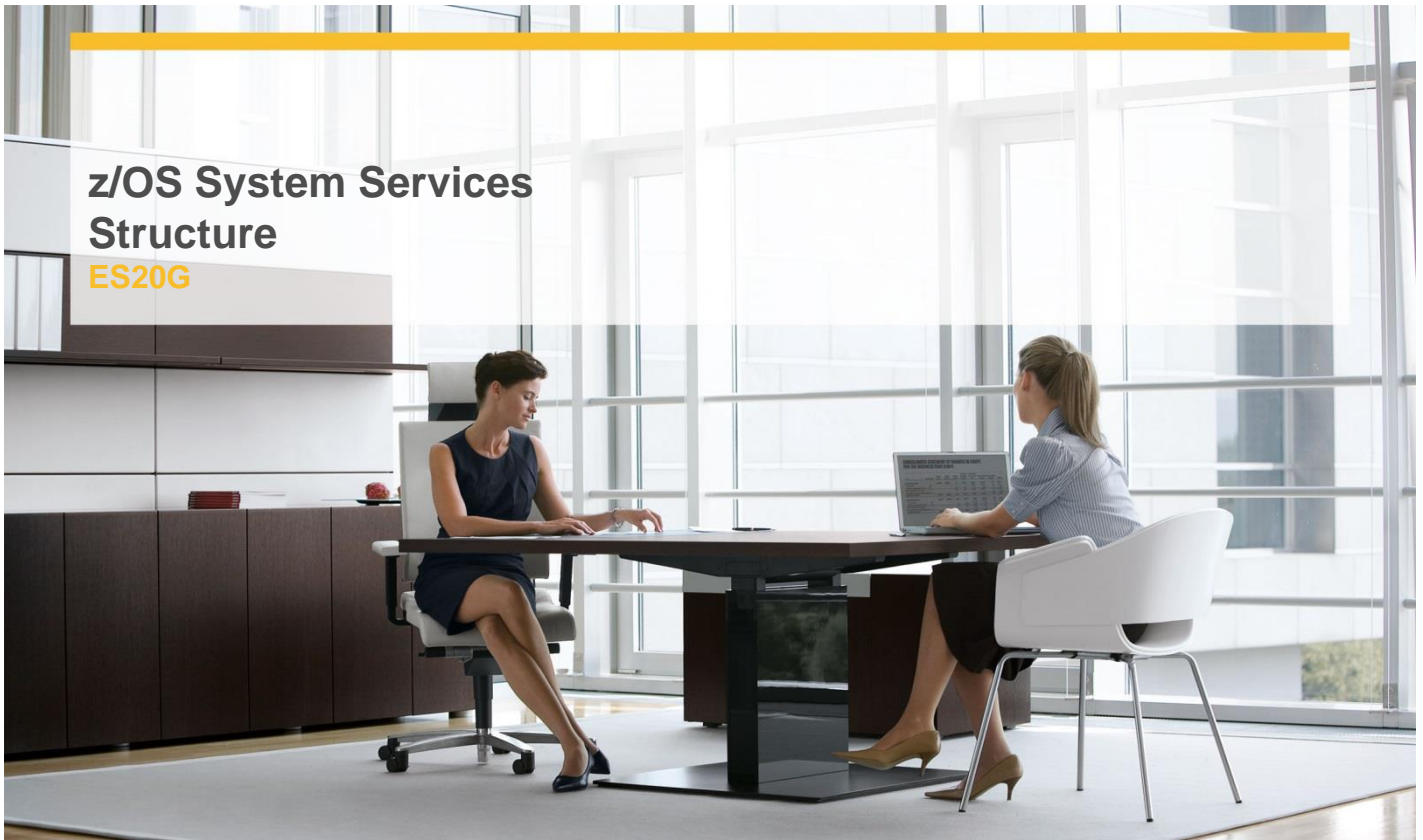


z/OS System Services Structure

ES20G



Delivery Type: Classroom

Duration: 4 days

Overview

This course presents the structure and control blocks of the z/OS BCP and system services. It prepares the z/OS system programmer to identify potential bottlenecks and performance problems, perform initial error symptom gathering, and identify opportunities and requirements for tailoring an z/OS system. This course also provides prerequisite information needed for further training in specialized areas such as system measurement and tuning and system problem determination.

Pre-Requisites

Before taking this course, you should be able to:

- ✓ Describe the following z/OS characteristics: multiprocessing, multiprogramming, virtual storage and paging, and multiple address space/data space architecture
- ✓ Explain how paging and swapping are accomplished through the interaction of

real/central, expanded, auxiliary, and virtual storage in an z/OS system

- ✓ Explain the role of the dispatcher, interrupts, SVCs, the program manager, and serialization in managing work in an z/OS system
- ✓ State the role of z/OS software and hardware components in handling an I/O request for data on a direct access storage device

These prerequisites can be met through on the job training or completion of z/OS Facilities (ES15).

Note: A fundamental knowledge of hexadecimal notation, assembler language, and z/Architecture instruction execution will enhance a student's understanding of the course material. Completion of Assembler Language Coding Workshop or Assembler Language Series is recommended.

Objectives

- ✓ Explain the z/OS functions and control blocks necessary to support a task in a multitasking and multiprocessing environment
- ✓ Describe the software and hardware functions that allow a program to interact with programs running in other address spaces, use data in

other address spaces, and use data in data spaces

- ✓ Trace the flow of an I/O operation from the initial request in the application program through the completion of data transfer
- ✓ Identify the control blocks that describe the current status of an I/O request
- ✓ Describe the functions of the z/OS Virtual, Real, and Auxiliary Storage Managers
- ✓ Describe the functions performed by the Recovery Termination Manager and recovery management components to minimize failure impact and enhance error correction
- ✓ Select the appropriate IBM publication to provide further technical information (SRLs, Technical Bulletins, Self-study and other z/OS courses)
- ✓ Describe the services provided by cross system extended services (XES)
- ✓ Identify and explain the purpose of the cache, list, and lock structures
- ✓ Plan the implementation of the global resource serialization STAR environment

Target Audience

This is an intermediate course for z/OS system programmers responsible for customization, measurement and tuning, or problem determination of z/OS. Subsystem programmers will also benefit from this class.