

# Oracle GoldenGate Veridata

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Enable high-speed, low-impact, heterogeneous comparison &  
Repair using Oracle GoldenGate Veridata

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## Oracle GoldenGate Veridata

In today's complex, hybrid (Cloud and On-premises) IT environment with the same data stored in multiple locations, or while migrating the data from one system or application to another, some data discrepancies are almost inevitable. If not discovered and addressed, bad data can lead to poor decision-making; failed service level agreements; and ultimately, operational, financial, and legal risk. Oracle GoldenGate Veridata provides an easy-to-use yet powerful solution for identifying out-of-sync data before it negatively impacts the business. While Oracle GoldenGate Veridata can work independently of Oracle GoldenGate's real-time data integration and replication solutions, deployed together the products help ensure your most critical data is continuously available, up to-date, and consistent.

Oracle GoldenGate Veridata 12c is a high-speed, low-impact, heterogeneous data comparison, and repair solution. Working primarily outside of the database system it quickly identifies, reports on, and fixes data discrepancies between databases without interrupting the ongoing business processes automatically.

### Robust Architecture for Rapid Data Discrepancy Detection

Oracle GoldenGate Veridata introduces a patent-pending technology that operates against live databases to selectively compare datasets at very high speeds with very little impact on the infrastructure and then fix any out-of-sync data.

Through a graphical user interface, a user can quickly select pertinent tables or data fields on the source and target databases to begin the comparison process. As the data on the source and target continue to change due to ongoing data replication, Oracle GoldenGate Veridata identifies in-flight records to accurately report persistent discrepancies. Users have the flexibility to determine how to handle in-flight data based on their own business requirements.

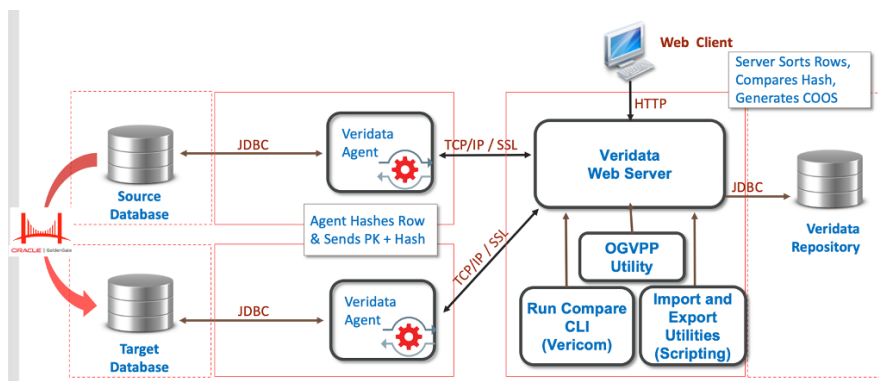


Image 1. GoldenGate Veridata Architecture

Oracle GoldenGate Veridata enables the rapid detection of inconsistent data across applications. It is a standalone product that runs independently of Oracle GoldenGate.

### Key features

- High-speed, efficient heterogeneous data comparison and repair
- Comparisons while both data sources are online
- Low impact by performing processing outside of the database
- Selective, Performant Parallel comparison for very large volume of data
- Flexible reporting for varying roles and access levels
- Intuitive Web interface
- Unattended Execution

## Key Features & Benefits

Oracle GoldenGate Veridata provides the following features and benefits to help organizations maintain data consistency across the enterprise.

### Heterogeneous Compare and Repair

Identify and fix out-of-sync data between heterogeneous database environments including Oracle, Oracle Autonomous Databases (ADW, ATP, DBCS), SQL Server, MySQL, DB2 LUW, DB2 for i, DB2 zOS, Informix, Sybase ASE and Teradata. For HP's Enscribe, SQL/MP systems and Big Data Hive Oracle GoldenGate Veridata offers heterogeneous data comparison without the repair feature.

### High Performance with Low Impact

On very dynamic or large systems, data can change faster than it can be compared. Oracle GoldenGate Veridata is capable of handling high data volumes without impacting the system and network infrastructure by quickly hashing, ordering, and comparing the data outside of the database system.

### Selective, Parallel Comparison using Automatic & Table Partition

Business applications use a variety of structures to store data in databases. To compare data across a variety of implementations, Oracle GoldenGate Veridata offers selective comparison capabilities and the ability to run multiple comparison tasks concurrently using Automatic Partitions. Unlike an all-or-nothing approach, Oracle GoldenGate Veridata allows users to pick and choose which rows and columns or database table partitions to compare, so only pertinent data is processed and relevant differences are highlighted.

### Nonintrusive Operation

With its ability to compare in-flight transactions, Oracle GoldenGate Veridata supports databases that are in use without interrupting business operations. Combining a light footprint and ground breaking technology, the application imposes minimal impact on technology infrastructure.

### Enhance Compliance and Auditing Procedures

As compliance requirements expand, corporations and their executives are expected to maintain extraordinary levels of accountability. Oracle GoldenGate Veridata helps companies ensure the accuracy of the enterprise data reflected in their statements, so they can quickly and confidently comply with regulatory demands.

### Real-time Results

With Oracle GoldenGate Veridata, comparison status and statistics are available via real-time updates. Graphical illustrations and detailed reports clearly convey the key results and specific data disparities so that IT can take immediate corrective action. If there are no inconsistencies, users can document the accuracy of their data for regulatory compliance reporting needs.

## Key Benefits

- Enhance Enterprise Data Integrity
- Reduce the time and resources required for data validation
- Non-intrusive operation to enable real-time data comparison without impacting performance
- Compliance & Auditing procedures are easy to maintain
- Validate data migration with confidence

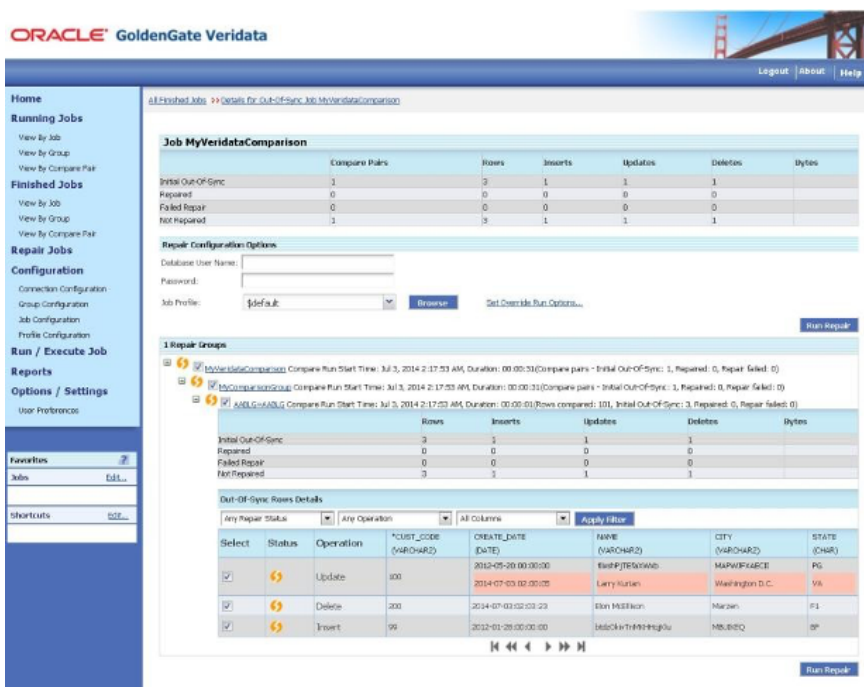


Image 2. GoldenGate Veridata Dashboard showing Data mismatch

## Related products

The following are Oracle GoldenGate Veridata family products

- Oracle GoldenGate Foundation Suite
- Oracle GoldenGate Management Pack
- Oracle GoldenGate for Oracle
- Oracle GoldenGate for non-oracle
- Oracle GoldenGate for Big Data
- Oracle GoldenGate Marketplace
- Oracle GoldenGate Stream Analytics

## Generate Repair SQL

The new generate repair SQL feature in Oracle GoldenGate Veridata generates the repair SQL statements that you can execute by yourself on any of other database tools. It allows you to review the repair SQL statements prior to updating the database environments. This option is in addition to the existing automated repair functionality provided by Veridata. It allows users to fix out-of-sync data with a single click and gives the ability to select which tables and rows should be repaired and when. By accelerating the resolution of data discrepancies, it further increases IT productivity.

## Delta Comparison

Oracle GoldenGate Veridata compares a source database table to the target database table. When all the rows in the table are compared, it is a Full Comparison Job. During the subsequent runs of a comparison job, the comparison of the tables can be performed based on what has changed in the tables from previous job run; these jobs are Delta Processing Jobs. Delta processing is suitable for use with very large Enscribe files and SQL tables that, otherwise, would take long time to Process.

## Scripting Tool

The scripting tool allows users to bypass the interface and bulk load comparison configurations from an XML file directly into the Oracle GoldenGate Veridata repository. This reduces the time required to define repetitive tasks, creates reusable configurations, and ensures that the test configuration mirrors the production environment. The existing GoldenGate users can create comparison pairs from their existing Parameter files to boost the productivity and consistency across various replication and verification tools.

## Perform Data Migration Validation Before Switching Over

Any time data is relocated or consolidated, it runs the risk of becoming invalidated or lost. The larger and more complex these migrations are, the greater the risk. These data migration events are also prime opportunities to ensure legacy data has not been stored using out of bounds national characters or bad dates, which often result in unusable data or nulls. This type of invalid legacy data is the most common issue Oracle GoldenGate Veridata discovers; its cause often lost in history.

Before moving users to a new system, it is prudent to first ensure that all data, new and old, has been validated and repaired.

## Make Sure High Availability Also Means Highly Accurate Data

Fast bulk load operations that bypass transaction (redo) logs on source systems, evolving conflict detection routines in multi-master replication configurations, and human error are common causes of why some of the standby systems in high availability (HA) solutions become out of sync. Using Oracle GoldenGate Veridata on a regular basis for HA systems helps quickly identify and fix data discrepancies so that IT teams focus on identifying and fixing their root causes.

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