DB2 pureScale Implementation and Management for DB2 LUW Administrators

**FORM OF TRAINING**

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<th>MATERIALS</th>
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<td>Digital materials</td>
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**LOCATIONS**

Krakow - 5 Tatarska Street, II floor, hours: 9:00 am - 4:00 pm
Warsaw - 17 Bielska Street, hours: 9:00 am - 4:00 pm

**TRAINING GOALS:**

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.

- 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 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

Plan and implement High Availability Disaster Recovery (HADR) for a DB2 pureScale database

Describe how a DB2 pureScale cluster handles failures of members

Describe 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

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

CONSPECT:

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

Requirements:

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.

Difficulty level

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