Course Code: CV853G

Course Title: Db2 12 for z/OS Intermediate System Administration

Description:

This course provides students with an introduction to the skills and knowledge needed to administer a Db2 12 for z/OS system.

Objectives:

After completing this course, students should be able to:

- Start and stop a Db2 subsystem
- Use the SET SYSPARM command
- Access the system log to gather information about the subsystem initialization, operation, or shutdown
- Describe the components and address space structure of a Db2 subsystem
- Explain the use of RACF (or another external security program) for Db2 connection security
- Explain the use of Roles and Trusted Contexts
- Implement security procredures for a Db2 subsystem
- Explain Db2 program flow for all environments
- Explain parameter setting for the IRLM
- Invoke and utilitze Db2 TSO facilities
- Use the Db2 Catalog to monitor subsystem authorizations
- Work with the Active Log data sets
- Explain Db2 logging
- Use SET LOG SUSPEND and SET LOG RESUME
- Use DSNJU004 to print log map and interpret the results
- Use DSNJU003 to rename Db2 data sets
- Plan for recovery of a BSDS failure
- Monitor and control a Db2 subsystem
- Explain transaction flow in IMS and CICS environments (optional)
- Describe the CICS and DB2 environment (optional)
- Explain the difference between JDBC and SQLJ
- And much more

Prerequisites:

- Understanding of the objects (such as databases, table spaces, tables, indexes, and so forth) used in a Db2 subsystem
- Basic knowledge of SQL
- At least one year as a z/OS systems programmer or equivalent knowledge

OR

- At least one year as a Db2 for z/OS Database Administrator

Duration:

24 Hrs

Topics:

Starting, stopping, and accessing Db2_x001a_ Starting Db2 as part of the z/OS IPL process_x001a_ Data set allocation and APF authorization_x001a_ The START DB2 and STOP DB2 commands_x001a_ zParms, DSNTIJUZ, and DSNZPARM_x001a_ Address spaces_x001a_ IRLM and lock storageDb2 components and processes_x001a_ BSDS and logging_x001a_ Catalog and directory_x001a_ Program preparation and execution_x001a_ Transaction execution_x001a_ Data sharing in the sysplexSystem security_x001a_ Protecting Db2 data sets_x001a_ Controlling connections to Db2_x001a_ Db2 authorization exits_x001a_ Trusted context and roles_x001a_ Securing an application serverDb2 authorization_x001a_ Authorizations_x001a_ Controlling access for dynamic and static SQL_x001a_ Access control authorization exits_x001a_ Distributed securityProgram flow for all environments_x001a_ Connection types and language interfaces_x001a_ Program flowTSO and batch environments_x001a_ TSO_x001a_ UtilitiesTransaction flow in IMS and CICS (optional)_x001a_ Transaction processing_x001a_ Thread reuse_x001a_ SIGNON exitCICS - Db2 environment (optional)_x001a_ CICS connections to Db2_x001a_ DSNC transactionIMS - Db2 environment (optional)_x001a_ IMS-Db2 introduction_x001a_ IMS TM_x001a_ IMS/DLI batch environmentDistributed - Db2 environment_x001a_ Distributed attachment_x001a_ Location aliases_x001a_ DDF profiling_x001a_ Block fetch_x001a_ Db2 REST servicesLogging_x001a_ The Db2 log_x001a_ Log commands_x001a_ Archiving considerations_x001a_ BSDSDb2 utilities_x001a_ Categorization_x001a_ DSNJU003 and DSNJU004_x001a_ BACKUP and RESTORE SYSTEMOperations (monitoring and controlling Db2)_x001a_ Issuing Db2 commands_x001a_ Basic workload controls_x001a_ Monitoring and controlling utilities_x001a_ DISPLAY commands_x001a_ Starting / stopping databasesRecovery_x001a_ Planning for recovery_x001a_ Table space recovery_x001a_ Log considerations_x001a_ DISPLAY and SET LOG commands_x001a_ Recovery considerationsSystem recover/restart_x001a_ System checkpoints_x001a_ System restart after normal shutdown_x001a_ Page externalization_x001a_ Two-ase commit processing_x001a_ System restart after system failure_x001a_ Recovery considerationsJava with Db2 (optional)_x001a_ JavaAdministrative task scheduler (optional)_x001a_ Overview_x001a_ Routines_x001a_ Scheduling features_x001a_ Life cycle_x001a_ Syncronization_x001a_ Commands

Audience:

This course is intended for z/OS system administrators, database administrators, or other technical individuals who will be managing Db2 12 for z/OS.