Course Code: CV880G

Course Title: Db2 12 for z/OS Advanced Database Administration

Description:

This course introduces the student to advanced database administration skills, including program preparation and the use of packages, online schema changes, partition management, and stored procedures; as well as performance and availability features of utilities (including LOAD, REBUILD INDEX, REORG, and UNLOAD). This course does not cover distributed data processing, nor does it cover data sharing.

Objectives:

Program preparation and the use of packages part 1 Program preparation overview Execution time errors BIND actions Package status and REBIND Deleting a package Determining the table/view qualifier

Online schema changes part 1 Changing data type Adding columns to a table Renaming columns in a table Renaming indexes Adding columns to indexes Versioning

Online schema changes part 2 Pending online schema changes Dropping columns from a table Converting to UTS Other pending changes Impact of pending changes on immediate options Restrictions and considerations

Partition management part 1 Adding partitions Rotating partitions

Partition management part 2 Modifying limit keys Rebalancing partitions

Stored procedures part 1 External stored procedures WLM-established application environments Altering and dropping a stored procedure Commands for stored procedures Execution privileges Catalog information

LOAD and REBUILD INDEX LOAD with parallel index build LOAD partitions in parallel REBUILD INDEX Inline image copies and statistics LOAD SHRLEVEL CHANGE LOAD REPLACE SHRLEVEL REFERENCE

REORG Performance features of REORG Online REORG Inline image copies and statistics Consideratons for PBG table spaces Online REORG with LOBs (optional)

UNLOAD Overview Image copy specification Table-only input specification SHRLEVEL option Modes of operation

Program preparation and the use of packages part 2 (optional) Table mirroring Package versioning Plan management Other REBIND PACKAGE options Application compatibility

Stored procedures part 2 (optional) Native stored procedures Native procedure deployment

Prerequisites:

- Familiarity with the z/OS operating system, including TSO, ISPF, and SDSF.
- Familiarity with SQL DML (SELECT, INSERT, UPDATE, DELETE, and MERGE) and DDL (CREATE, ALTER, DROP) statements
- Basic skills administering a Db2 12 for z/OS database environment, including the use of basic utilities, serialization, and basic database security.

Duration:

16 Hrs

Topics:

Program preparation and the use of packages part 1 Program preparation overview Execution time errors BIND actions Package status and REBIND Deleting a package Determining the table/view qualifierOnline schema changes part 1 Changing data type Adding columns to a table Renaming columns in a table Renaming indexes Adding columns to indexes Versioning Online schema changes part 2 Pending online schema changes Dropping columns from a table Converting to UTS Other pending changes Impact of pending changes on immediate options Restrictions and considerationsPartition management part 1 Adding partitions Rotating partitionsPartition management part 2 Modifying limit keys Rebalancing partitionsStored procedures part 1 External stored procedures WLM-established application environments Altering and dropping a stored procedure Commands for stored procedures Execution privileges Catalog informationLOAD and REBUILD INDEX LOAD with parallel index build LOAD partitions in parallel REBUILD INDEX Inline image copies and statistics LOAD SHRLEVEL CHANGE LOAD REPLACE SHRLEVEL REFERENCEREORG Performance features of REORG Online REORG Inline image copies and statistics Considerations for PBG table spaces Online REORG with LOBs (optional)

UNLOAD Overview Image copy specification Table-only input specification SHRLEVEL option Modes of operationProgram preparation and the use of packages part 2 (optional) Table mirroring Package versioning Plan management Other REBIND PACKAGE options Application compatibilityStored procedures part 2 (optional) Native stored procedures Native procedure deployment

Audience:

This course is for administrators who need to augment their skills in administering a Db2 12 for z/OS database environment.