



Oracle GoldenGate 12c : Configuration avancée

Description

Prix : 3 450 €HT

Durée : 4 jours

Code de Référence : D89113

Catalogue Haute Disponibilité – Sécurité, Application Development

Cette formation Oracle GoldenGate 12c vous permettra d'acquérir les compétences nécessaires pour l'installation et la configuration. En interagissant avec les meilleurs instructeurs Oracle, vous pourrez poser des questions tout en apprenant à consolider votre compréhension.

Objectifs de la formation

A l'issue de cette formation Oracle, vous serez capable de :

- Familiarize the student with Data Conflict Avoidance Techniques
- Set up and manage advanced deployment models, such as 3-node multi master replication configurations
- Integrate Oracle GoldenGate with Oracle cluster configurations
- Explain Oracle GoldenGate Advanced Configuration options
- Describe and take advantage of the Integrated Capture feature to extract complex data types and compressed data
- Introduce the new Integrate Replicat feature for improved data delivery
- Configure and implement the Oracle GoldenGate Event Marker system, to enable data transformation based on event records in the transaction logs or in the trail files
- Master Oracle GoldenGate facilities to detect and resolve data conflicts in active-to-active replication implementations
- Perform zero-downtime database migration

Public



Cette formation Oracle GoldenGate 12c s'adresse aux administrateurs de base de données, responsables de la configuration des systèmes, administrateurs de data warehouse et concepteurs de base de données.

Prérequis

Avoir suivi le cours Oracle GoldenGate 12c: Fundamentals for Oracle ou disposer des connaissances équivalentes.

Compréhension de l'anglais et du vocabulaire anglais spécifique IT.

Vous souhaitez faire vérifier vos prérequis ? Contactez-nous pour l'organisation d'un entretien téléphonique avec un de nos consultants formateurs.

Programme de la formation

Oracle GoldenGate Integrated Capture/integrated Delivery

- What is Oracle GoldenGate Integrated Capture?
- Why it is Needed and What Additional Replication Features it Makes Possible
- How to Prepare a Database for Integrated Capture – Creation of
- Users, Assignments of Roles and Privileges, etc
- Oracle GoldenGate Integrated Capture Deployment Modes
- Integrated Replicat/Apply Architecture
- Integrated Replicat: How it works
- Integrated Delivery in Detail

Oracle Goldengate With Oracle Real Application Clusters Configuration

- Oracle RAC, Oracle GoldenGate and Business Continuity
- Oracle GoldenGate Used in Combination with Oracle RAC
- Oracle GoldenGate and the Oracle Database File System (DBFS)
- Oracle DBFS and Oracle Clusterware
- Configuring Oracle GoldenGate using the DBFS file systems

Oracle GoldenGate Event Marker System

- Starting, Suspending, Stopping Processes, Performing a
- Transformation, Reporting Statistics, and Capturing Lag History Using the Event



Marker System

- Invoking Stored Procedures When Specific Events Occur Using SQLEXEC
- Activating Tracing Following the Exceeding of a Data Threshold
- Running OS Shell Commands at the Occurrence of Specific Data-Driven Events
- Extracting Details Analysis of the TABLE, MAP, FILTER, WHERE and SQLEXEC Statements
- Implementing Event Marker Actions on the Extraction Side and on the Delivery Side of Replication

Data Mapping, Data Selection/Filtering and Data Transformation

- TABLE (for Extract) and MAP (for Replicat) Options Which Allow for Data Selection
- COLMAP and COLMATCH Options
- Exploring Simple Filtering (Achieved Through the WHERE Clause) and Complex Filtering (Using the FILTER Clause)
- Data Transformation Functions: Enabling Concatenation, Substitution, Case Changing, Numeric Conversion and Date Conversion
- SQLEXEC Parameter to Invoke Stored Procedures or to Perform Native SQL Queries

Custom Behavior Through User Exits

- The CUSEREXIT Parameter and its Options
- User Exit Mandatory Parameters: EXIT_CALL_TYPE,
- EXIT_CALL_RESULT and EXIT_PARAMS
- The EXIT_CALL_PROCESS_RECORD Function
Oracle GoldenGate Callback Routines Invoked Through ERCALLBACK
- The usrdecs.h « C » Include File
- JMS and Flat File Using Oracle GoldenGate Application Adapters
- Connecting to the Java Subsystem Through the Java Native Interface (JNI)

Configuring Zero-Downtime Migration Replication

- Zero-Downtime Migration Prerequisites
- Zero-Downtime Migration Topology
- Configuring Initial Setup and Required Steps
- Configuring Primary Extract, Data pump and Replicat for Fallback
- Simulating fallback

Bidirectional Replication: Two-Node Configuration



- Bi-Directional Replication
- Data Conflict Types
- Getting Before Image Information from Source Database
- Using RESOLVECONFLICT
- Handling UPDATEROWEXISTS in Conjunction with USEDELTA,
- USEMAX, and IGNORE
- Exceptions MAP Statement
- Creating and Populating Exception and Discard Tables

Conflict Detection and Resolution - Custom Techniques

- Workload Partitioning
- Geographic or Topic-Based Segmentation
- Primary Key Generation
- Custom Conflict Resolution Techniques: Quantitative Methods for
- Conflict Resolution and Data Convergence
- Automatic Conflict Resolution Based on Time stamp or Trusted Source
- Automatic Data Convergence of Numeric Values Based on Additive Value or Average Value

Multi-Master Replication Topology - Three-Node Configuration

- Handling Multi-Master Configurations: Additional Limitations Compared to Active-Active
- Dealing with the Lack of Support for DDL Replication
- Data Convergence and Latency in a Multi-Master Topology
- Decreasing Complexity by Enabling Segmentation and Node-Based Partitioning in the Application
- Minimizing Data Conflict by Minimizing Latency
- Resolving Simple Conflicts Using RESOLVECONFLICT with USEMIN, USEMAX and USEDELTA
- Combining RESOLVECONFLICT with UPDATEROWEXISTS, INSERTROWEXISTS, DELETEROWEXISTS, UPDATEROWMISSING and DELETEROWMISSING Clauses to Identify Source of Conflict Errors
- Increasing Troubleshooting Information Captured in Error and Discard Tables Using Oracle GoldenGate Facilities

Active Data Guard and Oracle GoldenGate. How to achieve Maximum Availability



- Data Guard Fast Start Fail Over (FSFO)
- Role Transition Complexity – Oracle GoldenGate to the Rescue
- Oracle Bundled Agent (XAG)
- Oracle Bundled Agent – The Key to Maximum Availability

Méthodes pédagogiques

Alternance d'apports théoriques et d'exercices avec un vaste choix d'exercices pratiques et de scénarios d'atelier permettent de mettre en œuvre les connaissances acquises.

La dernière version du support en anglais est accessible en ligne. Vous aurez à votre disposition un accès contenant tous les matériels de cours de votre formation, ainsi qu'un accès à 5 h de visionnage d'une autre formation de votre choix dans la même thématique. L'ensemble sera disponible pendant 90 jours.

Méthodes d'évaluation des acquis

Afin d'évaluer l'acquisition de vos connaissances et compétences, il vous sera envoyé un formulaire d'auto-évaluation, qui sera à compléter en amont et à l'issue de la formation. Un certificat de réalisation de fin de formation est remis au stagiaire lui permettant de faire valoir le suivi de la formation.

Les plus de cette formation

Integrate your organization's disparate data across heterogeneous databases for improved decision-making. Become more efficient at configuring and implementing the more advanced features of Oracle GoldenGate used together with the Oracle RDBMS 12c.