

## Release Notes

This document describes the new features, major changes, and the known issues in Oracle GoldenGate Veridata Release 12c (12.2.1.4.x).

### New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.x) Releases

This topic lists the new features and enhancements in the following releases of Oracle GoldenGate Veridata:

#### New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.240430) — April 2024

##### **Support for Fetching COOS rows using Temporary Table**

To optimize the performance of fetching of rows from the Oracle database during the confirm-out-of-sync phase, specifically for table with no primary key or unique key, by default the coos strategy is selected as coos join. For more information, see [Fetching COOS rows using Temporary Table](#) in *Using Oracle GoldenGate Veridata* guide and Server Parameters for [Confirm Out-of-Sync Fetch Strategy](#) in the *Administering Oracle GoldenGate Veridata* guide.

##### **Delta Processing support provided for ORA\_ROWSCN even when ROWDEPENDENCIES is disabled**

For Oracle Database, the ORA\_ROWSCN pseudo delta column is supported, and selected by default even when ROWDEPENDENCIES is disabled for that table. For more information, see [rowscn](#) in the *Administering Oracle GoldenGate Veridata* guide.

#### New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.230922) — September 2023

##### **Support for Vericom to include option to repairsql when running a job**

A new Vericom command `repairsql` has been introduced in Vericom to support generation of repair sql after the Job comparison is completed. When the compare is complete, a repair sql zip file gets generated. This flag is valid only for Oracle and SQL Server target databases. For more information, see Running the Vericom Tool in *Administering Oracle GoldenGate Veridata*.

## New Features and Changes in Oracle GoldenGate Veridata C Agent for HP NonStop (12.2.1.4.230531) — June 2023

### **Oracle GoldenGate Veridata Agent for NonStop platforms with SSL**

Oracle GoldenGate Veridata Agent for NonStop platforms now support SSL or other encryption methods in HP Nonstop.

## New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.230531) — June 2023

### **Support CTEXT as primary key for PostgreSQL**

Oracle GoldenGate Veridata now supports a new parameter `max_lob_key_len` that sets the maximum length of LOB data types that can be used as key columns in the product. Note that this feature is currently only supported for Postgres CTEXT datatype. For more information, see `max_lob_key_len` in *Administering Oracle GoldenGate Veridata*.

### **Support for Oracle native network encryption**

Oracle GoldenGate Veridata now supports Oracle native network Encryption. The following new agent.properties have been introduced: `network.checksum.level`, `network.checksum.types`, and `network.encryption.types`. For more information, see Agent Parameters in *Administering Oracle GoldenGate Veridata*.

### **Download Repair SQL support for SQL Server targets**

Oracle GoldenGate Veridata provides the Download Repair SQL functionality to view the SQL Queries generated as part of Veridata Repair. For more information, see Supported/Unsupported Databases for Download Repair SQL in the *Oracle GoldenGate Veridata Installation and Configuration Guide* and Downloading SQL Statements for Out-of-Sync Records in the *Oracle GoldenGate Veridata User Guide*.

### **Oracle GoldenGate Veridata Server now supports SSL connection with NonStop Agent**

SSL Connection can be configured between Oracle GoldenGate Veridata Server and NonStop Agent. For more information, see Configuring an SSL Connection between Oracle GoldenGate Veridata Server and NonStop Agent in *Administering Oracle GoldenGate Veridata*.

### **New progress statistics has been added on the View By Compare Pair page**

Oracle GoldenGate Veridata now provides a new progress statistics on **View By Compare Pair** page.

- For Oracle database, enhanced columns **Rows From Source** and **Rows From Target** display estimated total rows, and the following new columns have been added **Source Remaining Time** and **Target Remaining Time**.
- The following new selectable columns are available for all databases: **Source Fetch Latency**, **Target Fetch Latency**, **Last Source Fetch**, and **Last Target Fetch**.  
For more information, see Viewing Jobs that are Running in the *Oracle GoldenGate Veridata User Guide*.

## New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.220831) — September 2022

### **SSL Communication support for the Oracle GoldenGate Veridata Import and Export utilities.**

The Export and Import utilities are now supported to communicate with Oracle GoldenGate Veridata server using SSL protocol. For more information, see SSL Configuration for Vericom in the *Oracle GoldenGate Veridata Administration guide*.

### **Vericom tool enhancement to be able to disable Delta Processing for a Job once during runtime**

The `-rdj` Vericom parameter has been introduced to disable parameter processing for a job. For more information, see Running the Vericom Tool in the *Oracle GoldenGate Veridata Administration guide*.

### **Support for enhancing data fetch performance in the Oracle database.**

A new `database.hash` server parameter has been introduced to improve data-fetch performance. This parameter is currently supported for the Oracle database only. For more information, see `database.hash` in the *Oracle GoldenGate Veridata Administration guide*.

### **Support for enhance reportutil to output encryption key names before and after key rotation**

The reportutil now supports a new parameter to output encryption key.

### **Support for citext datatype in PostgreSQL**

The citext datatype in PostgreSQL is now supported by Oracle GoldenGate Veridata. For more information, see Supported Datatypes - PostgreSQL in the *Oracle GoldenGate Veridata Administration guide*.

### **Support has been provided to skip junk data and display skipped data for number type for Oracle Database in the Out-Of-Sync table.**

During the Compare Pair configuration, whenever Oracle GoldenGate Veridata encounters a junk value in the Oracle database for the Number data type, the junk value will be handled and displayed as Hex value in the Out-of-Sync table and prevents the job failure. The row with junk data will be restricted from Repair operation. The rows with the bad data is displayed with a Skipped Status icon along with the comparison status. For more information, see Repairing Out-Of-Sync Jobs in the *Oracle GoldenGate Veridata User Guide*.

## New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.220228) — March 2022

### **Supports Trimming of Ideographic Spaces**

Oracle GoldenGate Veridata now supports trimming of ideographic space represented in byte format.

### **Support added for Viewing and Downloading Generated SQL files from Repair UI In Oracle GoldenGate Veridata**

You can now download the generated SQL File from the Oracle GoldenGate Veridata UI.

### **Support for PostgreSQL as Source and Target**

Oracle GoldenGate Veridata now supports comparison and repair of PostgreSQL datatypes. For more information, see Supported Datatypes - PostgreSQL in the *Oracle GoldenGate Veridata Administration Guide*.

## New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.210630) — July 2021

- **Oracle GoldenGate Veridata supports special number type comparison for Oracle database**  
Oracle GoldenGate Veridata supports comparison and repair of special values like NAN, Positive Infinity, and Negative Infinity in Oracle Number datatype.
- **Support has been added for repairing duplicate records in Oracle database, MySQL, and MSSQL database(s).**  
If duplicate records occur in a table due to the absence of primary/unique keys in a table, then repair of such duplicate entries is supported for Oracle, MySQL, and MSSQL.
- **Oracle GoldenGate Veridata server run as Windows service.**  
Once Oracle GoldenGate Veridata has been installed, the Veridata server can run as a Windows service. For more information, see Running Oracle GoldenGate Veridata as a Windows Service in the *Installing and Configuring Oracle GoldenGate for Veridata*.
- **Support has been added for automatic handling of Oracle NULL and non-Oracle Empty on applicable data types**  
Oracle GoldenGate Veridata can now handle EMPTY (Non-oracle) versus NULL (Oracle) compare pairs without manual intervention. Data comparison between EMPTY (zero byte string) for Non Oracle Database and NULL for Oracle Database values have been implicitly handled to be treated as in-sync. This is applicable only when either source/target is Oracle. For more information, see `server.convert_empty_to_null` and `truncate_spaces_len` in the *Installing and Configuring Oracle GoldenGate Veridata Installation and Configuration Guide*.

## New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.210226) — March 2021

- **Debugging capabilities were Enhanced with Additional Information on Table, Column, and Data**
- **Oracle GoldenGate Veridata Supports Connecting to an Oracle Database Server Authenticated by Kerberos**  
You can configure Oracle GoldenGate Veridata using Kerberos to connect to Oracle Database. For more information, see *Configuring Oracle GoldenGate Veridata Agent Using Kerberos to Connect to Oracle db* in the *Installing and Configuring Oracle GoldenGate Veridata* guide.
- **Oracle GoldenGate Veridata Supports Connecting to a Hive Database Server Authenticated by Kerberos**  
You can configure Oracle GoldenGate Veridata using Kerberos to connect to Hive. For more information, see *Configuring Oracle GoldenGate Veridata Agent Using Kerberos to Connect to Hive* in the *Installing and Configuring Oracle GoldenGate Veridata* guide.
- **Oracle GoldenGate Veridata command line utility 'Vericom' supports HTTPS to communicate with Oracle GoldenGate Veridata Server**  
The Vericom tool is supported to communicate with Oracle GoldenGate Veridata server using SSL protocol. For more information, see *SSL Configuration for Vericom* in the **Administering Oracle GoldenGate Veridata**.

## New Features and Changes in Oracle GoldenGate Veridata C Agent for HP NonStop (12.2.1.4.210226) — April 2021

### Database Repair Changes

**Oracle GoldenGate Veridata supports the HP Non Stop (Enscribe, SQL/MP) database for repair functionality.**

For more information, see *Supported/Unsupported Databases for Repair* in *Installing and Configuring Oracle GoldenGate Veridata Guide*.

## New Features and Changes in Oracle GoldenGate Veridata C Agent for HP NonStop (12.2.1.4.0) — September 2020

This is a compatibility release for bug fix only, no new feature was added.

## New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.200714) — July 2020

Oracle GoldenGate Veridata 12.2.1.4.2 release includes the following new and changed features :

- **Support has been added for MySQL Repair Functionality**

Oracle GoldenGate Veridata now supports users to repair out-of-sync data in MySQL database. For more information, see *Repairing Out-Of-Sync Jobs in the Using Oracle GoldenGate Veridata*.

- **Support has been added for Mapping Database Table Partitions and Automatic Row Partitions in Compare Pairs.**  
Oracle GoldenGate Veridata now supports selecting Mapping Database Table Partitions and Automatic Row Partitions in Compare Pairs. For more information, see *Configuring Partitions in Oracle GoldenGate Veridata*.
- **Command line utility for the purge jobs and reports :** The Vericom tool now includes an option `-purgeJobReports` to delete the latest jobs and reports. For more information, see *Running the Vericom Tool in the Oracle GoldenGate Veridata Administration Guide*.
- **Option to sort files in custom directory instead of always default to tmp dir:**  
A new option has been added to the Oracle GoldenGate server parameters that specifies the directory path where `.map` files are generated. By default it uses temp directory of the operating system. For more information, see `server.memory_mapped_sort_directory` in the *Oracle GoldenGate Veridata Administration Guide*.
- **Oracle GoldenGate Veridata can now handle EMPTY (Non-oracle) vs NULL (Oracle) compare pairs**  
Data comparison between spaces or blank or NULL values has been handled in the compare-format `string_en` for Varchar/Varchar2 datatypes. Without `string_en` format, the comparison result are out-of-sync for these values. With enhancement of `string_en` format, these values are treated as in-sync. Applicable only when either source/target is Oracle. For more information, see *Editing Connection Properties in Using Oracle GoldenGate Veridata*.
- **Enhancement to the Initial Compare Fetch Batch Size option in the UI:** When editing an existing connection for Oracle database, under the **Connection Settings** tab, the default value of the **Initial Compare Fetch Batch Size** check box is now displayed as the actual value instead of 0, also the maximum allowed value is increased to 100,000. For more information, see *Editing Connection Settings in Using Oracle GoldenGate Veridata*.

## New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.200115) — January 2020

Oracle GoldenGate Veridata 12.2.1.4.200115 release includes the following new and changed features :

### Database Support Changes

- Added MySQL support for comparison as source or target database. However, there is no support added for repair.
- Oracle GoldenGate Veridata now fully supports Oracle Multitenant Container database.

### Filtering Objects

- Added support to EXCLUDE VIEWS when creating compare pair.
- Added support to filter objects using NOT LIKE when creating compare pair.

## Email Alerts

- Added support for sending email notification on all jobs or alert only.

## Support for Jobs

- User can now re-run selected failed and out of sync jobs in Vericom.

## New Features and Changes in Oracle GoldenGate Veridata 12c (12.2.1.4.0) — September 2019

Oracle GoldenGate Veridata Release 12c (12.2.1.4.0) includes the following new and changed features:

- The History Purging option was added to the Oracle GoldenGate Veridata User Interface.
- On the Oracle platform, the user can generate a SQL file for repair. Oracle GoldenGate Veridata now gives an option to the user to perform repair outside of its user interface.
- You can now compare and connect the Oracle GoldenGate Veridata to Autonomous Data Warehouse (ADW) and Autonomous Transaction Processing (ATP) as source and target databases by using the Oracle Wallet.

## Parameters and Settings

After a patch is applied, compare the live configuration files against the template to verify additional or deprecated parameters:

- **Server Live:** DOMAIN\_HOME/config/veridata/veridata.cfg
- **Server Template:** MIDDLEWARE\_HOME/veridata/common/templates/veridata/veridata.cfg.template
- **Agent Live:** AGENT\_DEPLOY\_LOCATION/agent.properties
- **Agent Template:** MIDDLEWARE\_HOME/veridata/agent/sample\_properties/agent.properties.{DB\_type}

## Corrected Problems

This section contains information about bugs that have been corrected in 12.2.1.4.0 release. For questions on specific bugs or ticket numbers, consult Oracle Customer Support. SR is the Oracle Support SR number, and BugDB is the bug identification number.

## Release 12.2.1.4.240430 — April 2024

### **Bug 36367062 - The Save button is enabled in the Oracle GoldenGate Veridata Web UI, thus enabling the report viewer to edit Connection.**

This issue has been fixed. The Web UI buttons cannot be viewed by the users now unless they have the administrator privileges to edit, download SQL, or repair SQL files.

### **Bug 36260284 - Running Jobs and Finished Jobs show wrong characters after Oracle GoldenGate Veridata 12.2.1.4.230922 is applied.**

This issue has been fixed.

### **Bug 36139903 - Compare Pair Reports:Java.text.ParseException Unparseable date**

This issue has been fixed. Whenever the combination of String and Timestamp datatypes are encountered, the Oracle GoldenGate Veridata compare format is considered as Timestamp instead of String. Additionally, to address this issue for existing Compare Pairs, you need to update the String format to Timestamp format.

### **Bug 36106670 - Oracle GoldenGate Veridata WEB UI does not use Multibyte characters**

This issue has been fixed.

### **Bug 36481788 - Oracle Database temp memory is not released when the table has XMLType datatype causing out-of-process memory exception when the table rows were huge.**

This issue has been fixed by releasing unused temporary space at regular intervals.

## Release 12.2.1.4.230922 — September 2023

### **Bug 35755477 - PostgreSQL lists partitioned tables and not the main table in Manual Mapping**

This issue has been fixed. PostgreSQL now lists main tables both in Source as well as Target connections.

### **Bug 35642245 - Unable to download repair sql when server.encryption=true and UI shows Out-of-Sync Rows not found**

This issue has been fixed. You can now download the repair sql when `server.encryption=true`.

### **Bug 35604241 - Oracle GoldenGate Veridata invalid characters disappear after navigating to a different Out-of-Sync (OOS) page**

This issue has been fixed. You can now see the invalid characters on the OOS page.

### **Bug 35583893 - Run Repair automatically after compare not working when triggerd via Vericom**



This issue has been fixed. The Run Repair functionality works when triggered via Vericom.

## Release 12.2.1.4.230531 — June 2023

### **Bug 35132146 - Download SQL button generates an empty sql repair script**

This issue has been fixed. The **Download Repair SQL** button now generates a valid SQL repair script.

### **Bug 35040600 - Repair Job fails With OGGV-60013 java.lang.NullPointerException**

This issue has been fixed.

### **Bug 35111961 - Oracle GoldenGate Veridata Charts are not displayed after JAVA upgrade**

This issue has been fixed. Oracle GoldenGate Veridata Charts are now displayed on the Home page.

### **Bug 35008579 - Oracle GoldenGate Veridata Import fails due to empty values in export xml**

This issue has been fixed. The compare pair tags have been modified in the xml file.

### **Bug 34955844 - Delta processing errors with SQLException:java.sql.SQLException: INVALID\_DELTA\_QUERY**

This issue has been fixed.

### **Bug 34936201 - Oracle GoldenGate Veridata showing OOS for few float data between sybase to Oracle**

This issue has been fixed.

### **Bug 35180511 - Oracle GoldenGate Veridata to automatically map columns for Compare Pairs during wild-card pattern mapping - clob to char type.**

This issue has been fixed. CLOB to Char and vice versa mapping is automatically done for Compare Pairs during Pattern Mapping.

### **Bug 35149549 - Oracle GoldenGate for Veridata for Mysql fails with multiple errors for some tables**

This issue has been fixed. The value of the **Initial Compare Fetch Batch Size** parameter has been updated for the comparison to work.

### **Bug 35398073 - Invalid characters when generating SQL for ORACLE RAW records**

This issue has been fixed. The RAW datatypes were modified to Hex format in the SQL file to eliminate the invalid characters.

### **Bug 35139122 - OGGV-00118: Error Message from Agent: Socket closed**

This issue has been fixed.

**Bug 35159152 - Error when repairing OOS rows with Oracle GoldenGate Veridata**

This issue has been fixed.

**Bug 35208100 - Oracle GoldenGate Veridata repair job failed with OGGV-00208 & OGGV-00142 errors**

This issue has been fixed.

**Bug 35476197 - Oracle GoldenGate Veridata UI shows plain text for string literal even if comparison uses Binary compare format**

This issue has been fixed.

**Bug 35326430 - Incorrect OOS report for various datasets of number datatypes between Sybase and Oracle**

This issue has been fixed.

## Release 12.2.1.4.230428 — April 2023

**Bug 35326430 - Oracle GoldenGate Veridata Float datatype rounded to 13 digit for FLOAT (sybase) to NUMBER (Oracle)**

This issue has been fixed.

**Bug 34936201 - Oracle GoldenGate Veridata shows OOS for few data between REAL (sybase) to NUMBER (Oracle)**

This issue has been fixed.

## Release 12.2.1.4.220831 — September 2022

**Bug 34103357 - Veridata Errors while running vericom.sh and veridata\_import.sh**

This issue has been fixed. The Oracle GoldenGate Veridata Server Import and Export utilities are SSL enabled for communication between Oracle GoldenGate Veridata and Import/Export.

**Bug 34275308 - Need Cursor logic to avoid network reset due to memory overrun by PostgreSQL JDBC driver**

This issue has been fixed. For the PostgreSQL database, Oracle GoldenGate Veridata agent now always uses cursor logic to fetch data from the database itself in the initial stage (row hash stage).

**Bug 33979317 - Database query failed: [FMWGEN][DB2 JDBC Driver] Transliteration failed, reason: invalid UTF8 data**

This issue has been fixed. Some of the Chinese/Portuguese characters used to occupy 2 bytes. The allocation of bytes have been corrected in the binary column mapper.

**Bug 34322822 - Veridata compare pairs result codes reported differently by Vericom and GUI**

This issue has been fixed.

**Bug 34202990 - Agent: RAC jdbc url parsing is failing for oracle database**

This issue has been fixed.

Release 12.2.1.4.220228 — March 2022

**Bug 33750454 - After doing import with veridata\_import.sh SCALE defined on TIMESTAMP columns gets missing**

This issue has been fixed.

**Bug 33719877 - Veridata Comparison Result Shows Difference in Portuguese from between AS600 v6.1 and Oracle 12c**

This issue has been fixed. Special characters are treated properly with other databases.

**Bug 33885974 - Oracle GoldenGate Veridata - .x0 file under oosxml is not encrypted**

This issue has been fixed. The server configuration has been updated to make the .xNNN files encrypted. For more information, see Enabling Report Encryption in the *Administering Oracle GoldenGate Veridata* guide.

Release 12.2.1.4.210831 — September 2021

**Bug 33188570 - Repair on strings is truncated at 30 characters**

This issue has been fixed. Repair is successful for char or varchar datatypes with length of the data more than 30, where the target database is SQL Server.

**Bug 33104967 - Repair apply failed: index out of range**

This issue has been fixed. Repair is successful for char or varchar datatypes with a mix of data with or without trailing spaces, where the target database is SQL Server.

Oracle GoldenGate Veridata C Agent for HP NonStop  
(12.2.1.4.210815) — August 2021

**Bug 33061115 - Oracle GoldenGate for HP Non Stop (NSK) Compare with Delta enabled fails with Oracle GoldenGate Veridata-00118: Agent message (999): null.**

This issue has been fixed by memory allocation fix for bad malloc during COOS missing delete processing.

Release 12.2.1.4.210630 — July 2021

**Bug 32669339 - Oracle GoldenGate Veridata repair takes time and is slow.**

This issue has been fixed by providing support to handle duplicate records.

**Bug 33017930 - Oracle GoldenGate Veridata import fails With NPE when compair pair contains SQL partition**

This issue has been fixed.

**Bug 32852132 - In MySQL, schema or table name containing hyphens caused error in the SQL syntax**

This issue has been fixed by providing support for special characters, such as hyphen in the database object names.

**Bug 32821397 - DB2 database lock and contention issue due to Oracle GoldenGate Veridata queries**

This issue has been fixed by avoiding table locks during Initial Compare in the DB2 database.

**Bug 32633049 - VGPP error when parameter file contained long REPEROR code**

This issue has been fixed.

**Bug 32348306 - Job abends - An invalid XML character (Unicode: 0xb) was found in the value of attribute "val" and element is "col" .**

This bug has been fixed. Oracle GoldenGate Veridata XML Parser has been enhanced to handle invalid XML characters.

**Bug 32286962 - Database query failed while fetching XMLType data.**

Oracle GoldenGate Veridata used a deprecated API from Oracle Database that caused the issue. It has been updated to use XMLSerialize. A new property `compare.xmldatatype.format` has been added in `agent.properties.oracle` to use the `INDENT/NO_INDENT` functionality of XMLSerialize. For more information, see `compare.xmldatatype.format` in the *Administering Oracle GoldenGate Veridata* guide.

## Release 12.2.1.4.210420 — April 2021

**Bug 32717596 - Filter option not working in Run/Execute Job page**

This issue has been fixed by correcting the Filter option on the **Run/Execute** Job page. When a job is run, only the filtered list of compare pairs are run.

**Bug 32213540 - Generate SQL Fails displaying an Error Message**

This issue has been fixed. Generate SQL was generating wrong queries when there are special characters in OOS records.

**Bug 32322787 - Loading Out of Sync page is slow**

This issue has been fixed. Loading of out of sync (OOS) page has been made efficient.

## Release 12.2.1.4.210226 — March 2021

**Bug 32249623: Veridata Creating 100s of Connections even though our Max Concurrent Comparisons Threads is configured for 24**

This issue has been fixed.

**Bug 32113971: Checkbox unchecked when moving through Run/Execute Job and Group Configuration pages**

This issue has been fixed. The checkbox does not disappear when navigated to other pages from the **Run/Execute** job page.

**Bug 32250963: Precision in dec\_float does not work properly for Oracle DB**

This issue has been fixed.

**Bug 32348306: Job abends - An invalid XML character (Unicode: 0xb) was found in the value of attribute "val" and element is "col"**

This issue has been fixed.

**Bug 32486366: Unable to login to Veridata java.lang.NullPointerException on landing page**

This issue has been fixed.

Oracle GoldenGate Veridata C Agent for HP NonStop  
(12.2.1.4.210226) — April 2021

**Bug 32407381 - Enscribe table comparison fails with Delta turned on**

This issue has been fixed.

Oracle GoldenGate Veridata C Agent for HP NonStop Release  
12.2.1.4.0 — September 2020

**Bug 30765673 - An unexpected error occurred error when trying to generate compare pair**

This issue has been fixed. Comparison should no longer fail with the following error message `java.lang.Exception: java.lang.Error: Lost rows from source.`

Release 12.2.1.4.200714 — July 2020

**Bug 31568607 - Veridata Import is failing with OGGV-60013: Unhandled exception 'java.lang.StringIndexOutOfBoundsException': String index out of range**

This issue has been fixed. Changes have been made to connect to PDB using database service names (with or without fully qualified name).

**Bug 31344851 - Compares do not complete with Delta processing on**

This issue is fixed.

**Bug 31518396 - Veridata job failed with error message Lost rows from source - after upgrade to 12.2.1.4**

This issue is fixed. The Job failed error message is not shown in Oracle GoldenGate 12.2.1.4.2.

**Bug 31518402 - Jobs running for long time and hung on some tables**

This issue is fixed. The long running of the job or hanging of the tables issues are not seen any more.

**Bug 31518401 - Delta processing on target SQL Server results in SQLException**

This issue is fixed.

**Bug 31518397 - Float columns not added to Compare Group**

This issue has been fixed by correcting the Float columns mapping issue.

**Bug 31518386 - org.xml.sax.SAXParseException when trying to view OOS**

This issue is fixed.

## Release 12.2.1.4.191130 — November 2019

**Bug 30425385 - Jobs are failing with Failed:**

**java.util.concurrent.ExecutionException: java.lang.NullPointerException**

This issue was fixed. Comparison should no longer terminate abnormally due to this error.

**BUG 30558507 - Veridata shows comparisons performed as 0**

This issue has been fixed.

## Release 12.2.1.4.0 — September 2019

**Bug 27866348 - OGGV-00507: 'Is a directory' creating directory**

The issue was fixed. The user can create reports for large tables now.

**Bug 29135702 - Veridata job failed with error " Failed:**

**java.util.concurrent.ExecutionException: java.lang.NullPointerException"**

This issue was fixed. The Null Pointer Exception is no longer displayed.

**Bug 28892920 - Veridata not showing previous run screen, its refreshing to latest run only**

This issue was fixed. The browser page doesn't refresh to the latest job results page, but stays on the selected job results itself.

**Bug 25876077 - Veridata Inserts field with extra spaces**

This issue was fixed. Prior to the fix, Oracle GoldenGate Veridata inserted extra space on target in the following scenarios: the source datatype was CHAR, the target datatype was VARCHAR, and the column is PRIMARY KEY.

**Bug 29880216 - Veridata server sorting is taking more time for some compare pairs**

This issue was fixed. Prior to the fix, intermittently, the connection between the agent and the database was getting hung when multiple compare pairs were run in parallel and each processing billions of records.

**Bug 29647121 - Veridata existing group with veridata import Fails With java.lang.NullPointerException**

This issue was fixed. If a compare-pair exists in the group already, but is missing from the configuration xml file, which is passed as an input to Import utility, then the compare-pair gets deleted from the Oracle GoldenGate Veridata repository.

**Bug 29632716 - Veridata varbinary compare not working on varchar column**

This issue was fixed. The comparison and repair for Varchar2 in Oracle to Varchar in Microsoft SQL Server with binary format works properly.

## Known Issues and Workarounds

This section details the known issues and any workarounds for the Oracle GoldenGate Veridata Release 12c (12.2.1.4.x) releases.

### Release 12.2.1.4.230922 — September 2023

**Bug 35799033 - -repairsql option generates sql file when target DB is non Oracle and SQL Server.**

The Download Repair SQL generates the SQL file even when the Target databases are non-Oracle or SQL Server

**Bug 35764062 - Veridata allows user to select boolean column for Delta processing**

Oracle GoldenGate Veridata currently allows users to select Boolean column for Delta processing.

**Workaround** - Do not use Boolean or BIT columns for Delta processing, but only use columns where its values are always increasing.

**Bug 35815751 - DB2 to DB2 blob Datatype fails to compare with error ResultSet can not re-read row data for column 1**

Due to the driver issue, certain BLOB columns may encounter this error.

### Release 12.2.1.4.230531 — June 2023

**Bug 35359323 - In the DB2LUW database, the job fails to execute when the datatype is set to LONG VARCHAR.**

**Workaround:** If the LONG VARCHAR column is excluded from the compare pair configuration, then the run goes fine.

**Bug 35366765 - SQL SERVER - Primary Key Column with AUTO\_INCREMENT should not be included in DML statements for Insert Operation in the Downloaded SQL File**

**Workaround:** Set the identity insert parameter as follows: `SET IDENTITY_INSERT atssrc.raw_dt ON`; as a workaround in the SQL Server database. For all other databases, `AUTO_INCREMENT` works without any issues.

**Bug 35503471 - Unable to repair "TIMESTAMP" column when source is DATE and target is TIMESTAMP WITH LOCAL TIME ZONE**

Repair may be not be successful when the default compare format `DATE` is used.

**Workaround:** Change the compare format to `DATETIME`.

**Bug 35500922 - Run Repair fails with warning for ORACLE VARCHAR target ending with space(s) when using Binary compare format**

**Workaround:** Uncheck **Trim Settings** from **Connection Settings**.

**Bug 35479943 - Compare pair configuration page shows details of a wrong group for a different job**

Compare pair configuration show details of a group, which is not part of the job selected and showed in the breadcrumb.

## Release 12.2.1.4.220831 — September 2022

**Bug 34461043 - Filters for Skipped Rows in OOS table.**

The Out-of-Sync table will not be able to filter by Skipped status. When there are skipped rows in Out-of-Sync table, filtering by any status removes the skipped rows from the table.

**Workaround:** To bring the skipped rows back in the table, click the top rightmost breadcrumb on the page.

**Bug 34461053 OOS table is not displayed when there are bad number in Key Columns**

When there is bad data in the key column of the table and on compare if all the data other than the skipped rows are in-sync, then the out-of-sync table is not displayed.

The presence of the skipped rows can be identified from the finished jobs/groups/compare pair page where an icon for skipped row is displayed in the **Comparison Status** column.

## Release 12.2.1.4.210630 — July 2021

**Bug 32525295 - Value showing as "NAN" in OOS for Float .**

**Workaround:** Use `NUMBER` and `DECFLOAT` format in case of `FLOAT` to `FLOAT` in Oracle DB.

## Release 12.2.1.4.210420 — April 2021

**Bug 32669339 - Oracle GoldenGate Veridata repair takes time and is slow.**



Oracle GoldenGate Veridata repair is very slow when there are duplicate rows. Duplicate rows are not repaired in Oracle GoldenGate Veridata. However, non-duplicate rows repair is very slow when the table contains duplicate records.

## Release 12.2.1.4.210226 — March 2021

### **Bug 32525295 - Value showing as "NAN" in OOS for Float**

**Workaround:** Use NUMBER and DECFLOAT format in case of FLOAT to FLOAT in Oracle DB.

### **Bug 31167686 - Issue with repair from second page onwards**

**Workaround:** While repairing an out-of-sync job from second Repair screen onwards, click the **Repair** twice to run the repair.

### **Bug 32003875 - Float/Real datatype comparison limitations for db2iseries/db2zos/db2luw**

The decimal part of REAL value from the wldb2 jdbc driver always stores 16 digits precision different from the MySQL, which is 32 digits precision. For example, db2iseries/db2zos/db2luw REAL value of 0.8 converts 0.800000011920929 and same value is different in MySQL/Oracle and other databases. Therefore, irrespective of the databases, generation of compare pairs always fail when decimal values are present.

### **Bug 32376095 - Date/time compare with timestamp/datetime as primary key issue**

When the primary key is Date/Time one side (source DB) and DateTime/Timestamp is the primary key in the other (target DB), then the compare pair generated are faulty as Oracle GoldenGate Veridata always considers higher side of the datatype as the primary key.

**Workaround:** Update the Date/time column as a hash column and the other datatype column as the key column.

### **Bug 31543800 - Schema dropdown for db with catalog and schema are not working**

**Workaround:** Click **Browse** beside the Schema drop-down list to select a schema.

## Oracle GoldenGate Veridata C Agent for HP NonStop Release 12.2.1.4.0 — September 2020

### **Bug 31891066 - Extra "Refresh Source/Target Files/Tables" button in manual mapping**

**Workaround:** Click either of the duplicated (**Refresh Source Files/Tables** under Source, **Refresh Targets Files/Tables** under Target) buttons to continue.

## Release 12.2.1.4.200714 — July 2020

**Bug 31537719 - Veridata should dynamically determine scale instead of always use scale of target**

**Workaround:** If the scale of Target is larger than the scale of Source, then you need to manually set the scale of Target to match the scale of Source.

**Bug 31179181 - [Oracle-Mysql][Repair]: Issue with LONG to VARCHAR**

Use `LONGTEXT` instead of `VARCHAR` in MySQL.

## Release 12.2.1.4.200115 — January 2020

**Bug 30829622 - Incorrect comparison result for few datatypes when running comparison between mysql and Teradata, DB2**

When running comparison between MySQL to Teradata or MySQL to DB2 LUW/DB2 iSeries/DB2 z/os, incorrect comparison results are shown for REAL, DATE, and DATETIME datatypes.

**Bug 30666183 - [Mysql-Hive]: Job is failing for BINARY datatype**

An unexpected exception occurs and job fails for BINARY datatype.

## Release 12.2.1.4.0 — September 2019

**Bug 29695925: Delta processing may cause 'invalid identifier issue' in some corner cases**

**Workaround:** Wrap the delta column inside `TO_CHAR()` method while creating delta query for delta column type '

`TIMESTAMP(6) WITH LOCAL TIME ZONE`'. For example, use `SELECT TO_CHAR(MAX("SRC_MODIFIED_DATE"), 'yyyy-MM-DD:hh24:mi:ss.FF6') FROM "REPL_ENVIRONMENT"."LOGICALDEVICE_CHAR" where entityid between 0 and 31537113 instead of SELECT MAX("SRC_MODIFIED_DATE") FROM "REPL_ENVIRONMENT"."LOGICALDEVICE_CHAR" where Entity ID is between 0 and 31537113.`

**Bug 27676721 — Unable to override the settings at Connection level in compare pair**

Its not possible to override the **Use Source** or **Target Columns** as Key Columns when the generating Compare Pairs feature is configured at the connection level in the **Compare Pair Generation** page.

**Bug 27755796 — ROWID, RAW data type in Oracle is considering as Key Column**

Data types, such as ROWID and RAW with internal datatype as binary is considered as key columns when using **Use all columns as key columns**.

**BUG 27304630 — Delta Processing for Bit Data Type in MSSQL is Not Working.**

Bit datatype of MSSQL is not supported in delta processing even though the Oracle GoldenGate Veridata format for the datatype is also Number.

### **Bug 27303272 — File Pattern: for NSK is Not Working**

With the HP NonStop (NSK) source and target connection, the user is unable to do the File pattern in the **Pattern Mapping** page.

### **BUG 27292701 — 'java.lang.NoClassDefFoundError': com/google/protobuf/ProtocolMessageEnum'**

Without proxy user configuration properties, impersonation isn't possible.

**Workaround:** Configure `core-site.xml` in hadoop system with the following configuration:

```
hadoop.proxyuser.<super-user>.groups=*
hadoop.proxyuser.<super-user>.hosts=*
```

## General Known Issues

On Windows, the `JAVA_HOME` must be set to a directory path that does not contain spaces.

### **Veridata Agent Incorrectly Rounds Timestamp Values for Sybase Target**

The Veridata agent is incorrectly rounding off `TIMESTAMP/DATETIME/TIME` values when the time part of the value ends in `.998` and `.999`. The comparison of a `TIMESTAMP/DATETIME/TIME` value from the source to a `DATETIME` value from a Sybase target can be reported incorrectly as in-sync or out-of-sync when the source value ends in `.998` or `.999`.

### **DB2 for i: DataDirect Driver with VARCHAR Key Columns**

When using the DataDirect driver, `VARCHAR` key columns are returned with trailing blanks truncated during the `COOS` step. This is only occurring during the `COOS` step when a predicated `SELECT` is processed. You can workaround this issue by generating SQL statements to concatenate an empty string to the end of `VARCHAR` key columns to preserve the trailing spaces.

### **DB2 for i: DataDirect Driver with CLOBs and CCSID 1208**

When using the DataDirect driver, `CLOBs` declared with `CCSID 1208 (UTF-8)` are returned incorrectly. The correct data is inserted correctly and verified by casting the value to a `BLOB` then inspecting that the raw bytes were the correct UTF-8 values. There is currently no workaround for this issue because the `JTOpen` driver does not select these values correctly.

### **DB2 for i: DataDirect Driver with the DB2 Native Driver**

When using the DataDirect driver and DB2 Native driver, `IDENTITY` columns cannot be detected from the JDBC metadata. You can workaround this issue by querying the DB2 iSeries `SYSCOLUMNS` directly to supplement the JDBC metadata.

### **DB2 for i: DataDirect Driver with NULLID Library**

The DataDirect driver requires a DB2 package to store query execution plans. By default the `NULLID` library is used; if it does not exist, it is created the first time a

connection is made. If the package already exists in the `NULLID` library and the current user does not have permission to access the package a failure occurs. The DataDirect driver has workarounds to manually create the package and to use an alternative library to store the packages, see the driver documentation for specifics.

### **DB2 for i: Native Driver with UTF-8**

During a repair, the native driver fails when the LOB column is UTF-8 and the inserted data is multibyte. The driver does not recognize that UTF-8 expansion may require a larger buffer.

### **Informix: Unsupported Data Types with DataDirect JDBC Drivers**

The `INTERVAL`, `BIGINT`, and `BIGSERIAL` data types are not supported when using the DataDirect JDBC drivers.

### **Informix: Integer Minimum Value Limitation**

The limitation for the minimum value of the `SMALLINT`, `INTEGER`, and `BIGINT` data types is  $-(2x-1)$  (x is 31, 15, 63 sequentially). On a repair attempt (insert/update) of  $(-2x)$  from a non-Informix data base to an Informix data fails as repair Warning.

### **Data Type Limitation: SQLServer Numeric/Decimal negative zero error for very small values**

Oracle GoldenGate Veridata internally converts decimal numbers with a large scale by truncating tail digits. The limitations applies to all databases except Oracle. This is because, Oracle GoldenGate Veridata utilizes a template to mask decimal numbers, which, in cases of a large scale, leaves few digits for representing the scale part. For example: A number like 6.710123456789e-26, with a scale of 38 digits gets truncated to retain the first 15 digits, converting it to 0.

**Workaround:** For scenarios where preserving all digits of the scale is crucial, Oracle recommends using the string or other compare formats instead of the number compare format when configuring the Compare Pair.

## Getting Help with My Oracle Support

Use My Oracle Support to find knowledge solutions, workaround, and other information that is reported by customers, partners, and Oracle employees. My Oracle Support also enables you to open a Service Request. If a patch is required to resolve a service request, you will receive instructions on how to download it from My Oracle Support.

### **Note:**

If you purchased Oracle GoldenGate Veridata and support through a distributor, contact your distributor instead of attempting to create a service request through My Oracle Support.

## Using the Oracle GoldenGate Knowledge Base

To view the Oracle GoldenGate Knowledge Base, follow these steps:

1. Go to <http://support.oracle.com>.
2. Select your language and then log in with your email and Oracle password.
3. Click the **Knowledge** tab.
4. Under **Select a Product Line**, type the name "GoldenGate" and then select an Oracle GoldenGate product from the context menu. (You may have to wait a few seconds for this list to appear). As an alternative, you can select from the drop-down list or use the **Browse** link to select **Middleware**, then **Data Integration**, then **GoldenGate**.
5. Under **Task**, select the type of query you want to make, such as **Troubleshoot**.
6. Under **Version**, select the version of Oracle GoldenGate that you are using.
7. Under **Enter Search Terms**, type a search keyword or multiple keywords to focus the query.

If you need help with My Oracle Support, click **Help** at the top of the application window.

## Creating an Oracle GoldenGate Support Case

If you cannot find an answer to your question or problem in the Knowledge Base, you can open a support case with Oracle Support by following these steps:

1. Go to <http://support.oracle.com>.
2. Select your language and then log in with your email and Oracle password.
3. Click the **Service Requests** tab.
4. Click **Create SR**.
5. Complete the form, referring to the **Help** at the top of the application window if necessary.

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

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