

## DB2 10.5 pureScale Implementation and Control for DB2 LUW Administrators

**Duration: 2 Days**    **Course Code: CL801G**

### Overview:

This course is designed to prepare DB2 Linux, UNIX and Windows database administrators for planning, installing, managing and monitoring a DB2 pureScale database system. This course covers the features and functions of the DB2 pureScale feature for DB2 10.5, including fixpack levels 4 and 5. This is a lecture-only course.

### Target Audience:

This intermediate course is intended for experienced DB2 LUW database administrators.

### Objectives:

- List the basic components and functions in a DB2 pureScale database system, including DB2 Cluster Services and GPFS file systems
- Describe the types of information managed in the Cluster Caching Facility (CF) for a DB2 pureScale database
- Explain how page reads utilize local buffer pools on a member as well as the global buffer pool on the CF
- Describe the workload balancing and automatic client routing options used for application connections to a pureScale database
- Describe the use of local and global locking to support application concurrency in a DB2 pureScale database
- List the components that interact with DB2 Cluster Services to manage cluster availability
- Use db2start and db2stop commands to manage the components of a DB2 pureScale cluster
- Examine the db2instance command report to check the current status of the pureScale cluster
- Configure database manager and database member options for a DB2 pureScale cluster
- Choose the cluster interconnect network options for the pureScale cluster
- Estimate Cluster Caching Facility (CF) CPU and memory resources that will be needed to support your databases in the cluster
- Perform an installation of DB2 pureScale creating a DB2 instance and configuring the cluster hosts
- List and describe the steps required to migrate an existing non-pureScale database system to a DB2 10.5 pureScale cluster
- Select the best method to migrate any non-automatic storage table spaces into automatic storage table spaces based on the application requirements and current database structure
- Plan and implement High Availability Disaster Recovery (HADR) for a DB2 pureScale database
- Describe how a DB2 pureScale cluster handles failures of members
- Explain how the DB2 Cluster Services component detects various cluster problems like network failures or shared file system issues
- Create a new DB2 pureScale database using GPFS based file systems
- Use the db2cluster command to add and drop disk devices with DB2 managed GPFS file systems
- Monitor application activity in a DB2 pureScale database cluster
- Utilize db2pd commands to display Cluster Caching Facility memory allocations and connection pool information
- Use the db2instance and db2cluster commands to show the current status and alter information for database members and cluster hosts
- Explain the states shown in the db2instance -list report for pureScale members, hosts and CFs
- Locate the various message logs for the DB2 instance, GPFS and TSA
- Use the db2cluster command to list and clear active alerts
- Implement transaction-level workload balancing for application client systems to improve cluster resource usage
- Set DB2 client options for non-Java applications in the db2dsdriver.cfg file
- Configure client affinity for application systems that need to control connections to specific database member host systems
- Explain how member subsets can be used to manage how an application views the topology of the pureScale database environment

- Plan for online or offline database BACKUP for a DB2 pureScale database
- Use the RESTORE utility or the RECOVER DATABASE command to perform database recovery or to make a database copy for a pureScale database

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## Prerequisites:

You should have taken:

- DB2 10 for LUW: Basic Administration for Linux and Windows (CL2X3G) or
  - DB2 10 for LUW: Basic Administration for AIX (CL213G) or
  - DB2 10 for Linux, UNIX, and Windows Quickstart for Experienced Relational DBAs (CL485G)
- Or have equivalent experience.

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## Content:

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| ■ Unit 1: DB2 pureScale Database Introduction       | ■ Unit 5: Installation for a DB2 pureScale Database Cluster            | ■ Unit 9: Storage Management for a DB2 pureScale Database Cluster             |
| ■ Unit 2: Inside a DB2 pureScale database           | ■ Unit 6: Migration to DB2 pureScale from a non-pureScale DB2 database | ■ Unit 10: DB2 pureScale monitoring and performance management                |
| ■ Unit 3: Managing a DB2 pureScale Database Cluster | ■ Unit 7: DB2 pureScale Database Backup and Recovery Considerations    | ■ Unit 11: Problem Determination for a DB2 pureScale Database Cluster         |
| ■ Unit 4: Planning a DB2 pureScale Database Cluster | ■ Unit 8: DB2 pureScale High Availability Behavior                     | ■ Unit 12: Managing DB2 pureScale Client Availability and Workload Management |

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## Further Information:

For More information, or to book your course, please call us on 353-1-814 8200

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