# 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

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- Describe the hardware components of a Parallel Sysplex

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- Describe the software components of a Parallel Sysplex

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- List sysplex couple data sets and define their purpose

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- Identify and describe sysplex commands to display signaling and couple data set usage

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- Identify all coupling facility links, speeds, and connectivity options for System z servers

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- List the various structure types and how they are used

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- Identify potential users of a CF

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- Describe the CFRM policy and required parameters within the policy

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- Describe how the CF is used to enable resource and data sharing

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- Describe and identify various sysplex CF configurations, including high-availability CF configurations

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- Describe the types of failures and recoveries that can be automated with SFM

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- Start and stop SFM policies and identify SFM actions for each system

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- Identify new SFM support at z/OS 1.8 and z/OS 1.9

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- Determine the status and parameters of any sysplex console

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- Use z/OS commands to display console attributes, change console attributes, and route messages to any sysplex member

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- Describe the use and purpose of console switching groups

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- Identify console updates that apply to z/OS 1.8 and z/OS 1.10

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- Define why time synchronization is required in a sysplex

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- Use commands to display and change the operational status of a CF
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- Use the various z/OS commands to determine the current status of sysplex members
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- Remove a system from the sysplex
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- Describe structure and connector attributes
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- Use z/OS commands to resolve a problem structure status
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- Use z/OS commands to remove, add sysplex primary or alternate couple data sets, and modify CDS settings
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- Describe procedures for moving off a coupling facility for maintenance or other reasons
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- Describe the operator options to relocate structures between CFs
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- Use z/OS, JES2 commands, and CFRM polices, if required, to remove structures, CF links, and CFs

- Describe time synchronization options in a sysplex
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- Describe Sysplex Timer (9037) configurations
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- Define server time protocol terminology and configurations:
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- Mixed Coordinated Timing Network
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- STP-only Coordinated Timing Network
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- Identify three major phases of the IPL process
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- Describe what happens during each phase of the IPL process
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- Identify and resolve IPL-related problems
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- Perform a successful IPL of the z/OS system

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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
- (03:00) Unit 3: Sysplex operation and recovery
- (03:30) Supporting 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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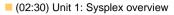- (00:45) Unit 6: z/OS IPL flow
- (02:00) Supporting labs

**Day 2**

- (00:30) Review

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

**Day 3**

- (02:30) Review and labs

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

For More information, or to book your course, please call us on  030 - 60 89 444

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