

## **ORACLE GOLDENGATE 11G R1 COURSE CONTENT**

### ❖ **REQUIRED PREREQUISITES:**

- Familiarity with Oracle Database

### ❖ **COURSE OBJECTIVES:**

- Use Oracle GoldenGate utilities
- Perform data transformation using Oracle GoldenGate
- Run and manage Oracle GoldenGate instances
- Describe Oracle GoldenGate solutions
- Describe Oracle GoldenGate architecture
- Install Oracle GoldenGate software on Linux
- Configure Oracle GoldenGate for Oracle-to-Oracle replication

## **COURSE TOPICS**

### ❖ **ORACLE GOLDENGATE 11GR1 INTRODUCTION:**

- Introducing Oracle GoldenGate Features and Functionality
- Describing Oracle Middleware for Business Intelligence
- Describing Oracle GoldenGate High Availability and Disaster Tolerance Solutions
- Describing Oracle GoldenGate Real-time Data Integration Solutions

### ❖ **UNDERSTANDING ORACLE GOLDENGATE: OVERVIEW:**

- Describing Oracle GoldenGate Functionality and Components
- Listing Supported Databases and Platforms
- Describing the Oracle GoldenGate Product Line

### ❖ **ORACLE GOLDENGATE ARCHITECTURE:**

- Describing Oracle GoldenGate Process Groups
- Explaining Change Capture and Delivery (with and without a Data Pump)
- Explaining Initial Data Load
- Explaining Batch and Online Operation
- Explaining Oracle Golden Gate Check pointing
- Describing Commit Sequence Number (CSN)
- Describing Oracle Golden Gate Files

### ❖ **INSTALLING ORACLE GOLDENGATE:**

- Installing Oracle Golden Gate on Linux
- Preparing the Operating System
- Running Golden Gate Commands from the GGSCI Prompt,
- Using Obey Files and OS Shell
- Get help information on GGSCI commands
- Identify the types of GGSCI commands available

### ❖ **CONFIGURATION OVERVIEW AND PREPARING THE ENVIRONMENT:**

- Describing the High-level Configuration Steps
- Configuring and Starting the Manager Process
- Generating a Source Definitions File
- Preparing a Source Database for Transaction Capture

### ❖ **CONFIGURING CHANGE CAPTURE:**

- Describing the Extract Process
- Marking Tables with TRANSDATA
- Configuring Extract to Access Logs on Oracle ASM
- Configuring and Starting an Extract Process

- Addind Local and Remote Trails
- Configuring and Starting an Extract Data Pump

❖ **CONFIGURING INITIAL LOAD:**

- Describing Oracle GoldenGate Initial Load Methods
- Describing a Variety of Database-specific Methods
- Explaining the Advantages of Oracle GoldenGate Methods
- Configuring an Initial Load using Oracle GoldenGate

❖ **CONFIGURING CHANGE DELIVERY:**

- Explaining the Replicat Process
- Explaining Adding, Configuring and Starting a Replicat Process
- Describing Avoid and Handle Collisions Between Changes and the Initial Load Data

❖ **EXTRACTING TRAILS AND FILES:**

- Describing and Contrast Extract Trails and Files
- Investigating Different Formats
- Viewing Extract Trails and Files with Logdump
- Reversing the Sequence of Operations in an Extract Trail or File to Back out Changes

❖ **WORKING WITH PARAMETERS:**

- Editing Parameter Files
- Contrasting GLOBALS with Process Parameters
- Describing Commonly-used Parameters for GLOBALS, Manager, Extract and Replicat

❖ **USING DATA SELECTION AND FILTERING:**

- Selecting and Filtering Data for Replication
- Mapping Columns Between Different Schemas
- Using Built-in Functions
- Using SQLEXEC to Interact Directly with a Database

❖ **USING ADDITIONAL TRANSFORMATION CONCEPTS:**

- Creating and Invoking Macros
- Setting and retrieving User Tokens
- Running User Exits in GoldenGate Processes
- Replicating Oracle Sequences

❖ **INTRODUCING CONFIGURATION OPTIONS:**

- Using BATCHSQL to Speed Delivery
- Understanding Data Compress Across the Network
- Enabling Message, Trail and Password Encryption
- Using Event Records to Automatically Trigger Actions

❖ **CONFIGURING BIDIRECTIONAL REPLICATION:**

- Understanding Bidirectional Configuration
- Detecting and Avoid Loops
- Avoiding, Detecting, and Handling Conflicts
- Handling Identity Types

❖ **SETTING UP DDL REPLICATION:**

- Understanding the Concept of DDL Replication
- Explaining the Requirements for Oracle DDL Replication
- Describing GoldenGate Options for DDL Replication
- Explaining DDL String Substitution

❖ **TUNING AND TROUBLESHOOTING:**

- Controlling Command Persionns
- Managing Trail Files
- Automating Process Setup
- Restarting Oracle GoldenGate
- Handling TCP/IP Errors
- Using Reporting and Statistics
- Monitoring Processes, Lags and Error Messages
- Features of GoldenGate Management Pack

