

DB2 12 FOR ZOS: BASICS FOR DBA BEGINNERS

Course Code: 821633

Db2 12 for z/OS beginning DBAs can develop fundamental skills or recognition through lectures and hands-on exercises.

Db2 12 for z/OS beginning DBAs can develop fundamental skills or recognition through lectures and hands-on exercises of:

- TSO/E and ISPF
- Data sets
- Db2 Objects
- Structured Query Language
- Db2 Commands
- JCL and SDSF
- Db2 Utilities
- Db2 Logging
- Db2 Program Preparation

The course materials cover Db2 12 for z/OS

What You'll Learn

Students will learn to,

- Describe several services provided in a z/OS environment
- Explain workloads in the batch environment
- Explain workloads in the online environment
- Describe job roles in a z/OS environment
- Log On to TSO/E
- Navigate TSO/E and ISPF
- Use TSO commands
- Setup and utilize JCL (Job Control Language)
- Utilize SDSF
- Describe the different types of data sets in a z/OS environment
- Allocate data sets and list data set information and content
- Create and modify data set content
- Give an overview of the Db2 9 environment
- Describe and utilize Db2 Objects
- Describe and utilize several DB2 Utilities

- Describe the Db2I (Db2 Interactive Facility) environment
- Use SPUFI (SQL Processing Using File Input) to compose and execute SQL
- Setup and execute Db2 Commands
- Understand Db2 Logging
- Describe Db2 program preparation process
- Understand Db2 startup and shutdown
- Understand and utilize Db2 recovery strategies

Who Needs to Attend

This beginning Db2 basic course is for z/OS database administrators who need to acquire the basic skills required to administer a Db2 database in a z/OS environment.

DB2 12 FOR ZOS: BASICS FOR DBA BEGINNERS

Course Code: 821633

CLASSROOM LIVE

\$4,295 USD

5 Day

Classroom Live Outline

Unit 1 Introduction

- The modern Mainframe Environment
- Defining z/OS
- What are the benefits of z/OS-
- Typical z/OS workloads
- Batch processing
- Online Transaction Processing
- Job roles in the Mainframe environment
- z/OS Components and Services
- UNIX System Services
- The Parallel Sysplex Environment
- z/OS Management Interfaces

Unit 2 TSO/E and ISPF

- Emulators
- z/VM systems
- 2.1. TSO/E
 - ☒ TSO Logon panel
 - ☒ Changing passwords
 - ☒ Additional logon panel options
 - ☒ The Reconnect option
 - ☒ TSO READY prompt
 - ☒ TSO HELP command
 - ☒ LISTALC command
 - ☒ PROFILE command
 - ☒ Changing PROFILE
 - ☒ LOGOFF command

- ☒ Scripting support
- 2.2. ISPF
 - ☒ What is ISPF
 - ☒ ISPF command
 - ☒ ISPF Primary Option Menu
 - ☒ Primary Option Menu Areas
 - ☒ Action Bar
 - ☒ Options option
 - ☒ ISPF Settings
 - ☒ Global Color Change Utility
 - ☒ Function Keys
 - ☒ Option or Command Prompt
 - ☒ Keylist Utility
 - ☒ F3 Exit
 - ☒ F1 Help
 - ☒ F2 Split
 - ☒ ISPF Navigation Techniques
 - ☒ PFSHOW
 - ☒ More ISPF commands
 - ☒ Option listing
 - ☒ ISPF Command Shell
 - ☒ TSO Command Prefix

Unit 3 Data Sets

- Data sets
- Types of data sets
- DASD versus Tape
- Volumes
- Storage allocation
- Data set naming conventions
- Catalogs
- Storage Management
- Checkpoint
- 3.2. Sequential Data Sets
 - ☒ Creating data sets
 - ☒ Utility Selection Panel
 - ☒ Data Set Utility Panel
 - ☒ Creating a data set
 - ☒ Allocate New Data Set
 - ☒ Creating a sequential data set
 - ☒ Editing a sequential data set
 - ☒ ISPF Editor
 - ☒ ISPF Editor primary commands
 - ☒ ISPF Editor line commands
 - ☒ Data Set List Utility
 - ☒ Data set name wild cards

- ☒ Data Set List Utility
- ☒ DSLIST results
- ☒ Select Action
- ☒ HELP on Line Commands
- ☒ DSLIST by volume
- 3.3. Partitioned Data Sets
 - ☒ Partitioned data sets
 - ☒ Creating a PDS
 - ☒ PDS members
 - ☒ Creating a PDS member - Library Utility Panel
 - ☒ DSLIST Utility
 - ☒ PDS Member List
 - ☒ Member Actions
- 3.4. VSAM Data Sets
 - ☒ VSAM data sets
 - ☒ VSAM data set components
 - ☒ Creating a VSAM data set

Unit 4 JCL and SDSF

- 4.1. JCL
 - ☒ Batch Jobs versus Online Transactions
 - ☒ Batch job activities
 - ☒ Creating the batch job
 - ☒ JCL: Job Control Language
 - ☒ Statement format
 - ☒ JOB statement
 - ☒ EXEC statement
 - ☒ DD statement
 - ☒ Instream Input Data Set
 - ☒ Instream Output Data Set
 - ☒ DD DUMMY
 - ☒ Sample Jobstream 1
 - ☒ Sample Jobstream 2
 - ☒ Submitting the job
 - ☒ Notification
- 4.2. SDSF
 - ☒ SDSF
 - ☒ SDSF Primary Option Menu
 - ☒ Output and Held queues
 - ☒ PREFIX command
 - ☒ Working with queue query
 - ☒ Select command
 - ☒ Canceling or Purging output
 - ☒ Sample jobstream 1 revisited
 - ☒ Sample jobstream 2 revisited

Unit 5 Db2 Relational Database Concepts

- Relational Database Systems
- Db2 for z/OS and Db2 family
- The Db2 Optimizer
- Benefits of Db2 for z/OS
- Database
- Tables
- Indexes
- Primary Key
- Relationships
- Referential Integrity
- Integrity Rules
- Data domains
- Table scan access
- Index access
- Interacting with Db2
- Transactions

UNIT 6 Structured Query Language (SQL) and SPUFI

- Structured Query Language (SQL)
- SQL categories
- SELECT statement
- SELECT list
- FROM clause
- Simple SELECT statement
- SUBSTR function
- SELECT with SUBSTR function
- WHERE clause
- SELECT with WHERE clause
- IN operator
- WHERE with IN operator
- BETWEEN operator
- WHERE with BETWEEN operator
- LIKE operator
- WHERE with LIKE operator
- ORDER BY clause
- The NULL value
- SELECT with ORDER BY
- Putting it all together
- Joining tables
- Correlation Names
- Additional criteria
- Cartesian products
- Executing SQL
- SQLCODE

Unit 7 Db2 Objects

- 7.1. Databases and Table Spaces
 - ☒ Db2 objects
 - ☒ The Db2 catalog
 - ☒ Storage group
 - ☒ Database
 - ☒ Table Space
 - ☒ Segmented table space
 - ☒ Partitioned table space
 - ☒ Partition By Growth table space
 - ☒ Partition By Range table space
 - ☒ VSAM data sets
- 7.2. Tables, Indexes and Views
 - ☒ Table
 - ☒ Partitioned table
 - ☒ Index
 - ☒ Clustering index
 - ☒ Index space
 - ☒ Partitioned index
 - ☒ View
- 7.3. Qualified names, Implicit Object Creation, and SQL statements
 - ☒ Qualifying Db2 objects
 - ☒ Implicit object creation
 - ☒ DML statements
 - ☒ Insert statement
 - ☒ UPDATE statement
 - ☒ DELETE statement
 - ☒ COMMIT statement
 - ☒ ROLLBACK statement

Unit 8 The Db2 System

- The Db2 system
- System parameters
- Required address spaces
- Optional address spaces
- Started tasks
- Master address space
- System databases
- Directory
- Catalog
- System database data sets
- Data pages
- Buffer pools
- Buffer pools: Read operations
- Buffer pools: Write operations
- System buffer pools
- Db2 logging

- Bootstrap data set
- Db2 locking
- Integrity issues
- Transaction locks
- Isolation Levels
- User interfaces

Unit 9 Db2 Commands and Program Preparation

- Accessing Db2
- 9.1. Db2 Commands
 - ☒ Db2 commands
 - ☒ Command format
 - ☒ DISPLAY DATABASE
 - ☒ DISPLAY DATABASE SPACENAM
 - ☒ Other DISPLAY DATABASE options
 - ☒ DISPLAY BUFFERPOOL
 - ☒ DISPLAY DDF
 - ☒ DISPLAY LOG
 - ☒ DISPLAY THREAD
 - ☒ ARCHIVE LOG
 - ☒ STOP DATABASE
 - ☒ START DATABASE
 - ☒ STOP DATABASE SPACENAM
 - ☒ START DATABASE SPACENAM
 - ☒ Executing commands
 - ☒ Executing commands: TSO
 - ☒ Executing commands: Batch
 - ☒ Executing commands: SDSF
- 9.2. Program Preparation
 - ☒ Db2 program preparation
 - ☒ Source program
 - ☒ Precompiler
 - ☒ Compile and link edit
 - ☒ Database Request Module
 - ☒ Bind plan
 - ☒ Bind plan
 - ☒ EXPLAIN
 - ☒ Program execution

Unit 10 Db2 Utilities

- Utility categories
- Utility and Tools Packaging
- Standalone utilities
- Service aids and samples
- Online utilities
- UNLOAD utility

- UNLOAD control statement
- LOAD utility
- LOAD utility steps
- Restrictive states
- Db2| Utility Generator
- Utility Panel One
- Utility Panel Two
- Utility batch job
- DSNUPROC
- SYSUTIL table
- DISPLAY UTILITY command

Unit 11 Db2 Shutdown, Startup, and Recovery

- Buffer Pools and Logging
- Normal Db2 Shutdown
- Restart phases
- Starting Db2 after a normal shutdown
- Abnormal Db2 shutdown
- Starting Db2 after an abnormal shutdown
- Log initialization
- Current status rebuild
- Forward log recovery
- Backward log recovery
- Object backup and recovery
- COPY utility
- Table space recovery
- RECOVER utility

Unit 12 Course Summary

- z/OS topics
- Db2 for z/OS topics
- Other Db2 courses
- Db2 for z/OS certifications
- Course Evaluation

DB2 12 FOR ZOS: BASICS FOR DBA BEGINNERS

Course Code: 821633

VIRTUAL CLASSROOM LIVE

\$3,975 USD

5 Day

Virtual Classroom Live Outline

Unit 1 Introduction

- The modern Mainframe Environment
- Defining z/OS
- What are the benefits of z/OS-
- Typical z/OS workloads
- Batch processing
- Online Transaction Processing
- Job roles in the Mainframe environment
- z/OS Components and Services
- UNIX System Services
- The Parallel Sysplex Environment
- z/OS Management Interfaces

Unit 2 TSO/E and ISPF

- Emulators
- z/VM systems
- 2.1. TSO/E
 - ☒ TSO Logon panel
 - ☒ Changing passwords
 - ☒ Additional logon panel options
 - ☒ The Reconnect option
 - ☒ TSO READY prompt
 - ☒ TSO HELP command
 - ☒ LISTALC command
 - ☒ PROFILE command
 - ☒ Changing PROFILE
 - ☒ LOGOFF command

- ☒ Scripting support
- 2.2. ISPF
 - ☒ What is ISPF
 - ☒ ISPF command
 - ☒ ISPF Primary Option Menu
 - ☒ Primary Option Menu Areas
 - ☒ Action Bar
 - ☒ Options option
 - ☒ ISPF Settings
 - ☒ Global Color Change Utility
 - ☒ Function Keys
 - ☒ Option or Command Prompt
 - ☒ Keylist Utility
 - ☒ F3 Exit
 - ☒ F1 Help
 - ☒ F2 Split
 - ☒ ISPF Navigation Techniques
 - ☒ PFSHOW
 - ☒ More ISPF commands
 - ☒ Option listing
 - ☒ ISPF Command Shell
 - ☒ TSO Command Prefix

Unit 3 Data Sets

- Data sets
- Types of data sets
- DASD versus Tape
- Volumes
- Storage allocation
- Data set naming conventions
- Catalogs
- Storage Management
- Checkpoint
- 3.2. Sequential Data Sets
 - ☒ Creating data sets
 - ☒ Utility Selection Panel
 - ☒ Data Set Utility Panel
 - ☒ Creating a data set
 - ☒ Allocate New Data Set
 - ☒ Creating a sequential data set
 - ☒ Editing a sequential data set
 - ☒ ISPF Editor
 - ☒ ISPF Editor primary commands
 - ☒ ISPF Editor line commands
 - ☒ Data Set List Utility
 - ☒ Data set name wild cards

- ☒ Data Set List Utility
- ☒ DSLIST results
- ☒ Select Action
- ☒ HELP on Line Commands
- ☒ DSLIST by volume
- 3.3. Partitioned Data Sets
 - ☒ Partitioned data sets
 - ☒ Creating a PDS
 - ☒ PDS members
 - ☒ Creating a PDS member - Library Utility Panel
 - ☒ DSLIST Utility
 - ☒ PDS Member List
 - ☒ Member Actions
- 3.4. VSAM Data Sets
 - ☒ VSAM data sets
 - ☒ VSAM data set components
 - ☒ Creating a VSAM data set

Unit 4 JCL and SDSF

- 4.1. JCL
 - ☒ Batch Jobs versus Online Transactions
 - ☒ Batch job activities
 - ☒ Creating the batch job
 - ☒ JCL: Job Control Language
 - ☒ Statement format
 - ☒ JOB statement
 - ☒ EXEC statement
 - ☒ DD statement
 - ☒ Instream Input Data Set
 - ☒ Instream Output Data Set
 - ☒ DD DUMMY
 - ☒ Sample Jobstream 1
 - ☒ Sample Jobstream 2
 - ☒ Submitting the job
 - ☒ Notification
- 4.2. SDSF
 - ☒ SDSF
 - ☒ SDSF Primary Option Menu
 - ☒ Output and Held queues
 - ☒ PREFIX command
 - ☒ Working with queue query
 - ☒ Select command
 - ☒ Canceling or Purging output
 - ☒ Sample jobstream 1 revisited
 - ☒ Sample jobstream 2 revisited

Unit 5 Db2 Relational Database Concepts

- Relational Database Systems
- Db2 for z/OS and Db2 family
- The Db2 Optimizer
- Benefits of Db2 for z/OS
- Database
- Tables
- Indexes
- Primary Key
- Relationships
- Referential Integrity
- Integrity Rules
- Data domains
- Table scan access
- Index access
- Interacting with Db2
- Transactions

UNIT 6 Structured Query Language (SQL) and SPUFI

- Structured Query Language (SQL)
- SQL categories
- SELECT statement
- SELECT list
- FROM clause
- Simple SELECT statement
- SUBSTR function
- SELECT with SUBSTR function
- WHERE clause
- SELECT with WHERE clause
- IN operator
- WHERE with IN operator
- BETWEEN operator
- WHERE with BETWEEN operator
- LIKE operator
- WHERE with LIKE operator
- ORDER BY clause
- The NULL value
- SELECT with ORDER BY
- Putting it all together
- Joining tables
- Correlation Names
- Additional criteria
- Cartesian products
- Executing SQL
- SQLCODE

Unit 7 Db2 Objects

- 7.1. Databases and Table Spaces
 - ☒ Db2 objects
 - ☒ The Db2 catalog
 - ☒ Storage group
 - ☒ Database
 - ☒ Table Space
 - ☒ Segmented table space
 - ☒ Partitioned table space
 - ☒ Partition By Growth table space
 - ☒ Partition By Range table space
 - ☒ VSAM data sets
- 7.2. Tables, Indexes and Views
 - ☒ Table
 - ☒ Partitioned table
 - ☒ Index
 - ☒ Clustering index
 - ☒ Index space
 - ☒ Partitioned index
 - ☒ View
- 7.3. Qualified names, Implicit Object Creation, and SQL statements
 - ☒ Qualifying Db2 objects
 - ☒ Implicit object creation
 - ☒ DML statements
 - ☒ Insert statement
 - ☒ UPDATE statement
 - ☒ DELETE statement
 - ☒ COMMIT statement
 - ☒ ROLLBACK statement

Unit 8 The Db2 System

- The Db2 system
- System parameters
- Required address spaces
- Optional address spaces
- Started tasks
- Master address space
- System databases
- Directory
- Catalog
- System database data sets
- Data pages
- Buffer pools
- Buffer pools: Read operations
- Buffer pools: Write operations
- System buffer pools
- Db2 logging

- Bootstrap data set
- Db2 locking
- Integrity issues
- Transaction locks
- Isolation Levels
- User interfaces

Unit 9 Db2 Commands and Program Preparation

- Accessing Db2
- 9.1. Db2 Commands
 - ☒ Db2 commands
 - ☒ Command format
 - ☒ DISPLAY DATABASE
 - ☒ DISPLAY DATABASE SPACENAM
 - ☒ Other DISPLAY DATABASE options
 - ☒ DISPLAY BUFFERPOOL
 - ☒ DISPLAY DDF
 - ☒ DISPLAY LOG
 - ☒ DISPLAY THREAD
 - ☒ ARCHIVE LOG
 - ☒ STOP DATABASE
 - ☒ START DATABASE
 - ☒ STOP DATABASE SPACENAM
 - ☒ START DABATASE SPACENAM
 - ☒ Executing commands
 - ☒ Executing commands: TSO
 - ☒ Executing commands: Batch
 - ☒ Executing commands: SDSF
- 9.2. Program Preparation
 - ☒ Db2 program preparation
 - ☒ Source program
 - ☒ Precompiler
 - ☒ Compile and link edit
 - ☒ Database Request Module
 - ☒ Bind plan
 - ☒ Bind plan
 - ☒ EXPLAIN
 - ☒ Program execution

Unit 10 Db2 Utilities

- Utility categories
- Utility and Tools Packaging
- Standalone utilities
- Service aids and samples
- Online utilities
- UNLOAD utility

- UNLOAD control statement
- LOAD utility
- LOAD utility steps
- Restrictive states
- Db2| Utility Generator
- Utility Panel One
- Utility Panel Two
- Utility batch job
- DSNUPROC
- SYSUTIL table
- DISPLAY UTILITY command

Unit 11 Db2 Shutdown, Startup, and Recovery

- Buffer Pools and Logging
- Normal Db2 Shutdown
- Restart phases
- Starting Db2 after a normal shutdown
- Abnormal Db2 shutdown
- Starting Db2 after an abnormal shutdown
- Log initialization
- Current status rebuild
- Forward log recovery
- Backward log recovery
- Object backup and recovery
- COPY utility
- Table space recovery
- RECOVER utility

Unit 12 Course Summary

- z/OS topics
- Db2 for z/OS topics
- Other Db2 courses
- Db2 for z/OS certifications
- Course Evaluation

Jun 2 - 6, 2025 | 9:30 AM - 5:30 PM EST

Oct 6 - 10, 2025 | 9:30 AM - 5:30 PM EST



DB2 12 FOR ZOS: BASICS FOR DBA BEGINNERS

Course Code: 821633

PRIVATE GROUP TRAINING

5 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

Date created: 4/18/2025 6:09:32 AM

Copyright © 2025 Global Knowledge Training LLC. All Rights Reserved.