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 (12.2.1.4.200115) — 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**: DOMIAN_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**: unzip MIDDLEWARE_HOME/veridata/agent/templates/oracle.veridata.agent.template.jar

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 12.2.1.4.191130 — 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 comparision 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) release.

**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

It's 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 \(-2^{(x-1)}\) (x is 31, 15, 63 sequentially). On a repair attempt (insert/update) of \(-2^x\) from a non-Informix data base to an Informix data base fails as repair Warning.

**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](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:

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.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.