KOENIG
step forward

KOENIG SOLUTIONS · COURSE OUTLINE

Db2 12 for z/OS: Introduction to System Administration

Learn to start, secure, monitor and recover Db2 12 for z/OS systems across TSO, CICS, IMS and distributed environments.

17	67
MODULES	TOPICS

COURSE OVERVIEW

This course covers starting and stopping Db2, its address spaces, and core components such as the BSDS, log, and catalog and directory. It addresses system security and authorization, including data set protection, authorization exits, trusted context, and distributed security, followed by program flow across TSO, batch, CICS, IMS, and distributed environments. It then covers logging, Db2 utilities, operations for monitoring and controlling Db2, and recovery, including table space recovery and system restart after normal or abnormal shutdown. It closes with optional topics on Java with Db2 and the Administrative Task Scheduler.

WHO THIS COURSE IS FOR

- **System Administrators**
- **Database Administrators**
- **System Programmers**
- **Operations Staff**
- **Security Administrators**

LEARNING OBJECTIVES

- Describe how Db2 starts and stops as part of the z/OS IPL process
- Explain the function of Db2 address spaces and IRLM lock storage
- Identify the role of the BSDS, log, catalog and directory
- Apply security controls to protect Db2 data sets and connections
- Compare authorization methods for dynamic and static SQL
- Analyse program flow across TSO, CICS, IMS and distributed environments
- Plan table space recovery and system restart after failure
- Interpret DISPLAY commands used to monitor and control Db2

COURSE SYLLABUS

17 Modules, 67 Topics

01

Starting, Stopping, and Accessing Db2

TOPICS

Starting Db2 as part of the z/OS IPL process · Data set allocation and APF authorization · The START DB2 and STOP DB2 commands · zParms, DSNTIJUZ, and DSNZPARM · Address spaces · IRLM and lock storage

02

Db2 Components and Processes

TOPICS

BSDS and logging · Catalog and directory · Program preparation and execution · Transaction execution · Data sharing in the sysplex

03

System Security

TOPICS

Protecting Db2 data sets · Controlling connections to Db2 · Db2 authorization exits · Trusted context and roles · Securing an application server

04

Db2 Authorization

TOPICS

Authorizations · Controlling access for dynamic and static SQL · Access control authorization exits · Distributed security

05

Program Flow for All Environments

TOPICS

Connection types and language interfaces · Program flow

06

TSO and Batch Environments

TOPICS

TSO · Utilities

07

Transaction Flow in IMS and CICS (Optional)

TOPICS

Transaction processing · Thread reuse · SIGNON exit

08

CICS - Db2 Environment (Optional)

TOPICS

CICS connections to Db2 · DSNC transaction

09

IMS - Db2 Environment (Optional)

TOPICS

IMS-Db2 introduction · IMS TM · IMS/DLI batch environment

10

Distributed - Db2 Environment

TOPICS

Distributed attachment · Location aliases · DDF profiling · Block fetch · Db2 REST services

11

Logging

TOPICS

The Db2 log · Log commands · Archiving considerations · BSDS

12

Db2 Utilities

TOPICS

Categorization · DSNJU003 and DSNJU004 · BACKUP and RESTORE SYSTEM

13

Operations (Monitoring and Controlling Db2)

TOPICS

Issuing Db2 commands · Basic workload controls · Monitoring and controlling utilities · DISPLAY commands · Starting / stopping databases

14

Recovery

TOPICS

Planning for recovery · Table space recovery · Log considerations · DISPLAY and SET LOG commands · Recovery considerations

15

System Recover/Restart

TOPICS

System checkpoints · System restart after normal shutdown · Page externalization · Two-phase commit processing · System restart after system failure · Recovery considerations

16

Java with Db2 (Optional)

TOPICS

Java

17

Administrative Task Scheduler (Optional)

TOPICS

Overview · Routines · Scheduling features · Life cycle · Synchronization · Commands

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

Visit koenig-solutions.com | info@koenig-solutions.com