

KNOWLEDGE
POWER



Introduction to Oracle Streams
Oracle Streams Information Capture
Oracle Streams Staging and Propagation
Oracle Streams Information Consumption
How Rules Are Used in Oracle Streams
Rule-Based Transformations
Advanced Capture Process Concepts
Advanced Queue Concepts
Advanced Propagation Concepts

ORACLE 11g Streams

Advanced Apply Process Concepts
Advanced Rule Concepts
Oracle Streams High Availability Environments
Introduction to Oracle Streams Administration
Managing Oracle Streams Implicit Capture
Managing Staging and Propagation
Managing Oracle Streams Information Consumption
Managing Rules
Managing Rule-Based Transformations
Monitoring an Oracle Streams Environment
Identifying Problems in an Oracle Streams Environment



Data Softech Inc

DATA SOFTECH INCORPORATION
12 PERRINE ROAD, SUITE 106
MONMOUTH JUNCTION
NJ 08852

PHONE 1-877-463-3765
1-732-823-4793
FAX 1-732-862-4607

WEBSITE
www.datasoftech.com
EMAIL
contact@datasoftech.com

ORACLE 11g Streams

The Oracle Streams class covers methods that reveal detail about how the Oracle replicate database objects in standalone as well as distributed environments.

Lesson Plan

DAY 1

Introduction to Oracle Streams

- Overview of Oracle Streams
- What Can Oracle Streams Do?
- Capture Messages at a Database
- Stage Messages in a Queue
- Propagate Messages from One Queue to Another
- Consume Messages
- Detect and Resolve Conflicts
- Transform Messages

Oracle Streams Information Capture

- Types of Information Captured with Oracle Streams
- Instantiation in an Oracle Streams Environment
- Implicit Capture with an Oracle Streams Capture Process
- Introduction to Capture Processes
- Capture Process Rules
- Data Types Captured by Capture Processes
- Local Capture and Downstream Capture
- Capture User
- Capture Process States
- Capture Process Parameters
- Synchronous Capture and Queues
- Synchronous Capture Rules

Oracle Streams Staging and Propagation

- Queues
- ANYDATA Queues and Typed Queues
- Persistent Queues and Buffered Queues
- Queues and Oracle Streams Clients
- Message Propagation Between Queues
- Propagation Rules
- Queue-to-Queue Propagations
- Ensured Message Delivery
- Directed Networks
- Queue Forwarding and Apply Forwarding

Session Hours

5 days

Who are we?

Data Softech Incorporation is a dynamic and progressive organization committed to provide an affordable and flexible Database Administration, Solution, Consultation and Employee or Staff training to meet the client needs. We have been working with major Fortune 500 companies.

ORACLE 11g Streams

DAY 2



Trainers

Our database training experts come from various IT backgrounds and possess market-specific IT qualifications. These specialists have worked on various data management fields with leading database industries in Information Technology.

Tutorials

DSI custom designed tutorials and live training on key projects helps the learners gain a quality and accountable experience with various projects.



Oracle Streams Information Consumption

- Implicit and Explicit Consumption
- Types of Information Consumed with Oracle Streams
- Captured/Persistent/Buffered LCRs
- Persistent User Messages
- Buffered User Messages
- Apply Process Rules
- DML Handlers
- Error Handlers
- DDL Handlers
- Message Handlers
- Precommit Handlers
- Apply Process Components
- Reader Server States
- Coordinator Process States
- Apply Server States
- Apply User
- Apply Process Parameters
- The Error Queue

How Rules Are Used in Oracle Streams

- Overview of How Rules Are Used in Oracle Streams
- System-Created Rules
- Global Rules
- Schema Rules
- Table Rules
- Subset Rules
- Row Migration and Subset Rules
- Message Rules
- Message Rule Example

ORACLE 11g Streams



Training Benefits

Our certified and highly experienced trainers will help you equip with the IT knowledge and database management solutions that helps you independently assess and utilize the updated technology skills in any business-IT firm. We provide state-of-art infrastructure to incorporate our training practices.

Affordable Training

DSI custom designs the training addressing the clients, their staff or learners needs thus maximizing the benefit they gain from their training investment.



Rule-Based Transformations

- Declarative Rule-Based Transformations
- Custom Rule-Based Transformations
- Required Privileges for Custom Rule-Based Transformations
- Multiple Rule-Based Transformations
- Transformation Ordering
- Considerations for Rule-Based Transformations

Advanced Capture Process Concepts

- Multiple Capture Processes in a Single Database
- Capture Process Checkpoints
- The Oracle Streams Data Dictionary

Advanced Queue Concepts

- Secure Queues and the SET_UP_QUEUE Procedure
- Secure Queues and Oracle Streams Clients
- Transactional and Nontransactional Queues
- Commit-Time Queues
- When to Use Commit-Time Queues
- Transactional Dependency Ordering During Dequeue
- How Commit-Time Queues Work

Advanced Propagation Concepts

- Propagation Jobs
- Propagation Scheduling and Oracle Streams Propagations
- Propagation Jobs and RESTRICTED SESSION
- Oracle Streams Data Dictionary for Propagations

Advanced Apply Process Concepts

- Apply Process Creation
- Apply Processes and Dependencies

DAY 3

ORACLE 11g Streams



Training Courses

Oracle 11g New features

Oracle 11g R2 RAC Administration

Oracle 11g R2 Administration I

Oracle 11g R2 Administration II

Oracle 11g R1 RAC Administration

Oracle 11g/10g Performance tuning

Oracle 11g/10g Streams

Oracle 11g/10g Data Guard

Oracle 11g/10g Backup

Oracle 11g/10g Recovery using RMAN

Oracle Application server Administration I

Oracle Application server Administration II

Oracle 10g Sql Tuning

Oracle Apps 11i System Administration

Installations



Advanced Rule Concepts

- The Components of a Rule
- Rule Condition
- Variables in Rule Conditions

Oracle Streams High Availability Environments

- Overview of Oracle Streams High Availability Environments
- Protection from Failures
- Oracle Streams Replica Database

Introduction to Oracle Streams Administration

- Oracle-Supplied PL/SQL Packages
- Oracle Streams Data Dictionary Views
- Oracle Streams Tool in Oracle Enterprise Manager

Managing Oracle Streams Implicit Capture

DAY 4

- Managing a Capture Process
- Starting and stopping a Capture Process
- Setting a Capture Process Parameter
- Dropping a Capture Process

Managing Staging and Propagation

- Managing and removing Queues
- Managing Oracle Streams Propagations and Propagation Jobs
- Starting and stopping a Propagation
- Altering the Schedule of a Propagation Job
- Dropping a Propagation

Managing Oracle Streams Information Consumption

- Starting and Stopping an Apply Process
- Setting an Apply Process Parameter
- Managing a DML Handler
- Managing a DDL Handler
- Creating and Managing an Error Handler
- Setting an Error Handler
- Managing Apply Errors
- Retrying and Deleting Apply Error Transactions
- Dropping an Apply Process

ORACLE 11g Streams

DSI Activities

Database Management
Database Monitoring
Database Administration
Performance Tuning
Database Backup
Recovery Procedures
Quality Assessment
System Analysis
Database Upgrades
Database Patching
Cloning and Refresh
Instance Management
Security Administration
Schema Maintenance
Application Development
Server Hosting
Web Development
Domain Registration
E-business solutions
Business Process Outsourcing
Database Migration
Strategic IT Planning
Consultation and Advices

Managing Rules

- Creating and Managing Rule Sets
- Adding a Rule to a Rule Set
- Removing a Rule from a Rule Set
- Dropping a Rule Set
- Managing Rules
- Creating a Rule
- Dropping a Rule

DAY 5

Managing Rule-Based Transformations

- Removing Declarative Rule-Based Transformations
- Managing Custom Rule-Based Transformations
- Creating a Custom Rule-Based Transformation
- Altering a Custom Rule-Based Transformation
- Unsetting a Custom Rule-Based Transformation

Monitoring an Oracle Streams Environment

- Monitoring the Oracle Streams Topology and Performance
- Monitoring Oracle Streams Implicit Capture
- Monitoring Oracle Streams Queues and Propagations
- Monitoring Oracle Streams Apply Processes
- Monitoring Rules
- Monitoring Rule-Based Transformations
- Monitoring Other Oracle Streams Components
- Monitoring Oracle Streams Performance Using AWR and Statspack

Identifying Problems in an Oracle Streams Environment

- Viewing Oracle Streams Alerts
- Using the Streams Configuration Report and Health Check Script
- Checking the Trace Files and Alert Log for Problems