

## IBM System z Parallel Sysplex Operations

**Duration: 3 Days    Course Code: ES73G**

### Overview:

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.

### Target 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.

### Objectives:

- Identify the difference between a base and a Parallel Sysplex
- Describe the hardware components of a Parallel Sysplex
- Describe the software components of a Parallel Sysplex
- List sysplex couple data sets and define their purpose
- Identify and describe sysplex commands to display signaling and couple data set usage
- Identify all coupling facility links, speeds, and connectivity options for System z servers
- List the various structure types and how they are used
- Identify potential users of a CF
- Describe the CFRM policy and required parameters within the policy
- Describe how the CF is used to enable resource and data sharing
- Use commands to display and change the operational status of a CF
- Use the various z/OS commands to determine the current status of sysplex members
- Remove a system from the sysplex
- Describe structure and connector attributes
- Use z/OS commands to resolve a problem structure status
- Use z/OS commands to remove, add sysplex primary or alternate couple data sets, and modify CDS settings
- Describe procedures for moving off a coupling facility for maintenance or other reasons
- Describe the operator options to relocate structures between CFs
- Describe and identify various sysplex CF configurations, including high-availability CF configurations
- Describe the types of failures and recoveries that can be automated with SFM
- Start and stop SFM policies and identify SFM actions for each system
- Identify new SFM support at z/OS 1.8 and z/OS 1.9
- Determine the status and parameters of any sysplex console
- Use z/OS commands to display console attributes, change console attributes, and route messages to any sysplex member
- Describe the use and purpose of console switching groups
- Identify console updates that apply to z/OS 1.8 and z/OS 1.10
- Define why time synchronization is required in a sysplex
- Describe time synchronization options in a sysplex
- Describe Sysplex Timer (9037) configurations
- Define server time protocol terminology and configurations:
  - Mixed Coordinated Timing Network
  - STP-only Coordinated Timing Network
- Identify three major phases of the IPL process
- Describe what happens during each phase of the IPL process
- Identify and resolve IPL-related problems
- Perform a successful IPL of the z/OS system

- Use z/OS, JES2 commands, and CFRM policies, if required, to remove structures, CF links, and CFs

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## 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

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## Content:

### Day 1

- (00:30) Welcome
- (02:30) Unit 1: Sysplex overview
- (01:00) Unit 2: Coupling Facility
- (03:00) Supporting labs

### Day 2

- (00:30) Review
- (03:00) Unit 3: Sysplex operation and recovery
- (03:30) Supporting labs

### Day 3

- (02:30) Review and labs
- (01:00) Unit 4: Sysplex Failure Manager and console operations
- (01:00) Unit 5: Sysplex timer and Sever Time Protocol operation
- (00:45) Unit 6: z/OS IPL flow
- (02:00) Supporting labs

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## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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