Oracle® GoldenGate Veridata

Release Notes

12*c* (12.2.1.2)

F10961-01

December 2018

Release Notes

This document describes the new features, major changes, and the known issues in Oracle GoldenGate Veridata Release 12*c* (12.2.1.2.0).
This release note contains the following topics:

New Features and Changes in Oracle GoldenGate Veridata 12*c* (12.2.1.2)

This section summarizes the new features and significant product changes for Oracle GoldenGate Veridata in 12*c* (12.2.1.2) release.

Oracle GoldenGate Veridata Release 12*c* (12.2.1.2) includes the following new and changed features.

High Availability for Oracle GoldenGate Veridata Server

You can set-up the Oracle GoldenGate Veridata Server (version: 12.2.1.2) and Agent deployed on Oracle Weblogic Platform for High Availability.

Encrypted Password for Vericom

Vericom provides an option to read the password directly from the Oracle Wallet rather than providing it on the command line or in a clear text file.

Automatic Repair After Compare

You can use the Repair option to automatically kick off a Repair after a comparison completes and has confirmed out of sync data exists.

Automatically Manage Memory

Memory use is now dynamically allocated as needed so you only need to set the maximum memory to use, and then optionally you can specify which disk area to use as virtual memory.

Compare Configurations

Oracle GoldenGate instances for tables in replication are queried and a comparison job is automatically created with the option to run it. This is available in the UI and in Vericom so that you can invoke this from remote locations like Oracle GoldenGate Monitor.

Export Utility

You can selectively export your database comparison configuration to an XML file that can then be imported into the same or another repository. You can select all comparisons or a subset for export. This is supported in Oracle GoldenGate Veridata releases 11.2, 12.1.3, 12.2.1 and 12.2.1.2.0 for all databases supported in those releases. This new export utility, along with the import utility introduced in 12.1.3, replace the previous `veridata_scripting` scripts.

Delta Processing

Delta processing that allows you to process large table compares in an acceptable time frame has been enhanced to include all supported databases is no longer limited to Oracle GoldenGate NonStop.

Database Support Changes

- Oracle GoldenGate Veridata now fully supports the use of the IBM DB2 for i (IAS400/iseries) database.
- Oracle GoldenGate Veridata now fully supports the use of the IBM Informix database.
- The free Oracle Express Edition (XE) database is supported.
- Apache Hive ™ is supported as of 12.2.1.2.171215.

  However, the Repair feature isn't supported.
- MySQL database is not supported, since Oracle WebLogic Server does not natively support this database.
- The repository export utility works with all Veridata repositories from release 11g (11.2) and 12c (12.1.3) including releases that support My SQL.
- Compact domain support was removed because it does not use an OPSS schema.

Deprecated Parameters and Settings

This section lists the parameters and settings that are no longer used in this new release. These parameters are deprecated in the `veridata.cfg` file.

Corrected Problems

This section contains information about bugs that have been corrected. After applying a bundle patch (12.2.1.2.xxxxxx), execute the `{Veridata_Domain}/veridata/bin/repository_patch.sh` script. 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. The information in this section is divided into the following releases:

Release 12.2.1.2.180615 — June 2018

Bug 27030571 — ERROR [OGGV-00227] Error Occurs When Running the Repair Job

This issue was seen when using the Oracle database and the values in tables contained empty values. The issue was fixed by handling Null value that came up during the trimming of empty values in tables.

Bug 22106595 — Active Directory (AD) Users Cannot Login to Oracle GoldenGate Veridata

Active directory users were not able to login to Oracle GoldenGate Veridata. New roles have now been created for active directory users `veridataAdministrator`, `veridataPowerUser`, `veridataReportViewer`, `veridataDetailReportViewer`, `veridataRepairOperator`, `veridataCommandLineUser`.

Bug 26949276 — Missing *Cancel* Button When Running the Compare Jobs

The issue of the missing **Cancel** button in different locales has been fixed.

Bug 27752388 — Getting ConcurrentModificationException frequently

The issue was fixed by resolving the `ConcurrentModiFicationException` exception during sorting.

Release 12.2.1.2.171215 — December 2017

This topic lists all the corrected issues in this release:

Bug 24517103 – Silent installation of Domain in Oracle GoldenGate Veridata

The silent installation domain creation issue was fixed. The `domain_silent.sh`, which has is responsible for domain creation was introduced.

Bug 26223552– Silent Installation - RCU not detecting Oracle GoldenGate Veridata - component name is incorrect

The issue of missing component was fixed by adding the Veridata Repository component for Oracle GoldenGate while running Repository Configuration Utility (RCU).

BUG 26364205 – Veridata_import.sh script hung issue

The issue of Oracle GoldenGate Veridata `Veridata_import.sh` script hanging after Updating profiles in `VERIDATA_server1-diagnostic.log` was fixed by adding a new `zlib.buffer.flush.size` property file to the `veridata.cfg` file and `agent.properties.sample` file both on the server side as well as on the agent side. The default value is 1000000.

BUG 25462427 – Oracle GoldenGate Veridata compare fails java.lang.NullPointerException

The issue of a NullPointerException occuring while running the Compare Pair functionality was fixed by adding a check to read the buffer only when it has bytes in it. The exception occurred when there is no room to hold data chunks in a particular run leading to an empty or null buffer.

BUG 26787395 – Import.sh jobs validating at backend but at GUI it shows status unknown

When importing settings using the Veridata Import functionality, although the validation of compare pairs were successful, the actual status was not shown in UI. This issue was fixed by running `Veridata_import.sh` with proper compare pairs in the import file; on successful execution of the script, the correct validation status gets displayed on the UI.

BUG 26767803 – Very slow import of groups configuration

The issue of slow import of group configurations is fixed.

BUG 26008206 – Trying to do the pair configuration pegs CPU at 100%

The comparison of data replication issue is fixed by the usage of correct binaries.

Release 12.2.0.1.3 — October 2017

The release 12.2.0.1.3 is for product Oracle GoldenGate for HP Nonstop.

This is not an Oracle GoldenGate Veridata release version. This topic lists all the corrected issues in this release:

Bug 26307629 — CAGT - CAgent: Agent message (999): null

The error message has been corrected. This can occur from the NSK agent when the table being evaluated has a large number of partitions.

Release 12.2.1.2.170515 — May 2017

Bug 25766243 - OGGV-50005: Unable to parse XML file

Corrected an issue with the Veridata scripting export feature creating invalid an XML file when the compare-pair has `column exclude` and `delta config` elements enabled.

Release 12.2.1.2.170215 — February 2017

Bug 23578323/Bug 24455263 - Failed: OGGV-00118: Agent message (999): Unexpected zlib needs input

Corrected an issue with the use of zlib libraries incorrectly compressing and decompressing message bytes between the server and agent.

Release 12.2.1.2.0 — October 2016

Bug 21797520 - Vericom needs password encryption

This feature provides an option to store Username and Password in Oracle Credential Store to be used for Vericom. This allows customer to create alias for Vericom user and use the alias while running Vericom and this also helps in automating Vericom run.

Bug 21910141 - OGGV-00119: Agent remote message (101): OGGV-600013: Unhandled exception

Limited the number of retries the agent makes when a JDBC connection fails to validate the connection and added improved error messages.

Bug 21909923 - Veridata slowness

Corrected the job Purge feature to properly delete the contents of repair_rows table used by Repaid jobs. This prevents the Slowness when loading the repair page after the purging of old data.

Bug 21687175- Finished Jobs page query optimization

Corrected an issue with the finished job page, which is taking too much time to load when Veridata repository contains too much data.

Bug 23039790- Veridata server crash when navigating Completed Jobs concurrent modification

Corrected an issue with the loading of the finished jobs page, which is causing StackOverFlow error.

Release 12.2.1.0.0 — March 2016

Bug 19277798 - Translating database characters based on database settings and not Oracle GoldenGate settings

In certain circumstances, the character set used to encode character does not match the database character set has been fixed. The raw bytes are retrieved from the database and used to specify the character set to decode the data before encoding it as UTF-8 for comparison.

Release 12.2.1.0.0 — October 2015

Initial Release.

Known Issues and Workarounds

This section details the known issues and any workarounds for the Oracle GoldenGate Veridata Release 12*c* (12.2.1) release.

Release 12.2.1.2.180615 — June 2018

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 Generating Compare Pairs** feature configured at connection level in the **Compare Pair Generation** page.

Bug 28074675 — Unable to Upgrade the MSSQL2012 as rcu repository after applying 12.2.1.2.180615 Patch

After the 12.2.1.2.180615 patch is applied, the user is unable to upgrade the repository with the `repository_patch.sh` upgrade script.

Workaround:

- Stop the Oracle Weblogic Server and the Oracle GoldenGate Veridata server.
- Go to the *{ORACLE_HOME}*`/user_projects/domains/base_domain/config/jdbc` directory.
- Take a backup of the `VeridataDataSource-jdbc.xml` file.
- Edit the `VeridataDataSource-jdbc.xml` file, and update the URL to `jdbc:weblogic:sqlserver://{`*hostName*`}:{`*port*`};databaseName={dbname}`.

- Execute `repository_patch.sh`.
- Restore the `VeridataDataSource-jdbc.xml` to original.
- Start the Oracle Weblogic Server and the Oracle GoldenGate Veridata server.

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 considering as key columns when using the 'Use all columns as key columns' feature

Release 12.2.1.2.171215 — December 2017

BUG 27129277 — Unable to Run the Compare Pair with Timestamp in MSSWL to Hive

Workaround: Configure the `TIMESTAMP` scale between <1-7> in connection properties for Hive connection.

BUG 27282433 — Unable to Run the Compare Pair with Database Sort

Workaround: Provide the super-user name in the hive connection to access the HDFS file systems.

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=*
```

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 is number for the same.

Bug 27303272 — File Pattern: for NSK is Not Working

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

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.

Database Related Issues

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.

Upgrade Issues

For the following release upgrade paths the reports and job run details are not available:

- Veridata 11g MySQL to Veridata 12c (12.1.3) Oracle and SQL Server
- Veridata 11g MySQL to Veridata 12c (12.2.1) Oracle and SQL Server
- Veridata 12c (12.1.3) MySQL to Veridata 12c (12.2.1) Oracle and SQL Server

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:**
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> 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`.

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.

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