

# Oracle® GoldenGate

## Release Notes



23ai  
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# Preface

This document describes the new features, major changes, and known issues for this release of Oracle GoldenGate.

## Documentation Accessibility

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## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, such as "From the File menu, select <b>Save</b> ." Boldface also is used for terms defined in text or in the glossary.
<i>italic</i>	Italic type indicates placeholder variables for which you supply particular values, such as in the parameter statement: <code>TABLE table_name</code> . Italic type also is used for book titles and emphasis.
monospace MONOSPACE	Monospace type indicates code components such as user exits and scripts; the names of files and database objects; URL paths; and input and output text that appears on the screen. Uppercase monospace type is generally used to represent the names of Oracle GoldenGate parameters, commands, and user-configurable functions, as well as SQL commands and keywords.
UPPERCASE	Uppercase in the regular text font indicates the name of a process or utility unless the name is intended to be a specific case. Keywords in upper case (ADD EXTRACT, ADD EXTTRAIL, FORMAT RELEASE).
LOWERCASE	Names of processes to be written in lower case. Examples: ADD EXTRACT exte, ADD EXTRAIL ea.
{ }	Braces within syntax enclose a set of options that are separated by pipe symbols, one of which must be selected, for example: {option1   option2   option3}.
[ ]	Brackets within syntax indicate an optional element. For example in this syntax, the SAVE clause is optional: CLEANUP REPLICAT group_name [, SAVE count]. Multiple options within an optional element are separated by a pipe symbol, for example: [option1   option2].

Convention	Meaning
Sample Locations	Compass directions such as east, west, north, south to be used for demonstrating Extract and Replicat locations. Datacenters names to use the standard similar to dc1, dc2.
Group names	Prefixes for each process, as follows: <ul style="list-style-type: none"> <li>• Extract: ext. Usage with location: extn, where <b>n</b> indicates 'north' compass direction.</li> <li>• Replicat: rep. Usage with location: repn, where <b>n</b> indicates 'north' compass direction.</li> <li>• Distribution Path: dp. Usage with location: dpn, where <b>n</b> indicates 'north' compass direction.</li> <li>• Checkpoint table: ggs_checkpointtable</li> <li>• Trail file names: e or d depending on whether the trail file is for the Extract of distribution path. Suffix derived in alphabetical order. Usage for an Extract trail file: ea, eb, ec.</li> <li>• Trail file subdirectory: The name will use compass directions to refer to the trail subdirectories. Example for trail subdirectory name would be / east, /west, /north, /south.</li> </ul>

## Related Information

The Oracle GoldenGate Product Documentation is available from the following location:

[Oracle GoldenGate Documentation](#)

Oracle GoldenGate for Distributed Applications and Analytics

[Oracle GoldenGate for Distributed Applications and Analytics](#)

For OCI GoldenGate, refer to:

[OCI GoldenGate](#)

For details on Oracle Database High Availability, see:

[Oracle Database High Availability](#)

# 1

## Introduction

This chapter introduces the Release Notes for Oracle GoldenGate.

### Topics:

## Latest Release Information

This document is accurate at the time of publication. Oracle will update the release notes periodically after the software release. You can access the latest information and additions to these release notes on the Oracle Technology Network at:

<http://www.oracle.com/technetwork/indexes/documentation/index.html>

## Purpose of this Document

This document contains the release information for Oracle GoldenGate.

Oracle recommends that you review its contents before installing, or working with the product.

## Certification Information

To see versions of platforms and related software for which Oracle GoldenGate is certified and supported, go to <https://www.oracle.com/integration/goldengate/certifications/>

## Product Documentation

For complete documentation on Oracle GoldenGate, go to <https://docs.oracle.com/en/middleware/goldengate/core/index.html>.

## Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support at <https://support.oracle.com>

[Lifetime Support Policy for Oracle GoldenGate](#)

## Licensing Information

Detailed information regarding license compliance for Oracle GoldenGate is available here:

[Licensing Information](#) in the *Oracle GoldenGate Licensing Information* guide.

# 2

## New Features

This section highlights new features available with the current release of Oracle GoldenGate.

### Release 23ai (23.7): January 2025

#### **Bug 35846704: PostgreSQL - Support capture from standby from PostgreSQL 16 onwards**

Oracle GoldenGate supports capture from PostgreSQL standby database from PostgreSQL version 16 and higher.

#### **Bug 31943030: PostgreSQL - Support Capture from OCI PostgreSQL**

Oracle GoldenGate Extract supported for OCI PostgreSQL.

### Release 23ai (23.6): October 2024

#### **Support for JSON Relational Duality**

Oracle GoldenGate 23ai supports replicating full-featured business objects in an event-based, pub/sub architecture with Oracle JSON Relational Duality and GoldenGate Data Streams. This is implemented by combining two new Oracle technology features: Oracle Database JSON Relational Duality Views and Oracle GoldenGate Data Streams.

For more information, see the following:

- [Replicating Business Objects with Oracle JSON Relational Duality and GoldenGate Data Streams](#)
- [Support for JSON-Relational Duality Views and JSON Collection Tables](#)
- [Enable Supplemental Logging for JSON Relational Duality Views and JSON Collection Tables](#)
- [ADD TRANDATA](#) and [ADD SCHEMATRANDATA](#)

#### **Support for Database Password Plugin**

Oracle GoldenGate 23ai (starting with 23.5 and higher) includes a user-friendly plugin that enables writing custom code to retrieve database credentials from a third-party vault and then return it in a predefined API to Oracle GoldenGate.

For more information, see [Authenticate the Database Connection Using the Database Password Plugin](#).

### Release 23ai (23.5.2): August 2024

#### **Oracle GoldenGate 23ai for Sybase supports Microservices Architecture**

Oracle GoldenGate 23ai for Sybase now supports Microservices Architecture.



### **Support for MySQL Releases 9.0 and 8.4**

Oracle GoldenGate 23ai for MySQL now supports releases 9.0 and 8.4.

### **Support for VECTOR datatype in Oracle GoldenGate 23ai for MySQL**

Oracle GoldenGate 23ai (23.5 onwards) for MySQL 9.0 and higher supports the vector data type.

## Release 23ai (23.5): July 2024

### **Oracle GoldenGate 23ai for Db2 for i and Oracle GoldenGate for Db2 LUW support Microservices Architecture**

Oracle GoldenGate 23ai for Db2 for i and Oracle GoldenGate for Db2 LUW now support Microservices Architecture.

### **Oracle GoldenGate 23ai for Oracle TimesTen supports Microservices Architecture**

Oracle GoldenGate 23ai for Oracle TimesTen now supports Microservices Architecture.

## Release 23ai (23.4.2): June 2024

### **Oracle GoldenGate 23ai supports direct connectivity (DSN-less) for SQL Server database connections**

Oracle GoldenGate 23ai adds direct connectivity support for SQL Server connections, allowing server host/IP and instance port entries for database connections.

For more information see, [Add Database Connections](#).

## Release 23ai (23.4.1): June 2024

### **Oracle GoldenGate 23ai for Teradata supports Microservices Architecture**

Oracle GoldenGate 23ai for Teradata now supports Microservices Architecture.

For more information, see the Installation Requirements for Teradata and Configure Teradata topics in the *Oracle GoldenGate Microservices Architecture Documentation for 23ai*.

## Release 23ai: May 2024

### **Oracle GoldenGate support for database artificial intelligence (AI)**

Oracle GoldenGate 23ai adds artificial intelligence support with the following data types:

- Oracle Database 23ai uses the new `vector` data type to store vector embeddings, which are mathematical vector representations of data. Oracle GoldenGate 23ai supports capture and delivery of the `vector` data type for Oracle Database 23ai to enable real-time vector processing for embedding flow. For more information, see Oracle: Details of Support for Oracle Data Types and Objects.

- Oracle GoldenGate 23ai can replicate vector data heterogeneously and homogeneously if the embedding algorithm is same in terms of type and dimension, across the databases, allowing migration of vector data from one database to another.
- Oracle GoldenGate 23ai also supports the capture and delivery of `array`, `pgvector` extension, `tsquery` and `tsvector` for PostgreSQL and most vendor derivatives. For more information, see PostgreSQL: Supported Data Types.

### **Configuration service to store critical configuration data**

Oracle GoldenGate 23ai now supports a new Configuration Service for managing the configuration files of Oracle GoldenGate for high availability (HA) purposes. For more information, see Configuration Service.

### **Data streaming service**

Oracle GoldenGate 23ai introduces the data streaming service. This service enables simplified access to database change records, provides continuous ETL, and real-time analytics over a web socket connection. For more information, see About Data Streaming Service.

### **Monitor Oracle GoldenGate statistics**

Oracle GoldenGate 23ai supports StatsD, which is an open-source network daemon that listens for statistics, like counters and timers, sent over TCP and sends aggregates to one or more pluggable backend services. Oracle GoldenGate Microservice Architecture sends metrics to the Performance Metrics Service and writes metrics in StatsD format to a StatsD daemon or a time series databases that supports ingestion of StatsD metrics.

For more information, see Using StatsD with OGG

### **Trail file management**

Oracle GoldenGate 23ai has introduced the ability to manage trail files directly, including the ability to create archive tasks and delete trail files.

For more information, see Trail File Management.

### **Support for new TRANLOGOPTIONS parameter**

Oracle GoldenGate 23ai adds support for the new `TRANLOGOPTIONS EXCLUDEFILTERTABLE` parameter. This parameter replaces the `TRANLOGOPTIONS FILTERTABLE` parameter but supports the same functionality. For more information, see TRANLOGOPTIONS.

### **Support for Db2 version 13 for z/OS**

Oracle GoldenGate 23ai now supports Db2 version 13 for z/OS.

### **Support for new DISTINCT data type**

Oracle GoldenGate 23ai now supports the new `DISTINCT` data type for Db2 for i, Db2 LUW, and Db2 z/OS.

### **New user interface for Oracle GoldenGate Microservices Architecture**

The Oracle GoldenGate Microservices Architecture web interface has been renewed with improved capabilities and enhanced user experience.

### **Oracle GoldenGate 23ai features for Oracle Database 23ai**

- **Oracle GoldenGate supports Lock-free Reservable Columns**

Lock-free reservable columns are supported with Oracle GoldenGate 23ai. For more information, see Support for Lock-free Reservation.

- **Oracle GoldenGate supports Blockchain and Immutable Tables**

Blockchain and immutable tables are supported. For more information, see Tables, Views, and Materialized Views.

- **Support for Oracle SQL Domains**

Oracle GoldenGate supports Oracle SQL Domains. For more information, see Details of Support for Oracle Data Types and Objects.

- **Support for Boolean data type**

Oracle GoldenGate supports Boolean data type. For more information, see Details of Support for Oracle Data Types and Objects.

- **Oracle GoldenGate supports tables with 4K columns for Oracle Database 23ai**

Oracle GoldenGate supports tables with 4K columns for Oracle Database 23ai. For more information, see Tables, Views, and Materialized Views.

- **Support for Oracle database online DDL**

Oracle GoldenGate Extract and Replicat processes can manage replication for DDL operations in cases where minimal supplemental logging is enabled. This provides more flexibility for online application upgrades using Edition Based Redefinition.

For more information, see Using Edition-Based Redefinition section in *Oracle GoldenGate Microservices Documentation*.

- **JSON diff data type is supported with Oracle GoldenGate 23ai**

JSON diff data type is supported with Oracle GoldenGate 23ai. For more information, see Details of Support for Oracle Data Types and Objects.

- **Oracle GoldenGate 23ai works with per-PDB Extract level users only**

Oracle GoldenGate 23ai captures using per-PDB Extract only. Root level access using common user (c##ggadmin) is not available.

For more information, see Configure Multitenant Container Database.

- **Support for VECTOR data type**

Oracle GoldenGate 23ai now supports VECTOR data type to store vector embeddings.

### **Integrated health checks and alerts for integrated Replicat and Extract in Oracle GoldenGate Microservices**

Diagnose and troubleshoot integrated Replicat and Extract processes in Oracle database from Oracle GoldenGate Microservices.

### **DDL notification on target tables for Replicat**

Starting with Oracle GoldenGate 23ai, Replicat uses efficient table DDL change notification to invalidate any cached metadata when you perform a DDL operation on the target table.

For details, see DDL Notification on Target Tables .

### **Support coexistence of Oracle GoldenGate with Data Guard Pluggable Database (DGPDB)**

Oracle Database 23ai functionality has been extended to allow using Oracle GoldenGate in a PDB-based Data Guard (DGPDB) environment in parallel. See Support for DGPDB.

### **New CHKPTDUMP utility**

Oracle GoldenGate 23ai includes a new utility called `chkptdump`, which enables dumping content from checkpoint files. For details, see [Location of Programs and Utilities Accessible from the Admin Client](#).

# 3

## Enhancements

This section highlights the enhancements available with this release of Oracle GoldenGate.

### Release 23ai (23.8.0.25.04) - April 2025

**Bug 37757820: Generic - Enable NOCHECKUNIQUEKEYS as default for BATCHSQL for all Non-Oracle Databases**

Enabled `NOCHECKUNIQUEKEYS` as default for `BATCHSQL` for all non-Oracle databases.

**Bug 37275192: Db2 z/OS - Enhanced the memory manager to use Operator Commands, STOP and MODIFY**

Enhanced the memory manager to use operator commands `STOP` and `MODIFY` to shut down the Extract process gracefully.

**Bug 37465578: MySQL - Change the default capture for Extract CDC to be remote capture**

Changed the default capture of Oracle GoldenGate for MySQL from local to remote capture for Linux-x64 platform.

**Bug 35938413: SQL Server - Start the SQL Server CDC Capture automatically from Extract**

Enhanced the functionality for Oracle GoldenGate for SQL to start the SQL Server CDC Capture automatically from Extract.

**Bug 37468430: SingleStoreDB - Add Certification with SingleStoreDB (on-prem) for versions 8.1, 8.5, 8.7, and 8.9**

Added certification for on-premises SingleStoreDB for versions 8.1, 8.5, 8.7, and 8.9.

**Bug 37468442: SingleStoreDB - Add Certification with SingleStoreDB Cloud (Helios) for versions 8.0, 8.1, 8.5, 8.7**

Added certification for SingleStoreDB Cloud (Helios) versions 8.1, 8.5, 8.7, and 8.9.

### Release 23ai (23.7) - January 2025

**Bug 37090212: PostgreSQL - Add SSL support for the native driver**

Enhanced Oracle GoldenGate for PostgreSQL to provide SSL support for the native driver.

**Add support for PostgreSQL version 17**

Oracle GoldenGate supports PostgreSQL version 17.

## Release 23ai - May 2024

### Added new features to Oracle GoldenGate Configuration Assistant (OGGCA)

Oracle GoldenGate 23ai added the following new features for better user experience:

- OGGCA is enhanced to allow configuring the following features for the Service Manager and deployment:
  - Enable and configure the StatsD server for the deployment and Service Manager
  - Enable and configure the Configuration Service for the deployment
  - Enhanced security configuration from OGGCA
- Default environment variables are set for `OGG_HOME` and `LD_LIBRARY_PATH`
- Additional configuration options have been provided for the following:
  - Integration with external IDP providers
  - Customization of authentication modes
  - Availability of a sample template of the response file

### Added encryption support for user data in cache files and Bounded Recovery Persisted Data Files (PCDFs)

Oracle GoldenGate 23ai provides encryption support for user data included in cache files and Bounded Recovery persisted data files (PCDFs). For more information, see *Secure Data in Transit*.

### Added support for automatic reconnection of parallel Replicat for application continuity

Added support for automatic reconnection of parallel Replicat with databases on connection failures to maintain application continuity.

### Integrated OAuth/SSO with identity domains in OCI Identity and Access Management (IAM)

Added the following to improve and simplify the integration of OAuth/SSO with identity providers (IDP):

- New OAM profile type
- Validate and enable the authorization profile to automatically configure the confidential application and self-register the redirect URIs

### Improved failure detection for distribution and target-initiated paths

Added WebSocket protocol and asynchronous receive thread to improve the network failure detection process for distributed and target-initiated paths.

### Improved token-based authentication

Oracle GoldenGate 23ai now supports token-based authentication for IDP-enabled deployments. For this, token-access parameter has been added to the `CONNECT` and `ADD CREDENTIALS` commands. In addition, `INFO CREDENTIALS` command has been updated to display the token related information. For more information, see `CONNECT`, `ADD CREDENTIALS`, and `INFO CREDENTIALS`.

### **Improved performance monitoring**

Added Integrated Diagnostics REST API to obtain performance data to diagnose performance issues related to integrated Extract, integrated Replicat, and parallel integrated Replicat. This is a replacement over the previously used Replication Performance Advisory Utility (UTLRPDV).

For more information, see Integrated Diagnostics

### **Enhanced Functionality for Automatic Conflict Detection and Resolution (ACDR)**

Automatic Conflict Detection and Resolution provides improved functionality for the following tasks:

- Removing ACDR entirely from the table or removing ACDR column groups has less impact on the table as the ACDR related columns are marked as UNUSED columns. The decision to drop the columns can be made at a later time.
- Starting with Oracle Database 23ai, using `DBMS_REDEFINITION` for ACDR related tables is supported. The `DBMS_REDEFINITION` package can be used to remove unused columns or any other purpose for which the table needs to be reorganized.

See the following topics for details, Configure Latest Timestamp Conflict Detection and Resolution, Support for Online Redefinition, Removing Conflict Detection and Resolution From a Table, and Removing a Column Group.

### **Oracle Key Vault 21.8 is supported for trail file encryption**

Oracle GoldenGate 23ai supports trail file encryption with Oracle Key Vault 21.8. See Using Oracle Key Vault with Oracle GoldenGate.

# 4

## Default Behavior Changes

This section describes the default behavior changes made to Oracle GoldenGate in relation to the last release..

### Release 23ai (23.8.0.25.04) - April 2025

**Bug 29709965: MySQL - Extract to skip XA transactions and log a Warning instead of Abend**

Changed the functionality in Oracle GoldenGate Extract for MySQL to skip XA transactions with a warning, instead of abending.

**Bug 37465578: MySQL - Change the default capture for Extract CDC to be remote capture**

Changed the default capture of Oracle GoldenGate for MySQL from local to remote capture for Linux-x64 platform.

### Release 23ai (23.7.1.25.02) - February 2025

**Bug 37581809: Oracle - Allow IR to run with nodbcheckpoint**

All Replicats are required to create and maintain a database checkpoint table, which serves as a mechanism for ensuring data consistency and facilitating recovery processes. The only exception to this requirement is the integrated Replicat. However, it is strongly recommended that you create and maintain a checkpoint table for the integrated Replicat.

**Bug 37643197: SQL Server - Upgrade odbcinst.ini contents to the absolute path and driver descriptions**

When upgrading an Oracle GoldenGate deployment for SQL Server to Oracle GoldenGate 23ai (23.7) from previous versions of 23ai or the 21c release using OPATCH, you must reset the contents of the `odbcinst.ini` file. For details on performing this task, see [Upgrading Oracle GoldenGate Microservices GUI](#).



**Note:**

You do not need to follow this step if upgrading from Oracle GoldenGate 23.7 to later releases.



## Release 23ai (23.7.0.25.01) - January 2025

### **Bug 37298528 - MySQL: Make TRANLOGOPTIONS TRACKSCHEMACHANGES enabled by default**

Enhanced `TRANLOGOPTIONS TRACKSCHEMACHANGES` option to be enabled by default.

### **Bug 37539434: Oracle - All Replicats without checkpoints are desupported**

The creation of integrated and classic Replicat without checkpoint tables is not supported in Oracle Database. Additionally, any Replicats that were created without the checkpoint tables, will not start successfully.

For existing Replicats to run successfully, you must alter the Replicat to add a checkpoint table or add the checkpoint table to GLOBALS and then restart the Replicat. See `ADD REPLICAT CHECKPOINTTABLE` in the *Command Line Interface Reference for Oracle GoldenGate* for details.

### **Bug 35569409: PostgreSQL - Use Microservices Architecture task scheduler to update the heartbeat tables instead of relying on cron job**

Configured an Administration Service task to update the heartbeat table to avoid relying on the cron job to do it.

## Release 23ai (23.5) - July 2024

### **Oracle GoldenGate 23ai does not need the OGG\_SERVICEMANAGER\_ID environment variable to be set for using the command line utilities that access database credentials**

In Oracle GoldenGate 23ai (23.5) release, there is no requirement to set up the `OGG_SERVICEMANAGER_ID` environment variable for using command line utilities that access database credentials. This is required in the Oracle GoldenGate 23ai (23.4) release.

### **MySQL - Removed the remote (RMTTRAIL) option from the WebUI**

For MySQL, the **Remote** button that was used for adding an Extract, has been removed from the WebUI.

## Release 23ai (23.4.2) - June 2024

### **Behavior change in Oracle GoldenGate 23ai**

Oracle GoldenGate 23ai introduces the following feature, which impacts the behavior of configuring and using Oracle GoldenGate:

#### **Microsoft ODBC Driver 18 for SQL Server**

Oracle GoldenGate 23ai for SQL Server now packages the Microsoft ODBC Driver 18 along with the Oracle GoldenGate for SQL Server installation, and database connections will use this driver by default.

## Release 23ai - May 2024

### Behavior change in Oracle GoldenGate 23ai

Oracle GoldenGate 23ai introduces the following features, which impacts the behavior of configuring and using Oracle GoldenGate:

- In OGGCA, you must use the `#pkcs8` format to upload server, client, and rootCA certificates. Uploading wallets (`#pkcs12`) is not supported. For more information, see [About Service Manager](#).
- When setting up Oracle database 23ai users for Oracle GoldenGate, make sure to use Oracle GoldenGate user roles to assign privileges. For more information, see [Grant User Privileges for Oracle Database 23ai and Higher](#).
- Support for Oracle `Boolean` and `vector` data type for Oracle database. For more information, see [Oracle: Details of Support for Oracle Data Types and Objects](#).
- Support for PostgreSQL `pgvector` extension, `array`, `tsquery`, and `tsvector` datatypes.
- Only per-PDB Extract is used for Extract rather than root-level Extract except for Downstream Capture, where root-level Extract is configured.
- Using Integrated Diagnostics rather than ULT\_RPADV Diagnostics integrated in Oracle GoldenGate 23ai.

### Oracle GoldenGate 23ai features for Oracle Database 23ai

#### User roles to grant role-based privileges for Oracle Database 23ai

Oracle GoldenGate 23ai for Oracle Database 23ai has introduced user roles to grant role-based privileges.

For details, see the [Grant User Privileges](#) topic in *Oracle GoldenGate Microservices Documentation*.

# 5

## Deprecated and Desupported Features and Parameters

This section describes the deprecated and no longer supported features of Oracle GoldenGate.

### Release 23ai (23.5) Deprecated and Desupported Features and Parameters - July 2024

#### **Oracle GoldenGate for Oracle TimesTen no longer supports the TimesTen Scaleout architecture**

Starting with Oracle GoldenGate 23ai, Oracle GoldenGate for Oracle TimesTen does not support the Scaleout architecture.

Use Oracle GoldenGate 21c for delivery to TimesTen Scaleout architecture for TimesTen versions 18.1 and 22.1.

### Release 23ai (23.4.2) Deprecated and Desupported Features and Parameters - June 2024

#### **Oracle GoldenGate has deprecated DBOPTIONS USEREPLICATIONUSER**

DBOPTIONS USEREPLICATIONUSER option has been deprecated.

All SQL Server builds automatically set the connection with `Replication=yes`, and the functionality of DBOPTIONS USEREPLICATIONUSER remains the same as long as SQL Server ODBC driver is version 17.8.1 or higher.

### Release 23ai Deprecated and Desupported Features and Parameters - May 2024

#### **Oracle GoldenGate 23ai has deprecated Integrated Replicat**

Starting with Oracle GoldenGate 23ai, integrated Replicat has been deprecated. As an alternative, you can use parallel Replicat.

#### **Oracle GoldenGate 23ai has desupported Oracle GoldenGate Classic Architecture**

Starting with Oracle GoldenGate 23ai, Oracle GoldenGate Classic Architecture has been desupported.

#### **Oracle GoldenGate 23ai has desupported the following parameters:**

Starting with Oracle GoldenGate 23ai, the following parameters have been desupported:

- `FILTERTABLE`
- `GETREPLICATES`

- GETAPPLPLOS
- IGNOREREPLICATES
- IGNOREAPPLPLOS
- SHOWSYNTAX



**Note:**

The `TRANLOGOPTIONS FILTERTABLE` parameter has been replaced with the `EXCLUDEFILTERTABLE` parameter, but with the same functionality.

**Oracle GoldenGate 23ai has desupported Blowfish encryption**

Starting with Oracle GoldenGate 23ai, Blowfish encryption algorithm has been desupported.

**Oracle GoldenGate 23ai has desupported the Trace Table functionality**

Starting with Oracle GoldenGate 23ai, the trace table functionality has been desupported for Oracle database. Therefore, the following parameters and commands are also desupported:

- **Parameters:**
  - `TRACETABLE`
  - `NOTRACETABLE`
- **Commands:**
  - `ADD TRACETABLE`
  - `DELETE TRACETABLE`
  - `INFO TRACETABLE`

**Oracle GoldenGate 23ai has desupported six-digit trail file**

Starting with Oracle GoldenGate 23ai, the six-digit trail file has been desupported.

**Oracle GoldenGate 23ai has desupported the use of userid and password in Extract and Replicat parameter files**

Starting with Oracle GoldenGate 23ai, the use of `userid` and `password` in the Extract and Replicat parameter files has been desupported. Alternatively, you need to use the `useridalias` option.

# 6

## Known Issues and Workarounds

This chapter describes the known issues at the time of release.

### Release 23ai (23.6) - October 2024

#### **Bug 37152943: Db2 for i - Extract fails with core dump issue for heartbeat table**

For Oracle GoldenGate Extract for Db2 for i, abends with the core dump error for heartbeat table. This results in heartbeat functionality not working .

#### **Workaround**

None.

#### **Bug 37468391: Oracle - XAGTask is killing all GoldenGate processes running on a node when one Service Manager is stopped**

When running Oracle GoldenGate using multiple OGG\_HOME directories, and a Service Manager registered with XAG fails, or is stopped by XAG/CRS, all GoldenGate processes running on the server will be stopped, no matter what OGG\_HOME they are running out of. This will cause a server wide GoldenGate outage.

#### **Workaround**

Only use XAG integration with Oracle GoldenGate on servers with:

- A single Service Manager.
- No other Oracle GoldenGate processes running out of a different OGG\_HOME.

### Release 23ai (23.5) - August 2024

#### **Parallel Replicat is not supported for Sybase**

Oracle GoldenGate for Sybase does not support parallel Replicat.

#### **Workaround**

Use coordinated or classic Replicat.

#### **Bug 36926498: Sybase - Bi-directional Extract crashes without any error**

An issue with Extract configured for bi-directional replication causes the Extract to abend.

#### **Workaround:**

None

**Bug 36927786: Generic - OGGCA deployment creation is not picking up SYBASE system variable/value**

When creating a Sybase deployment, the SYBASE system variable is not getting set automatically for the deployment.

**Workaround**

Add the SYBASE variable to the deployment's environment variable configuration manually, and set the path to the Sybase home directory, such as `/opt/sap`, then restart the deployment.

## Release 23ai (23.4) - May 2024

**Explicitly exclude Inverted File (IVF) and Hierarchical Navigable Small Worlds (HNSW) index tables**

If you are using wildcard parameters, then IVF and HSNW vector index tables must be explicitly excluded from the Extract.

**Workaround**

None

**Extract LSN positioning does not work with 0x8:8:4 format for the Admin Client**

For SQL Server, starting an Extract with ATCSN or AFTERCSN with the Admin Client and using a LSN value with a 0x8:8:4 format is not working as intended.

**Workaround**

Provide the LSN value in the following format: 0x8:8:4-ffffffff-8:8:4.

For example:

```
START EXTRACT EXTPROD AFTERCSN 0x000000b3:00002240:0003-  
ffffffff-000000b3:00002240:0003
```

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## Bugs Fixed

This chapter describes the bugs fixed at the time of release.

The Bug number is the number of the BugDB ticket. For questions on specific tickets or issues, consult Oracle Support.

### Release 23ai (23.8.0.25.04) - April 2025

**Bug 37254573: Generic - Unexpected Warning message showing up while deleting an Extract**

Fixed an issue with a warning message that kept appearing when trying to delete an Extract or Replicat.

**Bug 37581002: Generic - Discrepancy in Autorestart Delay timing for Distpath on the web interface**

Fixed an issue with the Oracle GoldenGate web interface showing the value of Auto Restart Delay for DISTPATH in seconds although it represents minutes.

**Bug 37686972: Generic - Web interface doesn't reflect updated managed process options for Extracts and Replicats if Critical to deployment health is enabled**

Fixed the web interface to reflect updated managed process options for Extracts and Replicats when the Critical to deployment health option is enabled.

**Bug 37477825: Autonomous Database - Integrated Extract showing faulty Running status and causing mutex lock on adminsrvr threads**

Fixed the issue where integrated Extract status is incorrectly shown as Running, which caused the mutex lock on the Administration Service threads.

**Bug 37207902: Db2 /zOS - OGG-01741 unexpected log sequence number**

Fixed an issue where Extract terminates with the error "OGG-01741 Unexpected Log Sequence encountered at LSN XXXXXXXXXX, previous LSN XXXXXXXXXX."

**Bug 37418253: Db2 z/OS - Heartbeat table not working on Oracle GoldenGate 23.6 from Db2 z/OS to Oracle database**

Fixed an issue where the `ADD HEARTBEATTABLE` fails to create a viable heartbeat system, if the value of `GGSCHEMA` is not entered in all caps in the `GLOBALS` file, even though the results show that it was successfully created.

**Bug 36775234: Db2 z/OS - Oracle GoldenGate for Db2 z/OS is writing multiple 00C90101 abends to Db2 Log**

Eliminated the 00C90101 errors and fixed Oracle GoldenGate for Db2 z/OS to catch most memory manager abends to eliminate large SVC dumps.

**Bug 37705856: Exadata Cloud @ Customer - KeyOCID and USEROCID are interchanged in OCI Console**

Fixed the OCI Console displaying interchanged KeyOCID and USEROCID values although the values are correctly set up internally.

**Bug 37430773: Microsoft SQL Server - Upgrade Heartbeatable does not work for Oracle GoldenGate for SQL Server MA Deployment**

Fixed the issue with Upgrade Heartbeatable functionality not working in Oracle GoldenGate for SQL Server MA deployment.

**Bug 37297126: MySQL - Metadata warnings are logged in the report file for uncaptured tables causing excess log growth**

Fixed an issue with metadata change warning being printed even for the uninterested tables, which was causing the report file size to grow.

**Bug 36683628: MySQL - DBOPTIONS FORCELOWERCASEMAPPING is not working for DDL Replication**

Fixed an issue with `DBOPTIONS FORCELOWERCASEMAPPING` not working for DDL Replication.

**Bug 37732737: Oracle - Unable to Create Distribution Path from the web interface**

Fixed an issue with Distribution Service web interface not allowing creation of `DISTPATH`.

**Bug 37702257: Oracle - Performance Metrics Statistics page is not loading**

Fixed an issue with Performance Metrics Service web interface not loading the Performance Metrics Statistics page.

**Bug 37378652: Oracle - Function @GETENV('TLFKEY',SYSKEY,4) is not working in the Replicat**

Fixed an issue with the column function `@GETENV('TLFKEY',SYSKEY,number)` not working and returning NULL value.

**Bug 36196912: Oracle - Initial Load Extract capturing Editionable View and Packages**

Fixed the functionality where initial load Extract was capturing editionable view and packages.

**Bug 36878392: Oracle - Health Check Oracle GoldenGate 23.4.1.24.05 and Oracle Database 23ai (23.5) reports ORA-942 for EXTRACT-LOGMINER**

Fixed an issue with health check script failing on Oracle Database 23ai.

**Bug 37651447: Oracle - Subdirectory field should not allow absolute paths when creating a Distribution Path**

Fixed an issue in Distribution Service web interface where the subdirectory field allowed absolute path when creating a Distribution Path.

**Bug 37631266: Oracle - Unable to Add Data Streams When User Selects Trail Name from Dropdown**

Fixed an issue with Distribution Service web interface unable to add Data Streams when trail name is selected from the dropdown box.



**Bug 37567815: Oracle - Unable to add checkpointtable from Admin Client**

Fixed an issue with Admin Client not being able to add checkpoint table without an argument.

**Bug 36705454: Oracle - Download/delete trail file fails with OGG-30257 for trails with 6 digits sequence number**

Fixed an issue with Administration Service Trails web interface not allowing download or deletion of initial load Extracts created with 6 digit sequence number.

**Bug 37295529: Oracle - ADD/DELETE TRANDATA does not throw an error when the option is unsupported**

Added the warning for unsupported `TRANDATA` options applied to Duality views.

**Bug 37600183: Oracle - Trail Size should be moved from the Source Options (Step 2) page to the Target Options (Step 3) page while creating target-initiated paths**

Fixed the Receiver Service web interface by moving the Trail Size option from the **Source Options** page to the **Target Options** page while creating a target-initiated distribution path.

**Bug 37510192: Oracle - ServiceManager UI deployment shows blank GoldenGate Data Home**

Fixed the Service Manager user interface that was displaying a blank Oracle GoldenGate Data Home directory value.

**Bug 37281746: Oracle - INFO TRANDATA shows supplemental logging as disabled even though logical replication is enabled in the RDBMS**

Resolved the inconsistency in the output from `INFO TRANDATA`.

**Bug 37460054: Oracle - When expanding Extracts/Replicats in the left pane, the hierarchy initially displays blank before subsequently loading the respective sections in the tree**

Fixed the behavior of the web interface left pane in the Administration Service, which would not display anything in the hierarchy initially, when expanding Extracts/Replicats, but, subsequently loads the respective sections in the tree.

**Bug 37506596: Oracle - Wrong value of 'Total Messages Received' in Network Statistics in Distribution Service Paths**

Fixed the Performance Metrics Service web interface, which was displaying a wrong value for 'Total Messages Received' in Network Statistics under Distribution Service Paths.

**Bug 34798711: Oracle - Error in DBFUNCTION usage should show "not supported" instead of mapping error**

Improved misleading error message when extra single quotes used in `@dbfunction`.

**Bug 37111463: Oracle - Replicat fails to be added due to missing checkpointtable parameter as expected, but subsequently on "info all" command, the adminclient checks for the unadded Replicat's checkpointfile**

Fixed an issue with Oracle GoldenGate for Oracle where Extract/Replicat registration is not removed when adding Extract/Replicat process fails.

**Bug 37645651: Oracle GoldenGate for DAA - Before Image record of the update operation not replicated with INSERTALLRECORDS**

Modified issue where an `UPDATE` operation type was not correctly used as `INSERT` when `INSERTALLRECORDS` was active.

**Bug 37549835: PostgreSQL - AFTERCSN is not working from the web interface**

Fixed `AFTERCSN`, which was not working from the web interface.

**Bug 37628576: Sybase - Upgrade Checkpointtable command not working**

Improved the error message when the `UPGRADE CHECKPOINTTABLE` command does not work for Oracle GoldenGate for Sybase.

**Bug 37430785: Sybase - Upgrade Heartbeatable does not work for Sybase**

Fixed the incomplete heartbeat table functionality for Oracle GoldenGate for Sybase.

**Bug 37008469: Sybase - Administration Service retrieves incorrect server information in DB Connection**

Fixed the server information when the user connects to different DB connection.

**Bug 37664259: TimesTen - Greater than 30 characters not accepted for ALTER CREDENTIALSTORE for USER**

Increased `DBUSER` string length to accommodate MA user strings (DSN-Less based).

## Release 23ai (23.7.1.25.02) - February 2025

**Bug 37504103: Generic - Distpaths Intermittently not self-recovering from the recvsrvr restarts**

Fixed the recovery rollback scan to scan forward.

**Bug 37570183: Oracle - Pump and Replicat doesn't update input checkpoint position XID properly**

Fixed the checkpoint transaction update for pump and Replicat.

## Release 23ai (23.7.0.25.01) - January 2025

**Bug 36587145: Generic - Administration Service worker threads in pthread\_mutex\_lock() mode while one/more threads are not successful when trying to log in to a database session from the Administration Service with adminsrvr::DatabaseSession::login()**

Fixed the issue with the `DBLOGIN` commands taking a few minutes to fail when multiple sessions try to issue `DBLOGIN` commands through the Administration Service.

**Bug 37381546: Generic - Filter Rules do not appear to be added or updated in the data stream when user attempts it while logged into the Administration Service web interface and navigates to the Distribution Service**

Fixed an issue with the Oracle GoldenGate 23ai web interface behavior regarding the creation of filter rules not getting added or updated in the Data Stream when you log in to the Administration Service and then navigate to the Distribution Service.

**Bug 33749680: Generic - Replicat reports misleading error when GRANT DDL applied and grantor user does not exist in target database**

Fixed an issue with Replicat not showing the DDL that failed to replicate at DDL failure.

**Bug 37409072: Generic - Distpaths are not working upon stop/start of Distribution Service3**

Fixed an issue with Distpaths not working after stopping and starting the Distribution Service.

**Bug 37270480: Generic - Coordinated Replicat starts reading from the first trail when terminating and restarting on Amazon Redshift**

Fixed an issue with Replicat checkpoint position lagging compared to the database position, after unexpected termination and restart on Amazon Redshift.

**Bug 37163842: Generic - Parallel Replicat gets stuck when restarting after database instance service is stopped, and Replicat abended**

Fixed the hang issue caused by inconsistent counter.

**Bug 36798702: Generic - Replicat abends with OCI Error ORA-00917: missing comma for @dbfunction(json\_mergepatch(...))**

Fixed an issue with Replicat abending with the error OCI Error ORA-00917: missing comma for @dbfunction(json\_mergepatch(...)).

**Bug 37086096: Generic - Parallel Replicat hangs during registration at startup**

Fixed an issue with parallel Replicat hanging during startup when configured with a large number of appliers.

**Bug 37439646: Db2 for i - Extract not capturing records when table has special characters**

Introduced support for extracting from table names with non-ascii characters.

**Bug 37413981 - Db2 for i - Extract abends with ERROR OGG-30541 One or more members of the file TPCC/CUSTOMER are locked**

Fixed an issue with Extract abending with the error ERROR OGG-30541 One or more members of the file TPCC/CUSTOMER are locked.

**Bug 37386126: Db2 for i - Extract error OGG-00551 Database operation failed: Fetching from qsys2.sysmemberstat for retrieving first member**

Fixed an issue with Extract generating the error OGG-00551 Database operation failed: Fetching from qsys2.sysmemberstat for retrieving first member.

**Bug 37204715 - Db2 for i - Issue with Info trandata on tables with format "."**

Fixed an issue with `INFO TRANDATA` failing with SQL names containing special characters and length greater than 10 characters.

**Bug 36980834: Db2 for i - Better handling of Journal Read API when the journal receiver is locked**

Enhanced the handling of error messages when the journal receiver is locked.

**Bug 37144231: Db2 for i - Extract Trandata not working when connected to IASP**

Fixed issues related to `ADD TRANDATA` and `ADD CHECKPOINTTABLE` commands when connected to an IASP.

**Bug 37239003: Db2 z/OS - Parsing parameter to TRANLOGOPTIONS IFIDIAGNOSTICS doesn't always produce correct result**

Fixed an issue with Extract abending with `SigSEGV` if activity logging is enabled for the Extract when using the parameter `TRANLOGOPTIONS IFIDIAGNOSTICS`.

**Bug 37409869: MySQL - Issue with the Heartbeat feature flooding the MySQL database logs**

Fixed an issue with the Heartbeat feature flooding the MySQL database logs.

Fixed an issue to increase the `remote_database` and `local_database` fields of the Heartbeat table to 512 characters, which caused excessive log usage when the values for this field exceeded 30 characters. You will need to run `UPGRADE HEARTBEATTABLE` if patching an existing heartbeat table implementation.

**Bug 37086063: MySQL - CREATE TABLE AS SELECT is not correctly ignored by Extract**

Fixed an issue with the `CREATE TABLE AS SELECT` statement not working because the `SELECT` option was not skipped properly.

**Bug 36921787: MySQL - Oracle GoldenGate Extract consumes high memory with UPDATERECORDFORMAT parameter**

Fixed an issue with Extract consuming higher memory when running with the `UPDATERECORDFORMAT` parameter

**Bug 37369266: Oracle - Lag of Extract continuously increasing on new primary after dbms\_rolling from 19c to 23ai when capturing from multiple PDBs**

Fixed an issue with continuously increasing Lag of Extract on new primary after `dbms_rolling` from 19c to 23ai when capturing from multiple PDBs.

**Bug 37307982: Oracle - XAG fails to start Oracle GoldenGate Microservices when Service Manager admin password includes a colon ':'**

Fixed the XAG behavior, that had failed to start Oracle GoldenGate Microservices when Service Manager admin password includes a colon ':'

**Bug 37285812: Oracle - Table Statistics under the Extract/Replicat, Database Statistics Page are not showing all table statistics until user tried to search for specific table stats from search box**

Fixed an issue with Table Statistics under the Extract/Replicat, **Database Statistics** page not showing all the table statistics until specific table statistics are searched from the search box.

**Bug 37285774: Oracle - Page reloads of internal navigation from Services/Extracts/Replicats tabs displays blank page**

Fixed an issue with the Oracle GoldenGate web interface displaying blank page upon page reloads of internal navigation from the **Services, Extracts, Replicats** tabs.

**Bug 36953036: Oracle - UIVPAT Border missing for Username, Password input text fields on Oracle GoldenGate login page**

Fixed an issue with UIVPAT border missing for username, password input text fields on Oracle GoldenGate login web page.

**Bug 37020932: Oracle - Output recovery not completing with Multiple target trail files after dbms\_rolling from 19c to 23ai**

Fixed the issue with multiple trail file output causing unfinished recovery if there is no transaction found.

**Bug 37046598: Oracle - Extract abends with invalid metadata error when DDL replication is disabled and truncate and table delete are in flight**

Fixed an issue with Extract abending with an `ERROR OGG-10556 No data found when executing SQL statement`, when trying to look up the metadata for a table from Logminer when processing a truncate while the DDL is not being replicated to the target.

**Bug 37485403: Oracle - Extract abends with the error "OGG-30465 FAKE PK UPDATE Received LCR With Objid" after upgrading Oracle GoldenGate 21c to Oracle GoldenGate 23ai**

Fixed an issue with Extract abending with the error `OGG-30465 FAKE PK UPDATE Received LCR With Objid` after upgrading Oracle GoldenGate 21c to Oracle GoldenGate 23ai.

**Bug 37273254: Oracle Exadata - High RAM Memory Consumption by Replicats**

Fixed memory leak with updates when using integrated Replicat with pseudo columns in the map.

**Bug 37118843: Oracle Exadata - Oracle 1430 error on checkpoint table in audit logs**

Fixed an issue with columns being added to parallel Replicat checkpoint tables without checking if the columns already exist.

**Bug 37266755: Oracle GoldenGate Big Data Delivery to JDBC-error OGG-02092 Unexpected condition in function indexOutOfRangeException**

Fixed an issue with incorrect array index when solving key columns when target table definition is created.

**Bug 36889273: PostgreSQL - Extract failing with Database error "ERROR: can no longer get changes from replication slot "etoora18\_6c1918b7f4e4a1ec" - Manually switched back from SLC primary to LVS standby"**

Fixed an issue where the replication slot becomes invalidated if the `wal_level` on standby node is not set to `logical` in case of failover.

**Bug 37095544: SQL Server - Task result displays "No message available" in purge process task info**

Fixed an issue with purge process task information displaying "No message available" in task results.

**Bug 37114532: Sybase: Encountering ERROR OGG-00870 Database error 16843163 when checking LAG**

Fixed an issue with Extract encountering database error while fetching lag information.

**Bug 37045115: Sybase - Extract getting abended without throwing any proper reason**

Fixed an issue with Extract abending without any specific reason.

**Bug 36426099: Sybase - Parallel Replicat abends with database error "ERROR: Attempt to insert duplicate key row"**

Fixed an issue with parallel Replicat not being able to insert records into target table.

**Bug 37135162: Sybase - Negative value shown in incoming\_extract\_restart\_age**

Fixed an issue with a database error occurring when fetching lag information for heartbeat lag.

## Release 23ai (23.6.3.24.12) - December 2024

**Bug 37383026: Generic - Credential store cannot be created intermittently when deploying Oracle GoldenGate**

Fixed an issue with Oracle GoldenGate deployment failing because the wallet is not created correctly.

## Release 23ai (23.6.2.24.11) - December 2024

**Bug 37234396: Generic - Convert credential store wallet's encryption factor from Service Manager ID to directory path, as needed**

Enhanced authentication by allowing conversion of credential store wallet's encryption factor from Service Manager ID to the directory path, as needed.

**Bug 36986688: Generic - Restarting Replicat fails after applying data length exceeding 4000, from JSON Data Vault to JSON Collection Tables**

Fixed an issue with Replicat failing to restart after applying data from JSON Data Vault to JSON Collection Table exceeding 4000.

**Bug 37215604: Generic - Updated @date function**

Updated parsing of `COLMAP`, correcting parentheses count and added check for quotes.

**Bug 37236177: Generic - After upgrade to 21.15, Replicat failed to process heartbeat data**

Fixed an issue with Replicat failing to process heartbeat data and generating the error 'Text ' ' could not be parsed at index 0 after upgrading to Oracle GoldenGate 21.15.

**Bug 37152943: Db2 for i - Extract is failing with core dump issue when heartbeat is enabled**

Fixed an issue with Extract failing with core dump issue when heartbeat is enabled.

**Bug 37283643: Db2 for i - Extract error "OGG-00146 Call to getNextRecord returned with error status -1: Unexpected operation type: C9D3"**

Fixed an issue with Extract not being able to handle Increment Limit (IL) journal entry.

**Bug 36848389: Oracle Autonomous Database Serverless - Replicat hangs on abend after error**

Fixed an issue with Replicat abending when it encounters an error on startup, while the process is still running and is in hung state.

**Bug 37170410: Oracle - Race condition when removing auto-login property from credential store and secure store wallets**

Fixed an issue with a race condition occurring when a single sign-on wallet is being converted to a password protected file.

## Release 23ai (23.6.0.24.10) - October 2024

**Bug 36869358: C-tree - Replicat overwrites memory and core dumps when writing to discard file**

Fixed a memory overwrite issue with Replicat when writing to the discard file that caused core dump error.

**Bug 34200795: Db2 for i - For a materialized query table, the Extract's behavior differs for a non-initial load setup**

Fixed the Extract behavior to abend properly when a fully qualified name resolves to a materialized query table name for a non-initial load setup.

**Bug 36606660: Db2 for i - Validate table name regex pattern for all SQL and native names**

Fixed a JSON parsing issue with `INFO TRANDATA` command processing table names containing a period (.).

**Bug 36743591: Db2 for i - Extract abends when table name includes characters other than ASCII**

Added support for non-ASCII characters to be included in the table names.

**Bug 36844240: Db2 for i - Checkpoint tables are not automatically journalled in Microservices deployment**

Fixed an issue with checkpoint tables not automatically being journalled to `GGSHEMA/OGGJRN`.



**Bug 36872864: Db2 for i - Intermittent connection timeout occurs when establishing a connection from a Java module to the database**

Fixed an issue that was causing intermittent connection timeout when establishing a connection from a Java module to the database.

**Bug 37084736: Db2 for i - The INFO TRANDATA command failing for native names with wildcards**

Added support for native names with wildcards for `ADD,INFO` and `DELETE TRANDATA` commands.

**Bug 36753184: Db2 LUW - Activity logger uses incorrect format specifications**

Fixed an issue of activity logger using incorrect format specifications.

**Bug 36024390: Db2 z/OS - The Extract should be able to switch LPARs using data sharing support**

Added data sharing support to enable Extracts to switch LPARs.

**Bug 36970650: Db2 z/OS - Extract abends without error when table is altered**

Fixed an issue of Extract abending without displaying any error message when a column is added to the table using the `ALTER TABLE` command.

**Bug 37064356: Db2 z/OS - Initial Program Load (IPL) resets the ECSA monitor job and causes the Extract to abend**

Fixed an issue of Extract abending when the memory monitor task is started on a different LPAR than the Extract.

**Bug 36860369: Exadata Cloud at Customer (Gen2) - Extract capturing DDLs on data pump export process's internal table, SYS\_EXPORT\_TABLE**

Fixed an issue with Extract capturing DDLs on internal tables generated during Data pump Export process.

**Bug 36688820: Exadata on Premise - Extract abends with error "OGG-02560 Formatting error on update operation for a LOB column"**

Fixed an issue of Extract abending with error, OGG-02560 Formatting error on update operation for a LOB column, due to leftover tombstone data.

**Bug 36825916: Exadata on Premise - Replicat abends due to missing trails purged by the manager process**

Fixed an issue of missing trail files being purged, causing the Replicat to abend.

**Bug 36773183: MariaDB - Unable to run parallel Replicat**

Fixed the issue of mapper receiving multiple `BEGIN` statements causing parallel Replicat to fail.

**Bug 36959562: Microsoft SQL Server - Extract abends on version check when non-Oracle created objects exist on CT tables**

Fixed an issue with Extract abending if an extra column, created as an object, is added to the CT table after running the `ADD TRANDATA` command.



**Bug 35208691: MySQL - Timestamp datatype conversion does not happen when two Extracts capture from two different MySQL servers with two different timezones**

Fixed an issue with `TZ` environment variable setting that was not allowing the conversion of the `TIMESTAMP` datatype to the MySQL database timezone.

**Bug 35252069: MySQL - Oracle GoldenGate replication does not work when the CDR column value is null**

Added support for `CDROPTIONS _CHECKNULL` option for non-Oracle databases.

**Bug 36622073: MySQL - Support @DBFUNCTION with arguments for MySQL Heatwave for vector embeddings**

Added support for vector embeddings through `@DBFUNCTION` with arguments for MySQL Heatwave.

**Bug 37103610: MySQL - The Binary(16) field with trailing 0 in bytes is truncated**

Fixed an issue of the `Binary` field with trailing value as 0 is truncated.

**Bug 35117978: Oracle - Parallel Replicat process mode displays as coordinated when process is created**

Fixed an initialization issue with parallel Replicat process mode that displays it as coordinated.

**Bug 36294046: Oracle - Replicat abends with error "OGG-01163 Bad column length replicating a truncate operation"**

Fixed an issue with Replicat abending when processing the `TRUNCATE` procedure from a trail file generated on a server with `Big-Endian` architecture.

**Bug 36451257: Oracle - After the certificate update, Oracle GoldenGate warning "Unable to locate certificate with subject" is displayed**

Fixed an issue of warning being displayed in the process log files, after updating the certificates through the Service Manager interface.

**Bug 36543936: Oracle - OGGCA does not use the value of the HOST\_SERVICEMANAGER option from the response file for non-silent installation**

Fixed an issue of Oracle GoldenGate Configuration Assistant (OGGCA) not using the value of the `HOST_SERVICEMANAGER` option from the response file for a non-silent installation.

**Bug 36714726: Oracle - Parallel integrated Replicat report file displays empty warning "WARNING OGG-00869 <NIL>" message**

Fixed an issue of empty warning messages displayed in the parallel integrated Replicat report file.

**Bug 36757657: Oracle - Coordinated Replicat abending with errors OGG-30200 & OGG-01091**

Fixed an issue with the purge process that was causing the coordinated Replicat to abend with errors `OGG-30200` & `OGG-01091`.

**Bug 36793509: Oracle - The Service Manager fails to start on Windows due to issue with ntdll.dll**

Fixed an issue with the `ntdll.dll` library file that caused the Service Manager to fail on Windows.

**Bug 36819559: Oracle - PDB change table capture abends with error "OGG-02259 Extract failed to gather source database metadata from the mining database"**

Fixed an issue of Extract failing to detect a shared capture on PDB, causing it to abend with the error, OGG-02259 Extract failed to gather source database metadata from the mining database, for an ADB deployment.

**Bug 36835509: Oracle - Replicat abends while mapping values from nchar/nvarchar2/varchar2 type column to boolean type column**

Fixed the UTF8 mapping issues between `Boolean` datatype and `nchar/nvarchar` and `varchar/nvarchar` with leading spaces datatypes.

**Bug 36855549: Oracle - For Output Extract recovery, Extract abends with error "OGG-02246 source redo compatibility level 23.5.0 requires trail format 12.2 or higher"**

Fixed a header issue with Extract, causing it to abend with error, OGG-02246 source redo compatibility level 23.5.0 requires trail format 12.2 or higher.

**Bug 36916916: Oracle - The Performance Metrics Service displays the error "OGG-15312 Cannot obtain database version information frequently"**

Removed the error message, OGG-15312 Cannot obtain database version information frequently, which was being displayed on connecting with the Admin Client.

**Bug 36920035: Oracle - The ConfigService.log is flooding with warning messages (Create new credential store failed with 409) when user is trying to get DB Connections using "services/v2/credentials" REST API**

Fixed an issue with `services/v2/credentials` REST API that was generating several warning messages in the `ConfigService.log`.

**Bug 36939158: Oracle - Heartbeat data disappears after the Performance Service page is refreshed**

Fixed an issue of heartbeat data disappearing when the Performance Service page is refreshed.

**Bug 36960165: Oracle - For some of the deployments, the status of all or some of the services is not updated from registered to running on the Performance Service page**

Fixed an issue with status of some services not being updated from registered to running on the Performance Service page, for some deployments, which were deployed using the Configuration Service.

**Bug 36993857: Oracle - Service Manager user interface shows service as common.pluginsrvr**

Renamed the `common.pluginsrvr` as Plugin Service in the Logs drop-down list of the Service Manager user interface.

**Bug 36993999: Oracle - In the Web UI, the trail files of same name but with different paths (subdirectories) are not displayed simultaneously in Trails section**

Fixed an issue of trail files with same names but stored in different sub-directories, not being displayed simultaneously in the Trails section of the Web UI.

**Bug 36997618: Oracle - In the Web UI, the result of parallel Replicat STATS command to be renamed from invalid index ops to total no unique index updates/deletes**

Renamed the result of the parallel Replicat `STATS` command from Invalid Index Ops to Total No Unique Index Updates/Deletes

**Bug 37031531: Oracle - The Service Manager login page takes more than two minutes to load**

Fixed the delay in loading of the Service Manager login page when the Oracle GoldenGate deployment is installed by enabling the Configuration Service.

**Bug 37031703: Oracle - In the Service Manager user interface, the Collapse/Expand operation on parent node of the tree in the left pane is not working correctly**

Fixed the expand/collapse operation of the Service Manager node in the Service Manager user interface.

**Bug 36956582: PostgreSQL - Oracle GoldenGate Replicat abends when BYTEA column is used in KEYCOLS parameter**

Added support for PostgreSQL `LOB` datatype column to be used with the `KEYCOLS` parameter.

**Bug 36708412: Sybase Adaptive Server Enterprise - Oracle GoldenGate Extract client connection to publish its local hostname to Sybase**

Fixed an issue of publishing the local hostname to the database for connections established by Oracle GoldenGate.

**Bug 36921608: Sybase Adaptive Server Enterprise - SSL attribute which is invalid for Sybase, does not throw valid error**

Added a relevant error message when unsupported additional attributes are provided with the `DBLOGIN` command.

**Bug 36926498: Sybase Adaptive Server Enterprise - The bi-directional Extract crashes without any error**

Fixed an issue of bi-directional replication causing the Extract to abend without any error.

**Bug 36927786: Sybase Adaptive Server Enterprise - OGGCA deployment creation does not pick up SYBASE system variable/value**

Fixed an issue with the OGGCA deployment not reading the value of the `SYBASE` system variable.

**Bug 36660154: Generic - Cookie created by session using Identity Provider (IDP) does not match the IDP session time.**

Fixed a session duration mismatch issue of the Oracle GoldenGate session cookie and the IDP session.

**Bug 36684067: Generic - Integrated Extract is generating XML with invalid characters &#**

Fixed an issue with integrated Extract generating XML with invalid characters due to missing CDATA tag for columns containing control characters.

**Bug 36742896: Generic - The TRANLOGOPTION EXCLUDEUSER command for integrated Extract is not working**

Fixed an issue of TRANLOGOPTION EXCLUDEUSER | EXCLUDEUSERID command not filtering excluded operations that were performed when integrated Extract was stopped or restarted.

**Bug 36778160: Generic - The Configure Client Access option under Access Signing Certificate in IDCS is not mandatory**

Updated the Configure Client Access option as non-mandatory in IDCS.

**Bug 36785701: Generic - Administration Service crashing frequently due to memory corruption**

Fixed an issue with the Administration Service frequently crashing due to running several database commands simultaneously.

**Bug 36802606: Generic - Plugin service option is displayed as "ServiceManager.pluginsrvr"**

Fixed the issue of Plugin Service displayed as ServiceManager.pluginsrvr in Web UI.

**Bug 36854462: Generic - Replicat abends when BinaryDouble and BinaryFloat are passed as argument for @DBFUNCTION(TO\_CHAR(number)) function**

Fixed an issue of Replicat abending when Boolean datatype is passed as an argument for DBFUNCTION().

**Bug 36890433: Generic - An invalid XML character (Unicode: 0X4) found in CData section**

Fixed an issue with the XML parser that was failing with the error, An invalid XML character (Unicode: 0x1a) was found in the CData section.

**Bug 37034549: Generic - Performance Metrics Service crashes frequently with Segmentation violation (11) from a corrupted double-linked list**

Fixed an issue with the Performance Metrics Service crashing frequently due to multiple threads accessing the clearMPoint function.

**Bug 37056535: Generic - During executing oggca.sh, no field to enter replication schema on Japanese environment**

Optimized the space on the OGGCA user interface screens to display all fields.

**Bug 37066526: Generic - IAM Web UI login fails with "invalid\_request & reached the token size limit of 16,000 characters" error**

Fixed an issue with the IAM Web UI login when the Oracle GoldenGate deployment is integrated with IDCS/IAM and the user belongs to large number of groups.

**Bug 37079447: Generic - Root capture fails to start when EXCLUDEUSER parameter is specified in the parameter file**

Fixed an issue with Extract abending during startup when the `TRANLOGOPTIONS EXCLUDEUSER` parameter is included in the parameter file for the root capture process.

**Bug 37099587: Generic - Issue with OCI Oracle GoldenGate 21.15 Kafka capture**

Fixed an update issue with the Oracle GoldenGate Kafka Extracts caused by an update to the Oracle GoldenGate Credential Store.

**Bug 37115005: Generic - The oggca.sh command fails with error "oggca.sh: command not found" while configuring a silent mode deployment**

Fixed an issue with `oggca.sh` command failing with error, `oggca.sh: command not found` while configuring a silent mode deployment.

## Release 23ai (23.5.2.24.07) - August 2024

**Bug 36228407: MySQL - Verify Oracle Golden Gate functionality with MySQL 9.0**

Added support for Oracle Golden Gate for MySQL 9.0.

**Bug 36474071: MySQL - Verify Oracle GoldenGate functionality with MySQL 8.4**

Added support for Oracle GoldenGate for MySQL 8.4.

**Bug 36478812: MySQL - Support for Vector data type**

Added support for `Vector` data type for MySQL Server 9.0 and HeatWave.

**Bug 36794959: MySQL - Extract missing out the DDLs**

Fixed an issue with single-line DDL statements that include comments, which causes these statements to be ignored and Extract to abend.

**Bug 36833980: Sybase - Heartbeat table records are not captured by Sybase Extract**

Fixed a configuration issue with the heartbeat table that was causing the Extract to not capture the heartbeat table records.

## Release 23ai (23.5.1.24.07) - July 2024

**Bug 36857176: Db2 z/OS - Extract fails with error "OGG-00551 Database operation failed: Retrieving reorg timestamp using >SELECT || SQLSTATE 42803 native database error -122"**

Added the missing `GROUP BY` clause to the `SELECT` statement that was causing the Extract to fail with the error, `OGG-00551 Database operation failed: Retrieving reorg timestamp using >SELECT || SQLSTATE 42803 native database error -122`.

**Bug 36771014: Oracle - oggca.sh 23ai fails with error "INS-85037 Restarting Service Manager"**

Fixed an issue with installing Microservices architecture on a IPv4-only system.

**Bug 36830821: Oracle - Parallel integrated Replicat performance degrades after upgrade to 21.14**

Fixed an issue with the parallel integrated Replicat process after upgrading to Oracle GoldenGate 21.14 or later releases that was causing the performance to decrease.

**Bug 36383740: Generic - The expand/collapse icon for Extracts/Replicats in the Web UI in the bar on the left of the screen may not work as expected**

Fixed an issue with the expand/collapse icon for Extracts/Replicats in the left-side bar that was not displaying all the tabs, such as parameters, properties, report, or log.

**Bug 36792393: Generic - Service Manager displays an error "Connection to server failed" after upgrade**

Fixed an issue with the Service Manager that was displaying an error on upgrading from Oracle GoldenGate releases 19 and 21 to release 23ai.

**Bug 36850729: Generic - Error "validator.validate is not a function" is displayed on alter Replicat with position in log method**

Fixed an issue with the alter Replicat with position in log method that was generating the error, `validator.validate is not a function`.

**Bug 36850812: Generic - Notifications display "The item type request with name does not exist" when the Check status link is clicked**

Fixed an issue of timeout notification messages not being cleared, when creating Extract is the stopped status and clicking the Check Status link.

**Bug 36858659: Generic - Initial load Extract does not replicate boolean datatype correctly**

Fixed an issue with the initial load Extract process that was not replicating the `Boolean` datatype values correctly.

**Bug 36859292: Generic - Process page for Extracts/Replicats using ">" in the tree may result in a blank page**

Fixed an issue of blank page being displayed when clicking the greater than sign (>) to collapse the selected Extract or Replicat.

## Release 23ai (23.5) - July 2024

**Bug 36452224: Db2 z/OS - OGGMT001 program can terminate without warning on missing or invalid parameters**

Added a message when `OGGMT001` program terminates if it is run without being started from Extract or run in any other unauthorized manner.

**Bug 36684657: Db2 z/OS - Extract abends, affecting the ATS runs**

Fixed an issue with Extract abending without generating a message in a report file.

**Bug 35996208: Exadata Cloud at Customer (Gen2) - The Replicat process crashed with segfault error 11**

Fixed an issue of parallel Replicat abending with `segfault error 11`.

**Bug 36260450: Exadata on Premise - Sequence objects are not replicated on downstream capture from ADG standby**

Fixed an issue with downstream Extract not capturing the updates to sequence objects.

**Bug 36353961: Microsoft SQL Server - Ignore In-memory tables when using ADD TRANDATA with a wildcard pattern**

Fixed an issue with using `ADD TRANDATA` and a wildcard specification that errored when encountering an in-memory table. In-memory tables are not supported for CDC capture.

**Bug 36429456: Microsoft SQL Server - Extract reprocesses prior records of the last checkpoint position after restarting**

Fixed an issue with Extract that was reprocessing records prior to the last checkpoint position, on restart.

**Bug 36713522: Microsoft SQL Server - Incorrect login information does not return proper messaging**

Fixed the incorrect error message that was displayed when using wrong credentials to login.

**Bug 36658085: MySQL - Replicat abends with duplicate primary key after certain case of GTID based positioning of the Extract**

Fixed an issue with Replicat abending on restart after encountering a duplicate primary key while running with GTID-based Extract.

**Bug 36688861: MySQL - Extract fails on restart with error "No: 1236 - Error Message: (Cannot replicate because the source purged required binary logs)"**

Fixed an issue of unsupported DDLs with GTID based Extract that fails on restart with the error, `"Cannot replicate because the source purged required binary logs."`

**Bug 36616731: Oracle - While running RegisterServiceManager.sh from root user, it fails with oggca.sh: command not found error**

Fixed an issue with the `RegisterServiceManager.sh` script that was causing the `oggca.sh: command not found` error, when run from the root user.

**Bug 36625469: Oracle - Extract abends without any error but it reports segmentation fault in /var/log/messages and GDB reported checkSizeToRollover error**

Fixed an issue with Extract abending without displaying any error when using `OUTPUTFORMAT XML` and switching to a new trail or output file.

**Bug 36630528: Oracle - Data not synchronizing when using different indexes or keycols in source and target databases**

Fixed the data synchronization issue when indexes or key columns are different for source and target databases.



**Bug 36781005: Oracle - The TRANLOGOPTIONS EXCLUDEUSER command in PDB setup excludes all users**

Fixed an issue with the `TRANLOGOPTIONS EXCLUDEUSER` or `EXCLUDEUSERID` command in PDB or CDB setup that was not capturing any operations and causing all users or user IDs to be excluded.

**Bug 36821561: Oracle - No option to specify Begin point for Extract when configuring it from the WebUI**

Added the `Begin` option in the WebUI for creating an Extract process.

**Bug 36301151: Generic - Replicat not updating the checkpoint table correctly on stopping**

Fixed an issue with Replicat not updating the checkpoint table correctly when stopped.

**Bug 36616207: Generic - MA report file incorrectly lists file names including REPREPA for PREREP**

Fixed an issue with report file listing incorrect file names.

**Bug 36625098: Generic - Replicat abends with invalid DATE/TIME in type conversion**

Fixed an issue with `DATE/TIME` type conversion that was causing the Replicat to abend.

**Bug 36655689: Generic - Replicat should be able to use long varchar2 as primary key if database allows it**

Fixed an issue with Replicat not selecting the column of `varchar2` type as a primary key.

**Bug 36731087: Generic - Snowflake Replicat deletion process not deleting the associated temporary and state files**

Fixed an issue with the `DELETE REPLICAT` command that was not deleting the temporary and state files.

**Bug 36742287: Generic - Replicat not getting restarted by AUTORESTART**

Fixed an issue with the `AUTORESTART` command, which was not restarting the Replicat process.

**Bug 36755183: Generic - Replicat abends with the "OGG-30464 The connected session is not a GG session" error**

Fixed an issue with Replicat abending with error, OGG-30464 - The connected session is not a GG session when connecting to a PDB with value of `container_data` variable as `CURRENT_DICTIONARY`.

## Release 23ai (23.4.1.24.05) - May 2024

**Bug 36630983: Oracle - Integrated Replicat fails with error "OGG-02092 Unexpected condition in function indexOutOfRangeException"**

Fixed an issue with integrated Replicat either failing with error, OGG-02092 Unexpected condition in function `indexOutOfRangeException`, or skipping update of mapped columns present in the target database but not in the source database, leading to data divergence.



# 8

## What's New in this Release for Oracle GoldenGate for Marketplace

This chapter describes the features, enhancements, and changes made to Oracle GoldenGate for Marketplace.

### Topics:

## What's New in this Oracle GoldenGate on Marketplace Release

This section provides a list of new features, enhancements, and changes made to Oracle GoldenGate on Marketplace. Oracle updates the release notes periodically after the software release. This document is accurate at the time of publication.

### Release 23ai (23.7.1.25.02) - February 2025

#### **Oracle GoldenGate on Marketplace Base OS changed**

Oracle GoldenGate on Marketplace uses OL8 Base OS.

#### **Terraform version updated**

The terraform version in use for Oracle GoldenGate on Marketplace is 1.2.9.

### Oracle GoldenGate on Marketplace New Features: September 2024

#### **Oracle GoldenGate on Marketplace requires Terraform v1.0.x**

Oracle GoldenGate on Marketplace version 23.5 and higher require Terraform v1.0.x. Any existing instance of Marketplace, needs to be upgraded to v1.0.x. For details on upgrade, see *Upgrading an Oracle Cloud Marketplace Image in Using Oracle GoldenGate on Oracle Cloud Marketplace* guide.

## Bugs Fixed and Enhancements for Marketplace

This chapter describes the bugs fixed and enhancements at the time of release.

The Bug number is the number of the BugDB ticket. For questions on specific tickets or issues, consult Oracle Support.

### Release 21c (21.7.0) - September 2022

#### **Bug 34329890 - Allow all available Intel/AMD shapes in Oracle GoldenGate Marketplace listings**

Enhanced Oracle GoldenGate Marketplace to allow all available Intel/AMD shapes in Oracle GoldenGate Marketplace listings.

**Bug 34420956 - Support flex shapes in Oracle GoldenGate Marketplace**

Flex shapes are supported in Oracle GoldenGate Marketplace.

**Bug 34180215 - Terraform Replicat fails with "Error: 400-InvalidParameter" for Oracle GoldenGate Marketplace MA on Oracle Autonomous Database on Shared Infrastructure**

Fixed an issue with terraform Replicat failing with `Error: 400-InvalidParameter` for Oracle GoldenGate Marketplace MA on Oracle Autonomous Database on Shared Infrastructure.