key areas with the IPL, explaining potential problems and how to avoid them

Prerequisites:

You should have an understanding of:

- Basic data processing and I/O concepts and terminology
- z/OS console operation, including display of device, job, and console status

Duration:

24 Hrs

Topics:

Day 1

- Welcome
- Unit 1: Sysplex overview
- Unit 2: Coupling facility
- Supporting labs

Day 2

- Review
- Unit 3: Sysplex operation and recovery
- Supporting labs

Day 3

- Review and labs
- Unit 4: Sysplex Failure Manager
- Unit 5: Server Time Protocol operation
- Unit 6: z/OS IPL flow
- Supporting labs

Audience:

The audience includes operations personnel and technical staff who are directly involved in the installation, operation, systems support, and software support of their Parallel Sysplex environment.