Oracle GoldenGate 19c

To succeed in today’s competitive environment, you need real-time information. This requires a platform that can unite information from disparate systems across your enterprise without compromising availability and performance. Oracle GoldenGate 19c is a high-performance software application for real-time transactional change data capture, transformation, and delivery, offering bidirectional data replication. The application enables you to ensure that your critical systems are operational 24/7, and the associated data is distributed across the enterprise to optimize decision-making.

REAL-TIME ACCESS TO REAL-TIME INFORMATION

Business-critical systems must offer the highest availability, ensure fast and easy access to the right data, and quickly adapt to changing business and IT demands. Transaction volume is increasing at an exponential rate as more business processes are conducted online. Many organizations need a better solution to collect and provide immediate access to the tremendous amount of enterprise data. Oracle GoldenGate 19c provides real-time capture, transformation, routing, and delivery of database transactions across heterogeneous systems and cloud. The software facilitates high performance, low-impact data movement with low latency to a wide variety of databases, platforms, and clouds while maintaining transaction integrity. Using Oracle GoldenGate with Oracle Streaming Analytics allows users to process and analyze large scale real-time information by using sophisticated correlation patterns, enrichment, and machine learning algorithms. It offers real-time actionable business insight on streaming data and automates action to drive today’s agile businesses.

Using Oracle GoldenGate 19c customers can reduce IT costs and risk, while achieving a faster time to value for operational and analytical systems. Oracle GoldenGate 19c for Oracle Databases leverages a microservices/REST based architecture to help companies address the continuous availability and real-time integration demands of enterprise systems, on-premise and in the cloud.

WHAT’S NEW IN ORACLE GOLDENGATE 19C (19.1.0)?

Oracle GoldenGate 19c’s new features include:

- Oracle Database 19c Support
- MySQL 8.0 certification
- Cross-Endian Support for Remote Integrated Extract for Oracle
- Centralized Key Management Service for Oracle Key Vault
- Target Initiated Paths to enable replication into secured networks
- New REST API Endpoints in the Microservices Architecture
- Capture Support for SQL Server Always On Read-Only Secondary Replicas
- Schema change tracking and monitoring long-running transactions for DB2

Key Capabilities
- Data High Availability
- Transaction Replication
- Data Warehouse Loading
- Data Lake Ingestion
- Real Time Data Transformation
- Data Operations (DataOps)
- Event Stream Analysis

Key Features of Oracle GoldenGate
- High-performance data replication
- Optimized for on-premise and cloud environments
- Support Heterogeneous sources and targets including Big Data
- ETL and JMS integration
- Out-of-Box Native Spark Based Stream Analytics Platform
- Highly secure with support for SSL and Encryption
- Flexible Topology Support
- High Performance Parallel Delivery for Oracle
- Simplified Active-Active implementation for Oracle

Key Benefits
- Enhance decision-making with real-time data
- Access mission-critical applications without disruption
- Increase IT flexibility with heterogeneous infrastructure support
- Enable high-performance data replication with minimal impact on production system
- Ensure transactional integrity across heterogeneous source and target systems
MAINTAIN CONTINUOUS AVAILABILITY OF CRITICAL SYSTEMS

Oracle GoldenGate 19c helps organizations eliminate the downtime caused by both unplanned and planned outages; and improve system performance and scalability. The software can be configured to support the following scenarios:

- **Zero-downtime operations.** Enable uninterrupted business operations during system upgrade, migration, and maintenance activities.
- **Scalable Active-Active architecture.** Synchronize changes made across 2 or more databases to scale out workloads, provide increase resilience and near instantaneous failover across multiple geographic regions.
- **Data distribution.** Replicate data for distributed applications in real time across geographies for reliable access to timely data.
- **Query offloading.** Ensure high performance for production systems while supporting read-only activities by replicating data between heterogeneous sources and targets.

ENABLE REAL-TIME DATA INTEGRATION ACROSS THE ENTERPRISE AND CLOUD

Oracle GoldenGate 19c captures and delivers real-time change data to data warehouses, operational data stores, reporting systems, and other online transaction processing (OLTP) databases with minimal performance impact. Real-time data access enables improved business insight and analytics.

- **Real-Time Data Warehouse.** Provide continuous, real-time capture and delivery of changed data between OLTP and data warehouse systems. Oracle GoldenGate 19c integrates easily with Oracle Data Integrator 19c Enterprise Edition and other extract, transform, and load (ETL) solutions. It is certified to capture from and deliver to Oracle Exadata, Autonomous Data Warehouse, and Autonomous Transaction Processing platforms to enable real-time data warehousing or data consolidation solutions.
- **Operational Reporting.** Offload reporting activity from production databases to lower cost of secondary systems with current data for real-time reporting.
- **Operational data integration.** Integrate operational data between OLTP systems in real-time. Enable service-oriented architectures, including Oracle SOA Suite, to operate with real-time data by publishing changed data.
- **Big Data Integration.** GoldenGate for Big Data provides real-time streaming integration to all major Big Data targets such as Apache Hadoop Ecosystem (HDFS, HBase, Hive), messaging infrastructure (Apache Kafka, JMS), NoSQL Databases (MongoDB, Cassandra and Oracle NoSQL), Elasticsearch, JDBC, Amazon Web Services Ecosystem (AWS S3, Kinesis, Redshift), Microsoft Azure Ecosystem, and cloud data warehouses (Google BigQuery, Snowflake).
- **Real-Time Streaming Analytics.** GoldenGate integrates seamlessly with Oracle Stream Analytics to enable users to identify events of interest by executing queries against event streams in real time. It allows for the creation of custom operational dashboards that provide real-time monitoring, transform streaming data, or raise alerts based on stream analysis.

CONCLUSION

Oracle GoldenGate 19c helps organizations harness the value of their IT investments and improve business operations by providing continuous access to mission-critical information in real time. With support for a wide array of continuous availability, disaster tolerance, and data integration scenarios, the software provides a modular foundation that easily scales to address the high-volume, low-impact data integration and replication challenges faced by enterprises today.

Related Products

The following products enable organizations to more completely optimize their solutions for access to real-time information:

- Oracle GoldenGate for Oracle
- Oracle GoldenGate for Mainframe
- Oracle GoldenGate for non-Oracle
- Oracle GoldenGate for Big Data
- Oracle Stream Analytics
- Oracle GoldenGate Foundation Suite (Veridata, Management Pack, Studio)
- Management Pack for Oracle GoldenGate
- Oracle Data Integrator
- Oracle Active Data Guard