# Oracle® Fusion Middleware

Using Oracle GoldenGate Studio 12c (12.2.1.1.0)

E69355-02

This document explains how to configure, customize, and run the Oracle GoldenGate Studio to create and manage the replication of data.



Oracle Fusion Middleware Using Oracle GoldenGate Studio, 12c (12.2.1.1.0)

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# **Preface**

This preface describes the document accessibility features and conventions used in *Oracle GoldenGate Studio Help*.

# **Documentation Accessibility**

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### **Related Documents**

The Oracle GoldenGate Product Documentation Libraries are found at

Oracle GoldenGate

Oracle GoldenGate Application Adapters

Oracle GoldenGate for Big Data

Oracle GoldenGate Plug-in for EMCC

Oracle GoldenGate for HP NonStop (Guardian)

Oracle GoldenGate Monitor

Oracle GoldenGate Veridata

Oracle GoldenGate Studio

### **Conventions**

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# Introducing Oracle GoldenGate Studio

This chapter introduces Oracle GoldenGate Studio and includes the following sections:

- Introduction
- How Do I Get Started?

### 1.1 Introduction

Oracle GoldenGate Studio enables you to design and deploy high-volume, real-time replication by automatically handling table and column mappings, allowing drag and drop custom mappings, generating best practice configurations from templates, and contains context sensitive help. With Oracle GoldenGate Studio, users new to Oracle GoldenGate can start replicating data with minimal effort while experienced users have access to GoldenGate's advanced replication options. Users new to Oracle GoldenGate can start replicating data with minimal questions.Oracle GoldenGate Studio provides you with the following abilities:

- Quickly create, modify, validate, deploy, and reuse GoldenGate best practice designs.
- Define data flows once and deploy to literally thousands of locations.
- Graphically filter, map, and transform data.
- Apply global rules and exceptions.

### 1.2 How Do I Get Started?

Oracle recommends that you familiarize yourself with Concepts and Terminology and Relating Properties Inspector Options to Oracle GoldenGate Commands and Parameters so that you have an understanding of what you will encounter in the product and documentation.

You can follow the basic steps outlined in the following table to create and deploy your replications:

#### Roadmap of Tasks

Begin by adding new database and GoldenGate connections to your Global Resource Library, see Understanding Projects.

Use the wizards to create a Project, Replication Solution, and Deployment Profile. By default each wizard will invoke the next. Solutions define the replicat process. The Solution and Deployment Profile wizards provide you with pre-configured templates, see Understanding Solutions.

#### Roadmap of Tasks

Solution objects own Mapping groups, which describe the logical view of the replication process. Use AutoMap or manually map schema, table, and column mappings then assign them to your replication paths, see <u>Understanding Mapping Groups</u>.

Create a Mapping Groups and assign to the appropriate replication paths. You can reuse Solution Mapping Groups in multiple replication paths for that solution and Global Mapping Groups across in multiple replication paths across Project, see <u>Understanding Mapping Groups</u>.

Add, remove, and fine tune any Oracle GoldenGate option or parameter, see Using the Properties Inspector.

Deploy the Solution online to live Oracle GoldenGate instances or generate the parameter and obey files locally for manual deployment, see, Understanding Deployment Profiles

Define any additional physical resources and assign them to your deployment profiles via drag and drop from the Global Resource Library to the Deployment Profile diagram, see Understanding Deployment Profiles

Solutions also own one or more Deployment Profiles which describe the physical attributes of a particular replicat deployment. You can create multiple deployment profiles. For example, separate profiles for development, testing and production for a single Solution, see Understanding Deployment Profiles

Start, stop, and monitor all physical processes, see Monitoring

View deployment history information, see Understanding Deployment Profiles

Export solutions and mappings to XML files that can be imported by other Oracle GoldenGate Studio users, see Using the Projects Navigator.

# **Using the Interface**

This chapter describes the Oracle GoldenGate Studio user interface and includes the following sections:

- **Understanding the User Interface Basics**
- **Setting Your Preferences**
- Using the Projects Navigator
- Using the Editor Area
- Using the Resources Navigator
- Using the Properties Inspector

# 2.1 Understanding the User Interface Basics

Oracle GoldenGate provides highly optimized user interface for easy creation, modification, and deployment of Oracle GoldenGate replication solutions.

There are two visible sections that appear when Oracle GoldenGate Studio is started. The Project Navigator to the left and the Start Page to the right.

Screens shown in this guide may differ from your implementation, depending on the skin and icons used. Any differences are cosmetic.

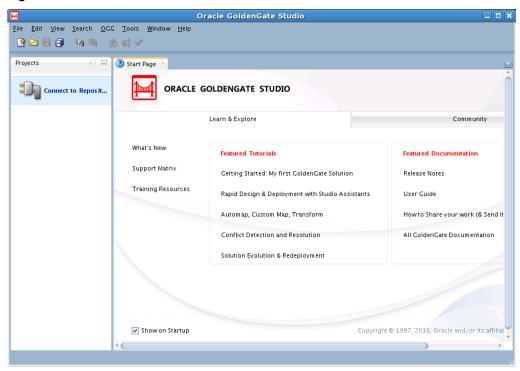


Figure 2-1 Oracle GoldenGate Studio Main Window

The interface includes the tabbed editor area with a selection of other windows. The primary windows used with the editor area when designing and deploying GoldenGate replication solutions are:

- Projects Navigator
- Resources Navigator
- Properties Inspector
- Components Window
- Log Messages Window
- Security Navigator

You can also use the **Tab** key to change focus within a component and keyboard shortcut **Ctrl+Tab** to change focus between different components.

## 2.1.1 Oracle GoldenGate Studio Repository Login

This is used to connect to Oracle GoldenGate Studio. The required connection details are:

- **LoginName**: Name of the login defined to the repository.
- User: Oracle GoldenGate Studio user name.
- Password: Oracle GoldenGate Studio user password.

You can click **New** to create a new Oracle GoldenGate Studio login. When you save your first repository connection definition you can save it using a secure wallet. The secure wallet itself is password protected.

Click Edit to modify the existing Oracle GoldenGate Studio login with the Repository Connection Information Editor.

Click **Copy** to copy a current login definition.

Click **Delete** to delete the existing Oracle GoldenGateStudio login.

For more information on repository database tables, see SNP\_REV Tables Reference.

#### Note:

To improve performance, the repository database needs to be in the same LAN as the machine using Oracle GoldenGate Studio.

### 2.1.2 Menu Options

The menu options available in Oracle GoldenGate are as follows:

#### 2.1.2.1 The File Menu

This menu is mainly used for file related activities such as:

- New: Used to create a new project, solution, deployment profile, mapping group, data server connection, Oracle GoldenGate instance connection, and global mapping group.
- Open: Used to open file.
- **Close**: Used to close the current editor tab.
- **Close All:** Used to close all the open editor tabs.
- Delete: Used to delete the currently selected object. If nothing is selected, this is grayed out.
- Save: Used to save any changes done in the current editor tab.
- **Save All**: Used to save the changes in all open editor tabs.
- Page Setup, Print, Print Preview, Print Area: Used to set up the print options.
- Exit: Used to quit Oracle GoldenGate Studio.

### 2.1.2.2 The Edit Menu

The Edit menu is mainly used for editing locally generated parameter and obey files. Any edits to these files will not be retained in the repository and will be overwritten the next time files are generated. Functions include:

- **Cut**: Used to cut the selected item.
- Copy: Used to copy the selected item.
- **Paste**: Used to paste the selected item.
- **Paste Special**: Used to paste the selected item while retaining all the attributes.
- Delete: Used to delete the selected item.

- **Multi-Cursor**: Used to enable multi-cursor functionality. This menu is available when a text file is opened in editor.
- Select All: Used to select all the available on screen items.
- **Block Selection**: Used to select a text block. This menu is available when a text file is opened in editor.
- Properties: Used to open the Properties Inspector for an item.

#### 2.1.2.3 The View Menu

The View menu is mainly used for viewing of toolbar, status bar and related viewing areas. Functions include:

- Editor: Used to display the options for editor.
- **Show Toolbars**: Used to view different toolbars such as Main, Code Editor, Properties, and Structure.
- Show Status Bar: Used to display the status bar.
- **Refresh:** Used to refresh the viewing area. If refresh is done on an editor tab, a dialog box is displayed to confirm if you wish to revert back to the last saved copy. It can be used as an alternative to undo.
- Full Screen: Used to display the product in full screen mode.
- Show Only Editor: Used to display only the editor area.

#### 2.1.2.4 The Search Menu

The Search menu is used to find individual items in Oracle GoldenGate Studio. The available options are:

- Find: Used to find a particular item.
- **Find Next**: Used to find the next instance of a particular item.
- **Find Previous**: Used to find the previous instance of a particular item.
- Find Usages: Used to find instances where the particular item is used.

#### 2.1.2.5 The Diagram Menu

The Diagram menu is used to view and optimize the diagrams. This menu is visible only when Solution Editor or Deployment Profile editor is selected. The options include:

- **Generate GoldenGate Files...**: Used to generate the GoldenGate files. The specified location must exist to complete this operation.
- **Deploy**: Used to deploy the solution. The status of the deployment action is displayed in the Messages log. Online deployment is possible at solution level, Oracle GoldenGate instance level, host level, and processes level. This option is enabled only when an Oracle GoldenGate instance is associated with an actual Oracle GoldenGate instance resource.
- **Validate Deployment Profile**: Used to validate the deployment profile. The validation checks if any database specific options were incorrectly used.

For example, if you indicated in the GoldenGate connection that the database was Oracle but tried to deploy to SQL Server, the validation will connect to the GoldenGate instance and a warning is displayed in Messages log if any Oracle specific options like integrated capture were used.

- Synchronize Profile with solution: Used to synchronize the deployment profile with a solution. This option is enabled only when the profile is not synchronized with the solution.
- **Start**: Used to start the selected process.
- **Start...**: Used to start the selected process with additional options.
- **Stop**: Used to stop the selected process.
- Kill: Used to kill (terminate) the selected process.
- Optimize Graphic Size: Used to set the optimal size of the graphic element.
- **Bring to Front**: Used to bring the selected graphic to the top layer.
- **Send to Back**: Used to send the selected graphic to the bottom layer.
- **Zoom**: Used to select the selected graphic to the required zoom level. You can select a defined zoom level, zoom in, zoom out, fit window, or zoom to a selected level.

### 2.1.2.6 The OGG Menu

The OGG (Oracle GoldenGate) menu includes the following:

- **Connect**: Used to connect to the repository.
- **Disconnect**: Used to disconnect from the repository.
- Repository Information: Used to display detailed information about the Studio Connection and Database Connection. The Studio Connection includes the Studio Login Name, User which is always **SUPERVISOR**, and SUPERVISOR password that was defined while creating the repository. The Database Connection includes the database user name for the repository schema and associated password, Driver Name which is always oracle.jdbc.OracleDriver and the JDBC URL.
- **Solution**: Used to synchronize all profiles for a solution.
- **Deployment**: Used to online deploy, generate the Oracle GoldenGate parameter and obey files for offline deploy, and to validate the deployment profile.

#### 2.1.2.7 The Tools Menu

The Tools menu includes the following:

- **Configure Components**: This is grayed out.
- **Preferences**: Used to set the preferences. See Preferences section for more information.
- **Groovy**: This is grayed out.

#### 2.1.2.8 The Window Menu

The window menu is used to display different window within the editor. The available options are:

- Projects Navigator: Used to display the Projects Navigator window. You can view
  all the available projects, solutions, deployment profiles, and mapping groups.
- Security Navigator: Used to display the Security Navigator window.
- **Components**: Used to display the Components window. Components are only displayed when the Solution diagram editor is selected.
- Extension Diagnostics: Used to display the extension logs.
- Log: Used to display the Log Messages Explorer.
- **Properties**: Used to display the Properties Navigator window.
- **Resources**: Used to display the Resources Navigator window. The main components are Global Mappings, OGG Instances, and Database Connections.
- **Structure**: Used to view the structural representation of data of the currently selected profile. The Structure window is enabled only when the Solution and Deployment Profile diagrams are selected.
- **Thumbnail**: Used to display a representation of the current diagram for quick navigation to a specific element on the diagram.
- **Configure Window**: This menu item consists a list of sub menu items to set the window behavior such as minimize, maximize, float and so on.
- Reset Windows To Factory Settings: Used to reset all windows to their default layout.
- **Assign File Accelerator**: Used to assign the file accelerators.
- **Close Profile** *profile name*: Used to close the active editor. If nothing is selected, this is generally grayed out.
- Close All Documents: Used to close all open documents within the editor.
- Close other documents: Used to close other documents.
- **Documents**: Used to display the documents window which lists all available documents. You can switch to a particular document, sort, save, or close a document.

#### 2.1.2.9 The Help Menu

The help menu includes the following options:

- **Search**: Used to search the online help system.
- Table of Contents: Used to display the table of contents for the online help system.
- Documentation Library: Used to open a browser window with a link to the related documentation.

- Start Page: Used to display the Oracle GoldenGate product information page. You can learn and explore the tutorials and help topics from this page.
- OGG Studio Forum: Used to open a browser window with a link to Oracle GoldenGate studio forum posts.
- Oracle Technology Network: Used to open a browser window with a link to Oracle Technology Network.
- **About**: Used to display the About dialog box with version information.

# 2.2 Setting Your Preferences

You can set the preferences for Oracle GoldenGate Studio including the environment, audit behavior, and display.

The main components of this window are:

- Environment: Used to set the undo level, navigation level, and look and feel. All warning messages can be reset from here.
  - Log: Each activity can be logged. You can set the directory for saving log files, maximum number of log lines, and log color options.
- Audit: This is grayed out.
- Code Editor: Used to open the editor.
- Database: Used to configure different database options. You can also select the JDBC driver from the list of registered drivers, add a new driver, or delete an existing driver.
- Diagrams: Used to set the options for diagrams.
  - Annotation: Used to set the annotation options like color and font.
- Parameter Editor: Used to open the parameter editor.
- Web Browser and Proxy: Used to configure web browsers, proxy settings and internet files.
  - Web Browsers: Used to set the default web browser.
  - Proxy Settings: Used to configure the proxy settings such as no proxy, system default proxy, automatic proxy settings, and manual proxy settings.
  - Internet Files: Used to enable cookies and clear all existing cookies.

### 2.2.1 How to Set Preferences

To set preferences, do the following:

- **1.** In the Oracle GoldenGate Studio window, navigate to **Tools > Preferences**.
- **2.** Modify individual items as per requirement.

# 2.3 Navigation Using the Keyboard

The following section describes the common methods of moving the cursor in Oracle GoldenGate Studio.

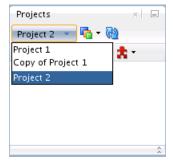
- Cursor control
- Operate Buttons
- Select Checkboxes
- Dropdown Lists and Combo Boxes
- List Boxes
- Radio Buttons
- Shuttles
- Sliders
- Spin Controls
- Text Fields
- Navigating Complex Controls

For more information, see OLINK:OJDUG172

# 2.4 Using the Projects Navigator

The Projects Navigator is used to browse and select existing solutions and solution components such as **Deployment Profiles**, and **Mapping Groups**. The list of all active projects are available through the **Project** drop-down option. You can refresh the current project using the **Refresh Projects Window** button.

Figure 2-2 Projects Navigator



You can perform the following project related tasks using the **Project Menu**:

- Open project: Opens the editor for the currently selected project. If no project is selected, this is grayed out.
- New project: Create a new project.
- Duplicate project: Duplicate an existing project and edit it after duplication.

- Delete project: Delete an existing project.
- Import project: Import a project XML file that was exported from Oracle GoldenGate Studio.
- Export project: Export a project to an XML file.

# 2.5 Using the Editor Area

The editor area is used to visualize the organization and flow of the logical replication solution with the physical objects for the physical deployment profile. You can add data server and replication path components visually using drag-and-drop to evolve the solution. The deployment profile architecture can be changed by selecting any part of the replication path in the deployment profile diagram and selecting the desired architecture template from the Properties Inspector.

Both the solution and deployment profile editors have an **Overview** tab. The solution overview tab contains the solution definition and description and deployment summary for all deployment profiles associated to that solution. The deployment profile editor overview tab contains the deployment profile description, deployment history for this profile only, monitoring, and deployment configuration options.

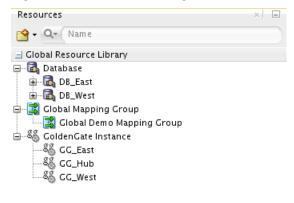
# 2.6 Using the Resources Navigator

The resources navigator, or the global resource library lists all the available resources such as:

- Data Servers: All the available data servers. In the current version, only databases are available as data servers.
- Global Mapping Group: Global mapping groups can be assigned to any replication path of any solution across all projects. Mapping groups created for a solution in the Projects Navigator can be copied to the global mapping groups or created directly from the Resources Navigator.
- Oracle GoldenGate Instance: The available Oracle GoldenGate instances.

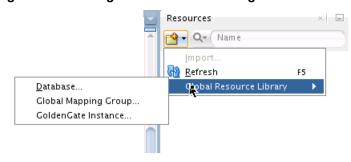
The Resources Navigator looks like:

Figure 2-3 Resources Navigator



There are three ways to add a new global resource. If any type of resource is not added then you can add it by selecting the **New** button in the Resources Navigator toolbar, select the New button in the Oracle GoldenGate Studio toolbar, or select New under File menu, and then select the resource type you want to add. If a resource type has already been added, you right-click the resource category and select New *Resource Type*. You can add a Global Mapping Group by right-clicking a mapping group in the Projects Navigator and selecting Copy to Global Resource Library.

Figure 2-4 Adding New Resources through Resources Navigator



You can change the properties of existing resources by using the **Properties** context menu. You can also use the keyboard shortcut **Ctrl+Tab** to navigate to Resources Navigator, use the **Tab** and **arrow** keys to select the particular resource, and use **Shift** + **F10** to view the context menu.

### 2.6.1 Add a New Data Server Connection

New data server connections are used only for table metadata to facilitate table mapping and are not used to define connections used by capture and apply processes. Capture and apply connections are defined in the Properties Inspector in the Deployment Profile.

A new data server connection wizard looks as follows:

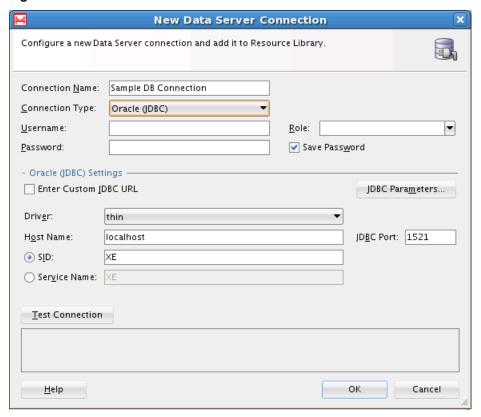


Figure 2-5 New Data Server Connection

- Select the Database resource type in the Resources Navigator window and rightclick to select New Database Connection.
- In the New Data Server Connection window, add the following:
  - Connection Name: The name of the new connection. The resource is listed in the Resources Navigator with the name mentioned here.
  - **b.** Connection Type: Connection types are Oracle(JDBC), MySQL, SQLServer, and DB2 for z/OS.
  - The User name and Password to connect to the database. If you uncheck **Save** Password check box during connection creation and if you want to expand the Database node after re-connecting to repository, Database node expansion will ask you to enter the password to show all the nodes under database connection.
  - The role as SYSDBA or SYSOPER. This can be left blank when the user is not SYS. Else, you have to select the role.
  - The Oracle JDBC settings.

By default, Oracle GoldenGate Studio provides drivers for Oracle, MySql, SQLServer, and DB2 for z/OS. Data direct drivers are provided for Informix, DB2, and Sybase but you can use any JDBC driver. Database driver can be configured by using Tools menu, then Preferences, Database, and finally **JDBC Driver Options**. Once a data server connection is created, you can browse objects under the database in the Resources Navigator and the information from the database navigator can be used for the mapping the

tasks. Currently Oracle, MySQL, SQLServer, and DB2 for z/OS drivers are certified.

3. Click OK to create a new Database resource.

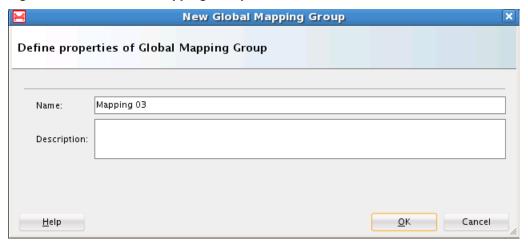
You can also test the connection using **Test Connection** button before creating the new resource.

### 2.6.2 Add a New Global Mapping Group

The New Global Mapping Group wizard defines a container for table mappings but does not guide you through the table mapping process. To learn more about defining table mapping see Understanding Mapping Groups

A new Global Mapping Group wizard looks as follows:

Figure 2-6 New Global Mapping Group



To add a new Global Mapping Group:

- 1. Click the **New** button on the Resources Navigator window or right click on the database icon and select **New Global Mapping Group Connection**.
- **2.** Enter the name of the new connection.
- **3.** Enter a short description to identify the resource.
- 4. Click OK.

### 2.6.3 Add a New Oracle GoldenGate Instance

The Add a New Oracle GoldenGate Instance dialog defines a connection to an existing GoldenGate installation. That installation must already have the GoldenGate manager and jAgent processes running

A new Oracle GoldenGate Instance dialog looks as follows:

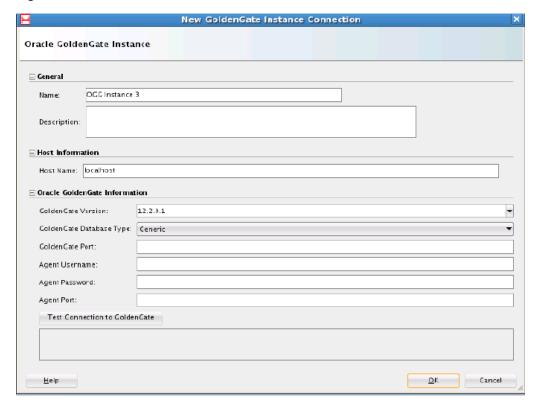


Figure 2-7 New Oracle GoldenGate Instance Connection

To add a new Oracle GoldenGate Connection:

- 1. Click the **New** button on the Resources Navigator window or right click on the database icon and select **New Oracle GoldenGate Instance Connection**.
- **2.** Under **General** section enter the name and description for the new connection.
- **3.** Under **Host Information** enter Host Name. It is the DNS name of the server where Oracle GoldenGate is installed.
- 4. Under Oracle GoldenGate Information enter the following:
  - GoldenGate Version: This gets automatically updated when Test Connection is clicked. You can also select the version from the drop down list while working offline. Test Connection only works if there is an active connection to database. You can also work in offline mode and provide all the required information. If there is an active connection and incorrect version is entered, the correct database information is fetched from the database to overwrite the incorrect version.
  - GoldenGate Database Type: The database type for which the connection is created. It gets automatically updated when Test Connection is clicked. You can also select the version from the drop down list while working offline.
  - GoldenGate Port: The port number for the Oracle GoldenGate manager process.
  - Agent Username: The JAgent name as specified by the jAgent.username property in the config.properties file of the jAgent at the time of installation.
  - Agent Password: The password for the corresponding username.

- Agent Port: The jAgent port as specified by the jagent.jmx.port property
  in the config.properties file of the jAgent. If the agent mode is OEM, then
  you have to use jagent.rmi.port, if the agent mode is OGGMON then you
  have to use jagent.jmx.port.
- **5.** Click **Test Connection to GoldenGate** to verify if the connection is working. The version and database type is automatically updated on successful connection.

# 2.7 Using the Properties Inspector

The Properties Inspector is used to view and edit the attributes of the selected artifacts in the solution diagram, deployment profile diagram, and mapping editor. You can view a tool tip with a description of that particular parameter with a right-click in Properties Inspector of the Deployment Profile. The Properties Inspector is dynamic and the attributes correspond to the different types of items selected in the editor.

Figure 2-8 Properties Inspector



Relating Properties Inspector Options to Oracle GoldenGate Commands and Parameters contains a list of all of the options that can appear in the Properties Inspector of the Deployment View.

## 2.7.1 How to Use the Properties Inspector

To use the Properties Inspector, do as follows:

- 1. In Oracle GoldenGate Studio, navigate to **Window** menu and select **Properties** to display the Properties Inspector.
- **2.** In the Solution Editor, Mapping Editor, or Deployment View select an item for which you want to change the property.
- 3. In the Properties Inspector, change the corresponding properties for that particular item. Some items, such as conflict resolution in the mapping editor, requires clicking a dynamic gear icon that appears to the far right when you mouse over the attribute.
- **4.** Save the changes using the **Save** button on the toolbar or using the **Save** under **File** menu. The changes in process parameters are available only after redeployment or after regeneration of parameter files.

# **Working with Solutions and Deployment Profiles**

This chapter explains how to use solutions and deployment profiles to configure and manage your replication solutions using Oracle GoldenGate Studio and includes the following sections:

- Understanding Projects
- **Understanding Solutions**
- Understanding Deployment Profiles

# 3.1 Understanding Projects

A project is a container for a replication solution. Once created, they are presented as a drop-down list at the top of the Projects Navigator. For more information, see Using the Projects Navigator.

### 3.1.1 Creating a Project

- 1. Click the New button on the toolbar, from the File menu, select New, or select New Project... from the Project Menu drop down list in the Projects Navigator.
- **2.** Select **Create New Project**, then click **OK**.
- **3.** Enter a name for you project. You can add a description as well.
- 4. (Optional) You can deselect the Continue to Solution Wizard if you do not want to immediately create a solution for your new project.
- 5. Click OK.

Your project is created and is displayed in the list of projects.

# 3.2 Understanding Solutions

Solutions represent the replication patterns supported by Oracle GoldenGate and are contained in a project. The concept of replication paths and mapping groups are all part of the logical definition of a solution. Once the logical design is in place, you can create multiple deployment profiles each with its own deployment template to match the physical elements of your replication environments. A single Oracle GoldenGate project can have multiple solutions.

One solution and its table mapping groups can be deployed to any number of physical locations.

A typical solution contains:

- Deployment Profiles: Describes the deployment architectural template, physical resources and additional deployment options.
- Mapping Groups: A collection of source and target table mappings and associated replication logic such as filtering and conflict detection rules. Table must be dragand-dropped from the Resources Navigator to the Mapping Editor. Then, source and target table mapping associations can be automatically generated using Automap or created by drag-and-drop from source to target and target to source. Additionally, wildcard characters (\*) can be used in the mappings at the schema and table level. For Oracle multitenant support you must edit the schema name manually to include the database name.

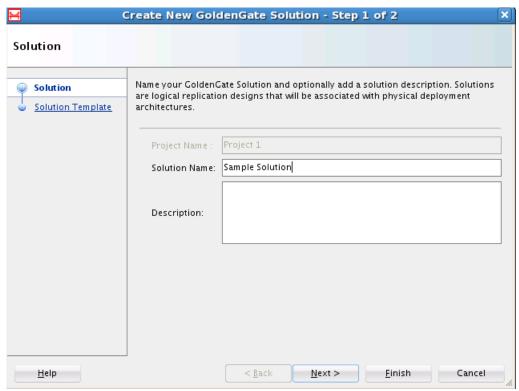
Readily available solution templates are available in Oracle GoldenGate Studio and they greatly reduce the time required to create and deploy a solution.

### 3.2.1 Creating a New Solution

You can create a new solution as follows:

1. In the Projects Navigator, right-click and select New.

Figure 3-1 New Solution Dialog



- 2. Provide a name for the solution with an optional description, then click Next.
- **3.** Select a solution template from Unidirectional, Bidirectional, or Hub and Spoke. If Hub and Spoke is selected then enter the number of spokes.

A description appears for the selected template.

Create New GoldenGate Solution - Step 2 of 2 × Solution Template Select a GoldenGate Solution template design. Solutions can be customized Solution subsequently. Solution Template ⊶ Unidirectional Captures changes from a source data store and applies them to a target data store. 🗫 Bidirectional 🞇 Hub and Spoke Continue to Deployment Profile Wizard <u>F</u>inish Cancel <u>H</u>elp < Back

**New Solution Template** Figure 3-2

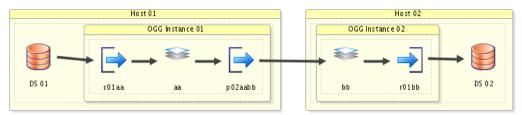
- 4. (Optional) You can deselect the Continue with Deployment Profile Wizard if you do not want to immediately create a deployment profile for your new solution.
- 5. Click Finish.

Your solution is created in the open project and is displayed in the Solutions Navigator.

# 3.3 Understanding Deployment Profiles

The deployment profile is part of the Oracle GoldenGate Studio solution. It describes the physical attributes of the replication solution. There can be more than one deployment profile per solution. For example, one deployment profile for the development environment, one for the test environment, and one for production.

Figure 3-3 Sample Deployment Profile Logical View



## 3.3.1 Components of the Deployment Profile

The different components of the deployment profile are:

### 3.3.1.1 Name of the Oracle GoldenGate profile

This is used to add a name and optional description to the deployment profile.

### 3.3.1.2 Deployment Architecture Template

This is used to define the architecture of deployment profile. When using the Deployment Profile wizard the selected architecture template is applied to each and every replication path in the solution. However, in the Properties Inspector, individual replication paths may have different architecture templates.

#### The available architecture templates are:

Source, Target: The source and target deployment environments contain Oracle GoldenGate instances local to the data servers. Capture and apply will both be done locally.

Target Only (Remote Source): There is only one Oracle GoldenGate instance and it is local to the target data server. Capture will be done remotely from the target.

Source Only (Remote Target): There is only one Oracle GoldenGate instance and it is local to the source data server. Apply will be done remotely from the source.

Hub Only (Remote Source and Target): There is only one Oracle GoldenGate instance and it is on a stagging server. Capture and apply are both done remotely.

Source, Hub, Target: There are three Oracle GoldenGate instances. One is local to the source data server and one is local to the target data server. Capture and apply are both done locally and data will be transmitted through a third Oracle GoldenGate instance on a hub between the two.

Hub, Target (Remote Source): There are two Oracle GoldenGate instances, one on a staging hub and one on the target data server. Capture is done remotely from the hub while apply is done locally at the target.

Source, Hub (Remote Target): There are two Oracle GoldenGate instances, one is on the source data server and one is on a staging hub. Capture is done locally from the source data server while apply is done remotely from the target data server from the

Single Host (Local Source and Target): There is only one host and it contains both the Oracle GoldenGate instance and source and target data servers.

#### 3.3.1.3 Assign Physical Resources

This is used to assign your resources to the source, the target, and the hub (if applicable) of the replication path.

### The resource assignment section contains:

*Replication Path*: It describes the data store mapping information.

Source: Select the Data Server and Oracle GoldenGate Instance to use as the source of each replication path.

Target: Select the Data Server and Oracle GoldenGate Instance to use as the target of each replication path.

Hub: Select the Data Server and Oracle GoldenGate Instance to use as the hub of each replication path.

#### Note:

Resource assignment can also be done or re-done through the Deployment Profile editor by dragging and dropping resources from the Resources Navigator to the appropriate diagram elements.

### 3.3.1.4 Deployment Options

This is used to select several additional options such as initial load of all targets, and starting of all or selected Oracle GoldenGate processes.

#### Deployment options include:

Initial load of all targets: Select if data must be copied between systems before changes to the data are applied.

Start All Oracle GoldenGate Processes: Select which (or all) processes should be started after deployment:

- Capture Process
- Pump Process
- **Apply Process**

#### Note:

Processes can be started only during online deployment.

### 3.3.2 Toolbars in the Deployment Profile

The toolbar buttons are described in sequence with the following image:

Figure 3-4 Deployment Profile Toolbar



Some buttons like validate and start are context sensitive and change color when enabled.

- Zoom In: Click to increase size of the on screen components
- **Zoom Out**: Click to decrease size of the on screen components.
- **Percent View**: Click to set the view to a predefined percentage value.
- **Perform Layout:** Click to automatically rearrange the components in the deployment view in a organized way. You can save the layout using the Save button in the toolbar or selecting Save under File manu. The data flow is from left to right.
- Synchronize Profile with Solution: Click to synchronize the deployment profile with a solution. This option is enabled only when the profile is not synchronized with the solution.
- **Deploy Solution**: Click to deploy the solution. The status of the deployment action is displayed in the Messages log. Online deployment is possible at solution level,

Oracle GoldenGate instance level, host level, and processes level. This option is enabled only when an Oracle GoldenGate instance is assigned with an actual Oracle GoldenGate instance resource.

- Validate Deployment Profile: Click to validate the deployment profile. The
  validation checks if any database specific options were incorrectly used. For
  example, if you indicated in the GoldenGate connection that the database was
  Oracle but tried to deploy to SQL Server, the validation will connect to the
  GoldenGate instance and a warning is displayed if any Oracle specific options like
  integrated capture were used. Validation warnings, if any, are displayed in the
  Messages log.
- **Generate GoldenGate Files:** Click to choose a local directory in which GoldenGate files will be generated.
- *Start the Selected Process*: Click to start the selected process.
- **Stop the Selected Process**: Click to stop the selected process.
- Kill the Selected Process: Click to kill the selected process.

### 3.3.3 Creating a New Deployment Profile

To create a new deployment profile:

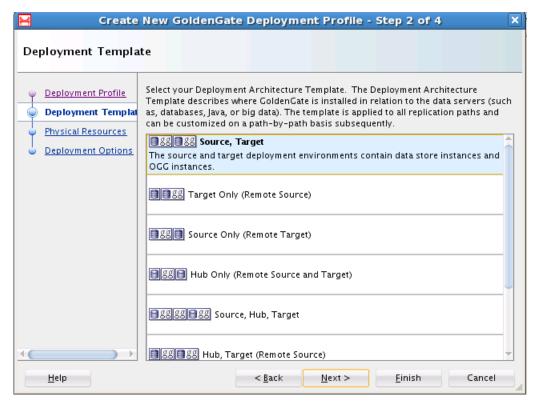
- Name your Deployment Profile: Provide a name for the deployment profile and click Next. Clicking Finish creates a profile that defaults the Replication Path, Source, and Target using automatically generated names and settings for the solution.
- 2. Deployment Template: Select an architecture to be used as the template for the solution. The deployment architecture template describes where Oracle GoldenGate is installed in relation to data servers. The selected template is applied to all replication paths and can be customized on a replication path-by-replication path basis subsequently. You can change a previously selected deployment architecture template by clicking the template link in the Deployment View and selecting a new template in the Properties Inspector.

Deployment Architecture Template	Description
Source, Target	The source and target deployment environments contain Oracle GoldenGate instances local to the data servers. Capture and apply will both be done locally.
Target Only (Remote Source)	There is only one Oracle GoldenGate instance and it is local to the target data server. Capture will be done remotely from the target.
Source Only (Remote Target)	There is only one Oracle GoldenGate instance and it is local to the source data server. Apply will be done remotely from the source.
Hub Only (Remote Source and Target)	There is only one Oracle GoldenGate instance and it is on a stagging server. Capture and apply are both done remotely.

Deployment Architecture Template	Description
Source, Hub, Target	There are three Oracle GoldenGate instances. One is local to the source data server and one is local to the target data server. Capture and apply are both done locally and data will be transmitted through a third Oracle GoldenGate instance on a hub between the two.
Hub, Target (Remote Source)	There are two Oracle GoldenGate instances, one on a staging hub and one on the target data server. Capture is done remotely from the hub while apply is done locally at the target.
Source, Hub (Remote Target)	There are two Oracle GoldenGate instances, one is on the source data server and one is on a staging hub. Capture is done locally from the source data server while apply is done remotely from the target data server from the hub.
Single Host (Local Source and Target)	There is only one host and it contains both the Oracle GoldenGate instance and source and target data servers.

Select the deployment architecture template from the list of available templates and click Next.

Figure 3-5 Deployment Architecture Template



The contents of the Physical Resources step is populated based on your deployment template selection.

3. Assign Physical Resources: Use this to assign your resources to the source, target, and hub (if applicable) of the replication path.

#### Source

Select the Data Server and Oracle GoldenGate Instance to use as the *source* of each replication path.

#### **Target**

Select the Data Server and Oracle GoldenGate Instance to use as the *target* of each replication path.

#### Hub

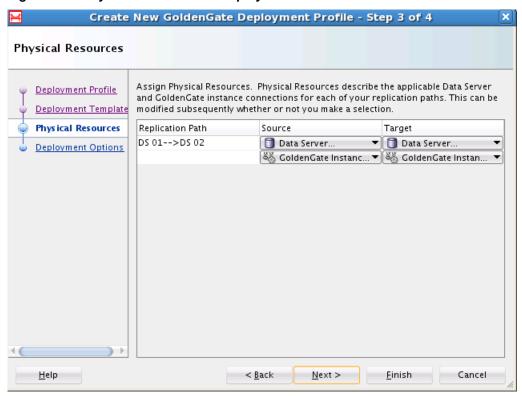
Select the Data Server and Oracle GoldenGate Instance to use as the *hub* of each replication path.

#### Note:

Resource assignment can also be done or re-done through the Deployment Profile editor by dragging and dropping resources from the Resources Navigator to the appropriate diagram elements.

The deployment template is the same for all replication paths in a given solution. Some templates do not require data stores.

Figure 3-6 Physical Resources in Deployment Profile



**4. Deployment Options**: Select or deselect any applicable Oracle GoldenGate starting process deployment options.

### Initial load of all targets

Select if data must be copied between systems before changes to the data are applied.

### Start All Oracle GoldenGate Processes

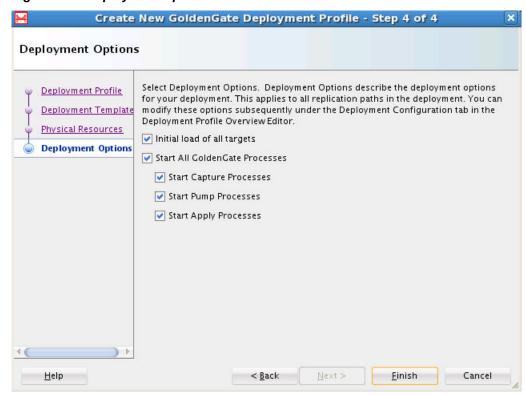
Select which (or all) processes should be started after deployment:

- Capture Processes
- Pump Processes
- **Apply Processes**

#### Note:

Processes can be started only during online deployment.

Figure 3-7 Deployment Options



Click Finish. Your deployment profile is created and added to the Solution.

# **Working with Mappings Groups**

This chapter explains how to use local and global mappings groups to configure and manage your replication options using Oracle GoldenGate Studio and includes the following sections:.

- Understanding Mapping Groups
- How to Create a Mapping Group
- How to Assign Mapping Groups to Replication Path
- How to Copy And Share Mapping Groups

# 4.1 Understanding Mapping Groups

In Oracle GoldenGate Studio, the term mapping group is used to explain a collection of source and target table mappings and associated replication logic such as filtering and conflict detection rules. First, the tables must be drag and dropped or added using the keyboard shortcuts from the Resources Navigator to the Mapping Editor. Then, source and target table mapping associations can be automatically generated using Automap or created by drag-and-drop or using keyboard shortcuts from source to target and target to source. Additionally, wildcard characters (\*) can be used in the mappings at the schema and table level. If you drag and drop the schema name it will automatically use a wildcard, indicating all tables. For more on wildcard logic see the Orcale GoldenGate Reference manual. For Oracle multitenant support you must edit the schema name manually to include the pluggable database name.

Only the metadata from the database connections are used when creating mapping groups. This means mapping groups are logical constructs which can be assigned to multiple replication paths. Mapping groups local to a solution can be associated with any replication path in that solution, while global mapping groups located in the global resource library, can be used for any replication path for any solution across all projects. When a mapping group is modified that change will be reflected in all replication paths referencing that mapping group. More than one mapping group can be assigned to a replication path.

For example, if you have 100 stores with the same application schema reporting back to a central data warehouse, you only have to define that mapping group once and you can apply it to all 100 replication paths. Any changes to that mapping group will only needs to be made once and will be reflected in all 100 replication paths.

# 4.1.1 Schema and Table Mapping

Schemas are not directly mapped to other schemas. Tables in the schemas are mapped other tables. To map all tables in a schema you can either highlight all of the tables in the global resource library and drag and drop them into the mapping editor or you can drag and drop the schema name, which will then use a wildcard (\*) for all tables. If

you're replicating DDL and want to capture new tables then always use a wildcard. Wildcard can also be used with schema names. However, when using a wildcard for schema names, some system schemas will automatically be excluded. To see which schema names will be implicitly excluded when using wildcards, refer Oracle GoldenGate installation document for that database. When using a wildcard for the schema name, the implicitly excluded schemas can be overridden by explicitly listing the schema names.

To map tables or wildcards you can click the **Automap** button and any unmapped target table will be mapped to a source table if the table names are the same regardless if they are in different schemas. Alternatively, in the mapping editor you can drag and drop source and target table names on each other to create the association.

Once tables are mapped you will see the **Source** table name in the **Target** column **Mapped From**. Only the Source table names are listed in this column but a tool tip will provide the source schema name. Double clicking the Target table name or Mapped From table name will take you to the column mapping editor.

In the schema and table mapping editor you can define properties and logic for the entire mapping, source tables, and target tables. The following figure and the table show which properties can be edited based on where you click in the mapping editor.

AutoMap Show. All

Q

Source

NORTH

Target

Mapped From

Target

Mapped From

TCUSTMER

TCUSTMER

TCUSTORD

TCUSTOR

Figure 4-1 Schema and Table Mapping

TCUSTORD

ID	UI Element	Properties
1	Map Breadcrumbs	Name and description, DDL replication, global column matching, DML conversions, and global replication error responses.
2	Source schema name	Database name, schema name, and exclude schema from source capture. The exclude schema is used when you have used a wildcard for all schemas but want to explicitly exclude certain schemas that would otherwise be included with the wildcard.
3	Source table name	Table name, exclude table from source capture, filter, Where clause, custom SQL execution, event actions, and additional custom properties.
4	Target schema name	Target schema name and exclude schema from target apply

ID	UI Element	Properties
5	Target table name and Mapped From	Target schema name and exclude table from target apply, exception handling, filter, DML conversion, Where clause, table specific replication error responses, custom SQL execution, coordinated apply thread (if applicable), coordinated apply thread range (if applicable), event actions, more settings, and additional custom properties.

#### Note:

When you have more than one table mapped you will need to drill into column mapping and select the table name to edit all the properties except exclude property. This allows you to apply different logic to different tables.

#### 4.1.2 Column Mapping

You can navigate to the column mapping from the table mapping editor. Double click the Target table name or the Mapped From column, or right-click anywhere on the target row that contains the table name and chose Edit Column Mapping from the context menu.

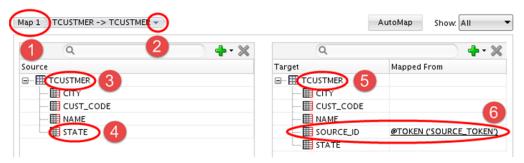
The Oracle GoldenGate runtime engine automatically maps matching column names so column mapping is not required. Column mapping works in the same way as table mapping and you can use Automap and drag-and-drop between Source and Target.

In the column mapping editor you can define properties and logic for Source and Target tables and columns. The following figure and the table show which properties can be edited based on where you click in the mapping editor. It also shows how to select individual table mappings when more than one table is mapped to a target table and how to navigate back to the schema and table mapping editor.

#### Note:

Selecting the table name in the column mapping editor provides the same options as clicking the table name in the schema and table mapping editor when there is only one source table mapped to the target table.

Figure 4-2 Column Mapping



ID	UI Elements	Properties
1	Map Breadcrumbs showing mapping group name	Selecting here returns to the schema and table mapping editor.
2	Map Breadcrumbs showing table mapping name	If there is more than one source table mapped to this target table, selecting here provides a drop down list of those other mappings and you can navigate to them.
3	Source table name	Table name, exclude table from source capture, filter, Where clause, custom SQL execution, event actions, and additional custom properties
4	Source column name	Column name, exclude column from source capture, force column to be used as (part) of the primary key.
5	Target table name	Target table name, exclude table mapping from target apply, force specific columns to be used as the key, exception handling, conflict detection, conflict resolution, filter, DML conversion, Where clause, table specific replication error responses, custom SQL execution, coordinated apply thread (if applicable), coordinated apply thread range (if applicable), event actions, more settings, and additional custom properties.
6	Target column name and Mapped From	Column name, mapped from (which can contain source column names or custom logic), force column to be used as (part) of the primary key, enable this column for update conflict detection, and enable this column for delete conflict detection.

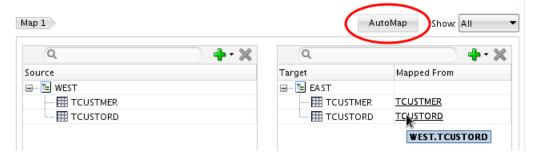
#### Note:

Primary key column overrides, conflict detection, and conflict resolution are only present in the column mapping editor.

#### 4.1.3 Automap

The Automap feature automatically maps similarly named tables. Automapping assignments are created from the source to target and not the reverse. The mapping window looks as follows:

Figure 4-3 Automap



### 4.2 How to Create a Mapping Group

To create a new local or global mapping group:

1. To create a mapping group that is local to the solution, select the Mapping Groups under that solution and right-click to select New. To create a global mapping group, right-click to Global Mapping Group in the Resources Navigator. If the Resources Navigator has no global mapping groups then click the plus icon +in the Resources Navigator, select Global Resource Library, and then select Global Mapping Group.

The Create New Mapping Group or New Global Mapping Group window opens.

- 2. Provide a name and optional description for the Mapping Group and click OK.
- **3.** If the mapping editor window does not open automatically, double click the new mapping group in the Projects Navigator or Resources Navigator.
- **4.** Add tables from the Global Resource Library by dragging and dropping them from the library into the source and target panes of the mapping editor.
  - To select a list of tables you can use Shift-click on the first and last table in the set, use Control-click to select multiple individual tables, or use the + button in the source and target mapping editor panes to manually add schema and table names. In the column mapping editor the equivalent + button allows you to add columns manually.
- **5.** Drag and drop the table or schema names from either the Source or Target pane to the other pane to create a source/target table mapping. If you drag the tables to a white area it will do an exact 1:1 mapping. If you drag a table name from one pane to the other and drop it directly on the other table name, it will create an explicit mapping.

For example, if Table EMP1 in Source is to be mapped with EMP\_BACK1 in Target, drag EMP1 from Source and drop it on EMP\_BACK1 at Target. EMP\_BACK1 appears as a **Mapped From** table for EMP1 indicating a successful mapping.

You can also use the keyboard to perform the same action. When a source or target schema does not have a reference to any specific Resources Navigator schema and the name matches a particular database name in the Resources Navigator, a confirmation dialog is displayed to associate the resource. You can select **Yes** to complete the mapping.

If you select a table as target in the Mapping Editor which is not mapped, the Properties Inspector displays a **Mapped From** text box. You can enter the source table name which will be validated against a valid source table references and can be mapped to target table if the source table is valid.

**6.** You can also use the **AutoMap** button to automatically create mappings for table names that are same between **Source** and **Target**. Source tables can be mapped to more than one Target table and more than one Source table can be mapped to a single Target table.

### 4.3 How to Assign Mapping Groups to Replication Path

Mapping group is assigned in the solution editor. To assign a local or global mapping group to a replication path, drag the mapping group from the Projects Navigator or

Global Resource Library and drop on the replication path or data server in the solution editor. If dropped onto a data server, the mapping group will be automatically associated with every replication path connecting that data server. If dropped on the replication path arrow, the association will be only for that path. You can drag the same mapping group and drop on multiple paths and data servers. These associations are by reference and not copies. Any change to the mapping group is automatically reflected in every replication patch associated with that mapping group.

To remove a mapping group from a replication path, select the replication path in the solution editor and in the Properties Inspector you will see a list of all replication path mapping associations. Select the desired mapping group name and click the red **X** icon to delete. A confirmation dialog appears.

In the Properties Inspector of the replication path, there is a green + icon, which provides an alternative way to add an association between a mapping group and replication path. When the + icon is selected, through a dialog box you can add association for local and global mappings to this replication path.

### 4.4 How to Copy And Share Mapping Groups

When you right click a local solution mapping group you can see options to copy it to the Global Resource Library, make a copy (duplicate) of the selection within the same solution, and export it to an XML file. The XML file can be used for import in another Oracle GoldenGate Studio repository. You can right-click the global mapping group and export to an XML file that can be imported by other Oracle GoldenGate users outside of your shared environment. The export map dialog supports character set and encryption settings.

You can import both local and global exported mapping groups by right-click to the appropriate Mapping Groups node in the Projects Navigator and selecting **Import**.

## **Deploying and Monitoring Your Solutions**

This chapter describes how to deploy and monitor your solutions and includes the following sections.

- Deploying Solutions
- Overview

### 5.1 Deploying Solutions

You can choose to deploy your solution either in Online of Offline mode in Oracle GoldenGate Studio.

Online Deploy: Online deployments require that the Oracle GoldenGate instances associated in the deployment profile have both the manager and Oracle GoldenGate Monitor JAgent is installed and running.

See olink:GGAIN

Offline Deploy: Oracle GoldenGate Studio will generate the GoldenGate replication parameter and obey files and save them in a local directory.

The online deployment implicitly runs a validation check by pinging the GoldenGate instances that have been assigned as resources in the deployment profile and ensures that the minimum required parameters have been set for those data server types. Any parameter that is set and is not related to the data server type to which you are deploying will be ignored when generating the parameter and obey files.

You can also explicitly run a validation by selecting the green check mark icon in the deployment profile toolbar.

Before writing the configuration and command files, the JAgent backs up any files it is about to overwrite to the dirtmp directory of the Oracle GoldenGate instance. Any conflicting process will be stopped. If you did not deselect the start option in the Deployment Configuration options the process will be started once the new configuration files are created.

Once a deployment profile has been deployed you can view the deployment history and some simple monitoring matrixes in the Overview tab under Deployment Profile next to the Deployment View tab. Deployment Configuration options can also be found in the Overview tab under Deployment Profile. Those options include starting all GoldenGate processes and performing full initial loads. Currently partial initial loads are not supported.

#### 5.1.1 How to Deploy a Solution

A solution can be deployed in several ways as follows:

Through Deployment Profile Toolbar.

- **2.** Through the context menu in Deployment Profile editor.
- 3. Through the Projects Navigator Deployment Profile Node.

For example, to deploy a solution through the Projects Navigator:

- **1.** In the Projects Navigator, select the Deployment Profile you want to deploy and right-click to select **Deploy**.
- Select between Deploy or Generate GoldenGate Files. Deploy is used for online deployment while the files generated by Oracle GoldenGate are used for offline deployment.
- **3.** Follow the on screen instructions to continue with deployment.

For offline deployment, you can select a directory to save the deployment files.

#### 5.2 Overview

This tab is used to edit information regarding the name and description of the deployment profile, deployment history, and deployment configuration.

#### 5.2.1 Definition

Use this tab to edit high level details of the deployment profile. The available fields are:

- Deployment Profile Name: You can view and edit the name of the deployment profile.
- Description: You can add or edit the description of the deployment profile.

#### 5.2.2 Deployment History

It provides a historical record of past deployments for a project, solution, deployment, or a single deployment profile. You can use the **Select Columns** icon in the table's toolbar to tailor your view of the deployment history information. Columns can be reordered as per requirement.

The available columns are:

- Last Deployed
- Deployment Status
- Deployed By
- Comments
- Process Name
- Process Type
- Instance Name

#### 5.2.3 Monitoring

Detailed information on the status of every process can be viewed under Monitoring. Additionally, you can monitor the status of each process currently deployed on an Oracle GoldenGate instance, such as the status, type, and mode of processes.

The tab looks as follows:

Figure 5-1 Monitoring Tab



The available columns are:

- Status
- · Process Name
- Type
- last-operation-lag
- Mode
- last-operation-timestamp
- last-checkpoint-timestamp
- Total Inserts
- Total Deletes
- Total Updates

#### **5.2.4 Deployment Configuration**

Use this tab to view or edit the deployment options and physical resources.

You use the Deployment Settings checkboxes to control which processes to start automatically. The Replication Path Table represents all replication paths in the deployment profile. You can control whether or not to generate code for an initial load for each of those replication paths.

## **Managing Security**

This chapter explains how to manage your the security of your replications using Oracle GoldenGate Studio and includes the following sections:

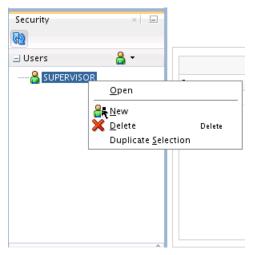
- Understanding Security in Oracle GoldenGate Studio
- Using the Security Navigator

#### 6.1 Understanding Security in Oracle GoldenGate Studio

The Security Navigator is used to manage the Security in Oracle GoldenGate Studio. It is also used to create users and profiles, and to set an account expiration date. Users in Oracle GoldenGate Studio can be Superusers, or Admin, or Administrator and they have same privilege irrespective of name.

The Security Navigator looks as follows:

Figure 6-1 Security Navigator



### 6.2 Using the Security Navigator

You can do the following tasks using the Security Navigator:

#### 6.2.1 Adding a New User

To add a new user, do as follows:

- 1. Click on the user button and select **New User**.
- **2.** Provide the name, password, and account expiration date (optional). By default, all users have Supervisor access privilege.

**3.** Click the **Save** button in the toolbar.

#### 6.2.2 Modifying an Existing User

To modify an existing user, do as follows:

- 1. Right click on the user and select **Open**.
- **2.** Modify the user name, password, or account expiration date.
- **3.** Click the **Save** button in the toolbar.

#### 6.2.3 Deleting an User

To delete an existing user, do as follows:

- **1.** Right click on the user and select **Delete**.
- **2.** In the confirmation dialog box, click **Yes**.

## **Troubleshooting**

This chapter describes common issues that may occur and how you can solve them.

- Positioning of Docked Windows
- Performance Issues While Using Oracle GoldenGate Studio
- Privilege Issue with Oracle GoldenGate Studio
- Syntax Errors with Generated Code
- Not Able to Set Multiple Environment Variables
- Not Able to Add Resources

#### 7.1 Positioning of Docked Windows

Issue: Multiple docked windows like Projects Navigator, Component pallets and so on are misplaced and do not fit the main application window properly.

Solution: Navigate to Window menu and click Reset Windows To factory Settings.

### 7.2 Performance Issues While Using Oracle GoldenGate Studio

Issue: Severe performance issue when using Oracle GoldenGate Studio.

Solution: Ensure that the repository is installed in the same LAN.

## 7.3 Privilege Issue with Oracle GoldenGate Studio

Issue: All users have Supervisor privileges.

Solution: To prevent contention against the same set of objects, it is recommended that Projects and Solutions are well planned in terms of who is working on the same objects.

### 7.4 Syntax Errors with Generated Code

Issue: Syntax errors are present.

Solution: Check is the version and database values of the data servers assigned to the deployment profiles. Generated Code will be compatible with the assigned data servers.

Next, check is to see if the code can be successfully parsed by Oracle GoldenGate Core product. If the syntax is successfully parsed by that tool, then the Oracle GoldenGate Studio and Core files are compatible.

If it is not successfully parsed and the error is not in the mapping syntax, then you can contact Oracle Support.

#### 7.5 Not Able to Set Multiple Environment Variables

Issue: User is not able to set multiple environment variables with GETENV and SETENV in Properties Inspector.

Solution: Environment variable SETENV is available in Properties Inspector, and user can set it multiple times. GETENV can be used by manually typing it in one the column mapping page in Properties Inspector **Mapped From**: directly under the **Name**: You can also manually type it in other free text areas such a FILTER, SQL Execution, WHERE, and so on.

#### 7.6 Not Able to Add Resources

Issue: Not able to set add resources using drag-and-drop.

Solution: Ensure that you are dropping the resources to correct targets and to solution editor links instead of Mapping Group to Deployment Profile links. You can add physical resources only to the Deployment Profile view.

# **Concepts and Terminology**

The table in this appendix describes the concepts and terms that are used in the Oracle GoldenGate Studio product and documentation.

Term	Description
Apply	An Oracle GoldenGate process that will write the changes captured in a trail file to a target data server.
AutoMap	Functionality that makes mapping recommendations based on pattern matching of schema, table and column names and data types.
Bidirectional	Name of a solution template that has a single source and single target with replication paths in both directions.
Business Entity	Logical representation of data that records a business or agency activity, usually regarding the sale, distribution or development of a product or a service.
Capture	An Oracle GoldenGate process that writes records relating to change data from a source system (database or JMS queue) into binary files (trails).
CDR	Conflict Detection and Resolution. A specific use case of error detection and response logic found typically in bidirectional and Active-Active solutions.
Column Mapping	The mapping of columns and fields between two tables or other data entities.
Conflict Detection	A specific use case of error detection.
Conflict Resolution	A specific use case of error response.
Connections	Information used to attach to a data server or Oracle GoldenGate instance.
Consolidation	Name of a solution template where many sources map to a single target.
Credential Store	The Oracle GoldenGate credential store manages user IDs and their encrypted passwords (together known as credentials) that are used by Oracle GoldenGate processes to interact with a database.
Data Entity	Typically a table but any data object that can be replicated including a sequence but not replicated logic such as procedures.

Term	Description
Data Server	Most commonly a database but can be any external (to GoldenGate) source or target of data (e.g. JMS). They contain information about data entities that are replicated (e.g. tables) as well as procedural logic that affect data (e.g. triggers and procedures). Can be used as a source or target.
Data server login credentials	Username and password to access data server.
DDL	Data definition language statements that can be replicated between like databases.
Deployment	Physical architecture bound to a logical design that contains one or more profiles.
Deployment Assistant	A sequence of dialog boxes that leads the user through creating a physical deployment, then allows the user to assign GoldenGate instances to replication paths, and provides additional deployment options such as perform initial load.
Deployment History	Contains a historical manifest of deployments and can be viewed in the context of a project, solution, deployment or a single deployment profile.
Deployment Profile	The physical architecture plus the physical properties of specific processes (their names, behavior options, environmental settings) It contains the details that binds the logical design to the physical architecture.
Deployment Template	The physical relationship of data servers, GoldenGate instances, and hosts.
Description	Text field that contains the name and description for a Project, Solution or Deployment.
Distribution	Name of a solution template that has a single source and multiple targets.
Document Tab	Tabs along the top of the interface that display solutions, library mappings and library logic.
Editor Tab	Tab located at the bottom of the interface that is subordinate to the Document Tab.
Exception Mapping	One or more auxiliary mappings that are invoked only when the primary mapping encounters and error.
Filter	Component of mapping to define rules to omit rows.
Folder	An interface construct used to select and visually organize related objects such as, mappings, logic and connections.
Functions	Oracle GoldenGate built in logic constructs that can act on change data or metadata resulting in the transformation, inclusion, or exclusion of column data. Used in the expression editor.
Oracle GoldenGate Agent	Heavy weight agent designed to monitor Oracle GoldenGate instances with minimal management capabilities.

Term	Description
Oracle GoldenGate Gallery	A sequence of dialog boxes that leads the user through creating new Oracle GoldenGate Studio Projects, Solutions, Deployments and Connections.
Oracle GoldenGate Instances	The connection details for an Oracle GoldenGate Instance available in the Resources Navigator.
Oracle GoldenGate processes	Processes and services that are part of the GoldenGate instance used for capturing, transferring, modifying, and applying data.
Hub and Spoke	Name of a solution template. Distributed data model consisting of connections arranged like a wheel, in which all traffic moves along spokes connected to the hub at the center.
Initial Load	The copying of data between systems before changes to that data are applied.
Library	A collection of shared mappings or logic code that can be used in more than one solution or project.
Logic library	Logic code used in mapping and error handling that can be used in more than one solution or project.
Logical Design	One or more data servers with connected replication paths.
Mapping Library	A collection of maps that can be used in more than one solution or project.
Mapping/Map	The assignment of one or more data entities to another or one or more statements to a data server.
Mappings	First-level construct containing the mapping of data entities, statements, and associated logic that is not shared beyond the local solution.
Overview	Name of an editor level tab under solution that provides high level details of the solution as well as control over access privileges.
Parameters	The set of all configurable items relating to the runtime behavior of Oracle GoldenGate processes used in replicating and loading data. Broken down into several areas, the most significant relating to the mapping logic.
Project	The highest level object containing Oracle GoldenGate solutions.
Project Wizard	A sequence of dialog boxes that leads the user through creating a new project.
Projects Navigator	The interface used to select Oracle GoldenGate Studio projects.
Properties Inspector	Shows attributes of selected artifacts and provide a means to change, add, or remove those attributes.
Replication Path	The path denoting one direction of change data as it moves between data servers. Two data servers can have from zero to two direct replication path connections but only one path in each direction.
Replication Source	Data server from which data is read, copied and transmitted.

Term	Description
Resource	Data Server and Oracle GoldenGate connections and mapping library.
Resource Assignment	The act of assigning physical resources.
Resources Navigator	Interface used to select Oracle GoldenGate Studio resources.
Schema Mapping	The mapping of schemas and tables.
Security Navigator	The interface used to select Oracle GoldenGate Studio security options.
Solution	A deployable object representing a replication design. The design view describes data servers, replication paths, mappings and a logical design. The deployment profile describe the resource assignments involved in the physical design. Solutions can contain more than one deployment profiles. A single solution design can be deployed to any number of physical systems by creating a deployment profile for each.
Solution Wizard	A sequence of dialog boxes that leads the user through creating a new solution by providing a menu of common solution templates, and then allows the user to add existing mappings, bind data server connections to the logical design, and finally include mappings from the mapping library.
Solution Navigator	The interface used to select Oracle GoldenGate Studio solutions, mappings, logic, and deployments.
Solution Templates	Preconfigured solution templates are provided.
Structure Panel	Auxiliary navigator to show additional detail beyond what higher level navigators allow.
Target	Data server to where data is written.
Trail	Sequenced set of binary files used to queue and read captured transactions by Oracle GoldenGate.
Unidirectional	Name of a solution template that has one source replicating to one target.
Wallet	Digital Oracle wallet used to store encryption keys and managed and used by Oracle GoldenGate processes to encrypt and decrypt data at rest and in flight.

## Relating Properties Inspector Options to Oracle GoldenGate Commands and Parameters

This appendix provides a correlation between the Oracle GoldenGate commands and parameters that are run when you select the various options in the Properties Inspector and includes the following sections:

- Commands with Options
- Parameter Category Names
- Units of Measure
- Opposites
- Other Oracle GoldenGate Parameters/Options

You can find information about all Oracle GoldenGate commands and parameters in the and describes how they function.

### **B.1 Commands with Options**

The Oracle GoldenGate commands with the specified options are listed in the following sections.

#### **B.1.1 ADD EXTRACT Commands**

For an explanation of the ADD EXTRACT command, see the .

ADD EXTRACT Command	Oracle GoldenGate Studio Label
ADD EXTRACT	Add Extract
SOURCEISTABLE	Table
TRANLOG	Transaction Log
INTEGRATED TRANLOG	Integrated Capture Mode
VAM	Vendor Access Module

ADD EXTRACT Command	Oracle GoldenGate Studio Label	
EXTFILESOURCE	Source File Name	
EXTTRAILSOURCE	Source Trail Name	
VAMTRAILSOURCE	VAM Trail Name	
BEGINNOW	Now	
EXTSEQNO	At Sequence Number	
EXTRBA	Relative Byte Address	
EOF	End of Log File	
LSN	LSN	
EXTRBA	Relative Byte Address	
PAGE	Page	
ROw	ROW	
SEQNO	Sequence Number	
SCN	System Change Number	
THREADS	Threads	
PASSIVE	Passive	
PARAMS	Parameter File	
REPORT	Report File	

ADD EXTRACT Command	Oracle GoldenGate Studio Label
DESC	Description

#### **B.1.2 ADD REPLICAT Commands**

For an explanation of the  ${\tt ADD}\,$  REPLICAT command, see the .

ADD REPLICAT Options	Oracle GoldenGate Studio Label
ADD REPLICAT	Add Replicat
INTEGRATED	Integrated
COORDINATED	Coordinated
MAXTHREADS	Max Threads
SPECIALRUN	Special Run
EXTFILE	Extract File
EXTTRAIL	Extract Trail
BEGIN	Begin
NOW	Now
EXTSEQNO	Sequence Number
EXTRBA	Relative Byte Address
CHECKPOINTTABLE	Checkpoint Table
NODBCHECKPOINT	No Checkpoint Table
PARAMS	Parameter File

ADD REPLICAT Options	Oracle GoldenGate Studio Label
REPORT	Report File
DESC	Description

#### **B.1.3 ADD EXTTRAIL Command**

For an explanation of the ADD  $\,\,$  EXTRAIL command, see the .

ADD EXTTRAIL Options	Oracle GoldenGate Studio Label
ADD EXT TRAIL	Add Extract Trail
EXTRACT	Extract
MEGABYTES	Megabytes
SEQNO	Sequence Number

#### **B.1.4 ADD RMTTRAIL Command**

For an explanation of the ADD  $\,{\tt RMTTRAIL}$  command, see the .

ADD RMTTRAIL Options	Oracle GoldenGate Studio Label
ADD RMTTRAIL	Add Remote Trail
EXTRACT	Extract
MEGABYTES	Megabytes
SEQNO	Sequence Number

#### **B.1.5 REGISTER EXTRACT Command**

For an explanation of the REGISTER  $\,$  EXTRACT command, see the .

REGISTER EXTRACT Options	Oracle GoldenGate Studio Label
REGISTER EXTRACT	Register Extract
DATABASE	Database
CONTAINER	Container
ADD CONTAINER	Add Container
DROP CONTAINER	Drop Container
LOGRETENTION	Log Retention
SCN	System Change Number

#### **B.1.6 START EXTRACT Command**

For an explanation of the START  $\,$  EXTRACT command, see the .

Start Extract Command	Oracle GoldenGate Studio Label
START EXTRACT	Start Extract
ATCSN	At CSN
AFTERCSN	After CSN

#### **B.1.7 START REPLICAT Command**

For an explanation of the START  $\mbox{\sc replicat}$  command, see the .

Start Replicat Command	Oracle GoldenGate Studio Label
START REPLICAT	Start Replicat
SKIPTRANSACTION	Skip Transaction
ATCSN	At CSN

Start Replicat Command	Oracle GoldenGate Studio Label
AFTERCSN	After CSN
FILTERDUPTRANSACTIONS	Filter duplicate Transactions
THREADS	Threads

#### **B.1.8 ADD TRANDATA Command**

For an explanation of the Trandata commands, see the .

Add Supplemental Logging Command	Oracle GoldenGate Studio Label
ADD SCHEMATRANDATA	Enable Schema Supplemental Logging
ALLCOLS	Logging Columns
ALLOWNONVALIDATEDKEYS	Allow Non-Validated Keys
ADD TRANDATA	Enable Table Supplemental Logging
COLS	Logging Columns
NOKEY	Suppress primary key columns
INCLUDELONG	Include LONGVAR columns
EXCLUDELONG	Exclude LONGVAR columns

## **B.2 Parameter Category Names**

Option
Add Extract Options
Add Replicat Options
Extract Registration
Globals

#### Option

General

**Environment Variables** 

Port Management

Process Management

**Event Management** 

Maintenance

Processing Method

Selection, Converting and Mapping Data

Routing Data

Formatting Data

**Custom Processing** 

Reporting

Tuning

Error Handling

Rep Error

Security

Other

Advanced

Start Extract Options

**Start Replicat Options** 

Supplemental Logging

For more information parameter categories, see the Oracle GoldenGate Reference Guide.

#### **B.3 Units of Measure**

Unit	Option
MS	Millisecond
CS	Centisecond

Unit	Option	
CSEC	Centisecond	
CSECS	Centiseconds	
S	Second	
SEC	Second	
SECOND	Second	
SECS	Seconds	
SECONDS	Seconds	
М	Minute	
MIN	Minute	
MINUTE	Minute	
MINS	Minutes	
MINUTES	Minutes	
н	Hour	
HR	Hour	
HOUR	Hour	
HOURS	Hours	
D	Day	

Unit	Option
DAY	Day
DAYS	Days
WEEK	Week
WEEKS	Weeks
K	Kilobyte
КВ	Kilobyte
МВ	Megabyte
G	Gigabyte
GB	Gigabyte

## **B.4 Opposites**

Oracle GoldenGate Parameters/Options	Oracle GoldenGate Studio Label
batchsql.nobatcherrormode	No Batch Error Mode
batchsql.nobypasspkcheck	Don't Bypass PK Check
batchsql.nocheckuniquekeys	Don't Check Unique Keys
batchsql.noerrorhandling	No Error Handling
bulkload.nologging	Disable Redo Logging
bulkload.noparallel	Disable Parallel Loading

Oracle GoldenGate Parameters/Options	Oracle GoldenGate Studio Label
dboptions.noallowlobdatatruncate	Disallow LOB Truncation
dboptions.noallowunusedcolumn	Disallow Unused Columns
dboptions.nocatalogconnect	No Separate Catalog Connection
dboptions.nofetchlobs	Disallow LOB Fetching
dboptions.nolimitrows	Don't Limit Rows
dboptions.noreparselobsql	Don't Reparse LOB SQL
dboptions.noshowwarnings	Don't Log Warnings
dboptions.noskiptemplob	Don't Skip Temp LOB
dboptions.nospthread	No Separate Connection For Stored Procedures
dboptions.nosuppresstriggers	Don't Suppress Triggers
ddloptions.CROSSRENAME	Cross Rename
ddloptions.ignoreapplops	Ignore Application Operations
ddloptions.ignorereplicates	Ignore Replicat Transactions
ddloptions.nomapderived	Disallow Derived Name Mapping
ddloptions.noreplicatepassword	Don't Replicate Password
ddloptions.noreport	Don't Log DDL Operations To Report File
disableheartbeat	Disable Heartbeat

Oracle GoldenGate Parameters/Options	Oracle GoldenGate Studio Label
disableheartbeattable	Disable Heartbeat Table
disablenewmanager	Disable New Manager
extfile.no_objectdefs	No Object Definitions
exttrail.no_objectdefs	No Object Definitions
fetchoptions.nodetaileddiagnostics	No Detailed Diagnostics
fetchoptions.nodiagnosticsonall	No Diagnostics On All
fetchoptions.nousediagnostics	Don't Use Diagnostics
fetchoptions.nousekey	Don't Use Key
fetchoptions.nouselatestversion	Don't Use Latest Version
fetchoptions.nouserowid	Don't Use Row ID
fetchoptions.nousesnapshot	Don't Use Snapshot
fetchoptions.suppressduplicates	Suppress Duplicates
formatasciinoind	No Ind
formatasciinoop	No Op
formatasciinots	No TS
formatascii.nonames	Exclude Column Names
formatxml.noinlineproperties	Write Properties Outside XML Tab

Oracle GoldenGate Parameters/Options	Oracle GoldenGate Studio Label
formatxml.notrans	Exclude Commit Markers
ignorealters	Ignore Alters
ignoreapplops	Ignore Application Operations
ignorecreates	Ignore Creates
ignoredeletes	Ignore Deletes
ignoredrops	Ignore Drops
ignoreinserts	Ignore Inserts
ignorereplicates	Ignore Replicat Transactions
ignoretruncates	Ignore Truncates
ignoreupdateafters	Ignore Update After Images
ignoreupdatebefores	Ignore Update Before Images
ignoreupdates	Ignore Updates
map.nohandlecollisions	Don't Handle Collisions
map.noinsertappend	Don't Insert Append
map.noinsertmissingupdates	Don't Insert Missing Updates
map.nomapinvisiblecolumns	Don't Map Invisible Columns
map.notrimspaces	Don't Trim CHAR to VARCHAR Trailing Spaces

Oracle GoldenGate Parameters/Options	Oracle GoldenGate Studio Label
map.notrimvarspaces	Don't Trim VARCHAR to CHAR Trailing Spaces
no_use_traildefs	Don't Use Trail Definitions
noallowduptargetmap	Don't Allow Duplicate Target Map
noallowlargefloat	Don't Allow Large Float
noallownoopupdates	Don't Allow No-Operation Updates
noapplynoopupdates	Don't Apply No-Operation Updates
noassumetargetdefs	Don't Assume Target Definitions
noauditreps	Don't Audit Replicats
nobinarychars	Don't Use Binary Characters
nocachenullablecols	Don't Cache Nullable Columns
nocharsetconversion	Disable Character Set Conversion
nochecksequencevalue	Don't Check Sequence Values
nocomplexnullcond	No Complex Null Conditions
nocompressdeletes	No Compress Deletes
nocompressupdates	No Compress Updates
nodeletelogrecs	Don't Delete Log Records
nodynamicresolution	No Dynamic Resolution

Oracle GoldenGate Parameters/Options	Oracle GoldenGate Studio Label
nodynsql	No Dynamic SQL
nofilterdups	Don't Filter Duplicates
nohandlecollisions	Don't Handle Collisions
noinsertappend	No Insert Append
noinsertdeletes	Don't Insert Deletes
noinsertmissingupdates	Don't Convert Failed Updates To Inserts
noinsertupdates	Don't Insert Updates
nolist	Don't List Parameters in Report File
nologallsupcols	Don't Capture All Supplementally Logged Columns
nomapinvisiblecolumns	Don't Map Invisible Columns
nooverridedups	Don't Override Duplicates
nopassthru	Disable PassThru
nopassthrumessages	Disable PassThru Messages
norestartcollisions	Don't Restart Collisions
nospacestonull	Don't Convert Spaces to Null
notcpsourcetimer	Do Not Compensate For System Clock Differences
notrimspaces	Don't Trim CHAR to VARCHAR Spaces

Oracle GoldenGate Parameters/Options	Oracle GoldenGate Studio Label
notrimvarspaces	Don't Trim VARCHAR to CHAR Spaces
noupdatedeletes	Don't Convert Deletes To Updates
noupdateinserts	Don't Convert Inserts To Deletes
nouseansisqlquotes	Don't Use ANSI SQL Quotes
nousededicatedcoordinationthread	Don't Use Dedicated Coordination Thread
novarwidthnchar	Don't Treat NCHAR, NVARCHAR2, NCLOB As UTF-16
purgeoldextracts.no_use_checkpoints	Don't Use Checkpoints
reportcount.norate	Don't Report Rate
rmtfile.no_objectdefs	No Object Definitions
rmttrail.no_objectdefs	No Object Definitions
showsyntax.apply	Apply
statoptions.noreportdetail	No Operation Statistics
statoptions.noreportfetch	Don't Fetch Statistics
statoptions.noresetreportstats	Don't Reset Report Statistics
table.notrimspaces	Don't Trim CHAR to VARCHAR Spaces
table.notrimvarspaces	Don't Trim VARCHAR to CHAR Spaces
trail_seqlen_6d	Trail Sequence Length 6 digits

Oracle GoldenGate Parameters/Options	Oracle GoldenGate Studio Label
tranlogoptionsnoarchivedlogonly	Don't Read Only From Archived Logs
tranlogoptions.ignoremetadatafromvam	Ignore Metadata From VAM
tranlogoptions.noapifilter	No API Filter
tranlogoptions.nocompletearchivedlogonly	No Complete Archived Log
tranlogoptions.nogetctasdml	Don't Get CTAS DML
tranlogoptions.nomanagesecondarytruncationp oint	Manage Secondary Truncation Point
tranlogoptions.nominefromactivedg	Don't Mine From Active Data Guard
tranlogoptions.nominefromsnapshotstby	Don't Mine From Standby Snapshots
tranlogoptions.noprepareforupgradetoie	Don't Prepare For Upgrade To Integrated Extract
tranlogoptions.nopurgeorphanedtransactions	Don't Purge Orphaned Transactions
tranlogoptions.nousenativeobjsupport	Don't Use Native Object Support
tranlogoptions.nouseprevresetlogsid	Don't Use Previous Reset Log SID
tranlogoptions.nouserexit	No Userexit

## **B.5 Other Oracle GoldenGate Parameters/Options**

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
a2e	ASCII to EBCDIC
accessrule	Access Rule

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
allocfiles	Allocate Memory Structures
allowduptargetmap	Allow Duplicate Target Map
allowinvisibleindexkeys	Allow Invisible Index Keys
allowlargefloat	Allow Large Float
allownonvalidatedkeys	Allow Non-Validated Keys
allownoopupdates	Allow No-Operation Updates
allowoutputdir	Allow Output Directory
applynoopupdates	Apply No-Operation Updates
asciimixedccsid	ASCII Mixed CCSID
asciitoebcdic	ASCII to EBCDIC
assumetargetdefs	Assume Target Definitions
assumetargetdefs.override	Override Target Defs
auditreps	Audit Replicats
autorestart	Auto Restart
autorestart.er	Extract/Replicat
autorestart.extract	Extract
autorestart.replicat	Replicat

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
autorestart.resetminutes	Reset Time (mins)
autorestart.retries	Retries
autorestart.waitminutes	Wait Time (mins)
autorestartinterval	Auto Restart Interval
autorestartmintime	Auto Restart Minimum Time
autostart	AutoStart
autostart.er	Extract/Replicat
autostart.extract	Extract
autostart.replicat	Replicat
batchsql	BatchSQL
batchsql.batcherrormode	Batch Error Mode
batchsql.batchesperqueue	Batches Per Queue
batchsql.batchtransops	Operations Per Transaction
batchsql.bypasspkcheck	Bypass PK Check
batchsql.bytesperqueue	Bytes Per Queue
batchsql.checkuniquekeys	Check Unique Keys
batchsql.errorhandling	Error Handling

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
batchsql.maxthreadqueuedepth	Max Thread Queue Depth
batchsql.numthreads	Number of Threads
batchsql.opsperbatch	Operations Per Batch
batchsql.opsperqueue	Operations Per Queue
batchsql.thread	Thread
batchsql.trace	Trace
begin	Begin
binarychars	Binary Characters
bootdelayminutes	Boot Delay (min)
bootdelayseconds	Boot Delay (secs)
br	Bounded Recovery
br.brdir	Directory
br.brfsoption	FS Option
br.brinterval	Interval
br.brkeepstalefiles	Keep Stale Files
br.broff	Off
br.broffonfailure	Off On Failure

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
bulkload	Bulk Load
bulkload.logging	Log To Redo
bulkload.noskipallindexes	Enable Index Maintenance
bulkload.parallel	Enable Parallel Loading
bulkload.skipallindexes	Skips Index Maintenance
bulkload.skipunusedindex	Skip Unusable Indexes
cachemgr	Cache Manager
cachemgr.cachebuffersize	Cache Buffer Size
cachemgr.cachedirectory	Cache Directory
cachemgr.cachefsoption	Cache File Sync Option
cachemgr.cachepageoutsize	Cache Page Outsize
cachemgr.cachesize	Cache Size
cachenullablecols	Cache Nullable Columns
catalogexclude	Catalog Exclude
catalogexclude.norename	No Rename
cdroptions	CDR Options
cdroptions.applymodcolonly	Apply Modified Columns Only

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
charmap	Character Map Override
charset	Parameter File Character Set
charsetconversion	Enable Character Set Conversion
checkminutes	Maintenance Check Minutes
checkparams	Check Parameter Syntax
checkpointsecs	Checkpoint Seconds
checkpointtable	Checkpoint Table
checksequencevalue	Check Sequence Values
cmdtrace	Command Trace
colmatch	Column Match
colmatch.names	Names
colmatch.prefix	Prefix
colmatch.reset	Reset
colmatch.suffix	Suffix
comment	Comment
complexnullcond	Complex Null Condition
compressdeletes	Compress Deletes

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
compressdeletes.fetchmissingcolumns	Fetch Missing Columns
compressupdates	Compress Updates
coordstatinterval	Coordinate Statistic Interval
coordtimer	Coordinate Timer
credentialstorelocation	Credential Store Location
cuserexit	C User Exit
cuserexit.includeupdatebefores	Include Update Before Images
cuserexit.params	Params
cuserexit.passthru	PassThru
dboptions	Database Options
dboptions.allowlobdatatruncate	Allow LOB Truncation
dboptions.allowunusedcolumn	Allow Unused Columns
dboptions.bindcharforbitaschar	Encode CCSID Data
dboptions.catalogconnect	Use Separate Catalog Connection
dboptions.catalogur	Catalog Uncommit Read
dboptions.connectionport	Connection Port
dboptions.decryptpassword	Decrypt Password

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
dboptions.decryptpassword.algorithm	Algorithm
dboptions.decryptpassword.aes128	AES128
dboptions.decryptpassword.aes192	AES192
dboptions.decryptpassword.aes256	AES256
dboptions.decryptpassword.blowfish	Blowfish
dboptions.decryptpassword.encryptkey	Encryption Key
dboptions.deferrefconst	Defer Referential Integrity Constraint
dboptions.disablecommitnowait	Disable Asynchronous Commits
dboptions.disablelobcaching	Disable LOB Caching
dboptions.emptylobstring	Empty LOB String
dboptions.enableinstantiationfiltering	Enable InstantiationCSN Filtering
dboptions.fetchbatchsize	Fetch Batch Size
dboptions.fetchcheckfreq	Fetch Check Freq
dboptions.fetchlobs	Fetch LOBs
dboptions.fetchretrycount	Fetch Retry Count
dboptions.fetchtimeout	Fetch Timeout
dboptions.host	Host

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
dboptions.integratedparams	Integrated Parameters
dboptions.integratedparams.ALLOW_DUPLICATE_ ROWS	Allow Duplicate Rows
dboptions.integratedparams.APPLY_SEQUENCE_N EXTVAL	Apply Sequence Next Value
dboptions.integratedparams.BATCHSQL_MODE	Batch SQL Mode
dboptions.integratedparams.CDGRANULARITY	Conflict Detection Granularity
dboptions.integratedparams.COMMIT_SERIALIZA TION	Commit Serialization
dboptions.integratedparams.COMPARE_KEY_ONLY	Compare Key Only
dboptions.integratedparams.COMPUTE_LCR_DEP_ON_ARRIVAL	Compute LCR Dependency On Arrival
dboptions.integratedparams.DISABLE_ON_ERROR	Disable On Error
dboptions.integratedparams.DISABLE_ON_LIMIT	Disable On Limit
dboptions.integratedparams.EAGER_SIZE	Eager Size
dboptions.integratedparams.ENABLE_XSTREAM_T ABLE_STATS	Enable Table Statistics
dboptions.integratedparams.GROUPTRANSOPS	Group Transaction Operations
dboptions.integratedparams.HANDLECOLLISIONS	Handle Collisions
dboptions.integratedparams.IGNORE_TRANSACTION	Ignore Transaction

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
dboptions.integratedparams.MAXIMUM_SCN	Max SCN
dboptions.integratedparams.MAX_PARALLELISM	Max Parallelism
dboptions.integratedparams.MAX_SGA_SIZE	Max SGA Size
dboptions.integratedparams.MESSAGE_TRACKING _FREQUENCY	Message Tracking Frequency
dboptions.integratedparams.OPTIMIZE_PROGRES S_TABLE	Optimize Progress Table
dboptions.integratedparams.OPTIMIZE_SELF_UP DATES	Optimize Self Updates
dboptions.integratedparams.PARALLELISM	Parallelism
dboptions.integratedparams.PARALLELISM_INTE	Parallelism Interval
dboptions.integratedparams.PRESERVE_ENCRYPT ION	Preserve Encryption
dboptions.integratedparams.RTRIM_ON_IMPLICI	RTRIM On Implicit Conversion
dboptions.integratedparams.STARTUP_SECONDS	Startup Seconds
dboptions.integratedparams.SUPPRESSTRIGGERS	Suppress Triggers
dboptions.integratedparams.TIME_LIMIT	Time Limit
dboptions.integratedparams.TRACE_LEVEL	Trace Level
dboptions.integratedparams.TRANSACTION_LIMI	Transaction Limit

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
dboptions.integratedparams.WRITE_ALERT_LOG	Write Alert Log
dboptions.legacylobreplication	Legacy LOB Replication
dboptions.limitrows	Limit Rows
dboptions.lobbufsize	LOB Buffer Size
dboptions.lobwritesize	LOB Write Size
dboptions.nofetchtimeout	No Fetch Timeout
dboptions.reparselobsql	Reparse LOB SQL
dboptions.sessionpoolincr	Session Pool Increase
dboptions.sessionpoolmax	Session Pool Max
dboptions.sessionpoolmin	Session Pool Min
dboptions.settag	Set Tag
dboptions.showinfomessages	Show Info Messages
dboptions.showwarnings	Show Warnings
dboptions.skiptemplob	Skip Temp LOB
dboptions.sourcedbname	Source DB Name
dboptions.sourcerootname	Source CDB Root Name
dboptions.spthread	SP Thread

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
dboptions.suppresstemporalupdates	Edit Temporal Updates
dboptions.suppresstriggers	Suppress Triggers
dboptions.tdspacketsize	TDS Packet Size
dboptions.trustedconnection	Trusted Connection
dboptions.useodbc	Use ODBC
dboptions.usereplicationuser	Use Replication User
dboptions.xmlbufsize	XML Buffer Size
ddl	DDL Operations
ddl.exclude	Exclude
ddl.exclude.all	All
ddl.exclude.allcatalogs	All Catalogs
ddl.exclude.allowemptyobject	Allow Empty Object
ddl.exclude.allowemptyowner	Allow Empty Owner
ddl.exclude.eventactions	EventActions
ddl.exclude.instr	Instring
ddl.exclude.instrcomments	Instring Comments
ddl.exclude.instrcommentswords	Instring Comments Words

Pracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
ddl.exclude.instrwords	Instring Words
ddl.exclude.mapped	Mapped
ddl.exclude.objname	Object Name
ddl.exclude.objtype	Object Type
ddl.exclude.optype	Operation Type
ddl.exclude.other	Other
ddl.exclude.sourcecatalog	Source Catalog
ddl.exclude.staymetadata	Stay Metadata
ddl.exclude.unmapped	Unmapped
ddl.include	Include
ddl.include.all	All
ddl.include.allcatalogs	All Catalogs
ddl.include.allowemptyobject	Allow Empty Object
ddl.include.allowemptyowner	Allow Empty Owner
ddl.include.eventactions	EventActions
ddl.include.instr	Instring
ddl.include.instrcomments	Instring Comments

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
ddl.include.instrcommentswords	Instring Comment Words
ddl.include.instrwords	Instring Words
ddl.include.mapped	Mapped
ddl.include.objname	Object Name
ddl.include.objtype	Object Type
ddl.include.optype	Operation Type
ddl.include.other	Other
ddl.include.sourcecatalog	Source Catalog
ddl.include.staymetadata	Stay Metadata
ddl.include.unmapped	Unmapped
ddlerror	DDL Error
ddlerror.abendmissingobjects	Abend on Missing Objects
ddlerror.abendmissingtables	Abend on Missing Tables
ddlerror.error_code	Error Code
ddlerror.error_code.abend	Abend
ddlerror.error_code.discard	Discard
ddlerror.error_code.exclude	Exclude

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
ddlerror.error_code.exclude.all	All
ddlerror.error_code.exclude.allcatalogs	All Catalogs
<pre>ddlerror.error_code.exclude.allowemptyobjec t</pre>	Allow Empty Object
ddlerror.error_code.exclude.allowemptyowner	Allow Empty Owner
ddlerror.error_code.exclude.eventactions	Event Actions
ddlerror.error_code.exclude.instr	Instring
ddlerror.error_code.exclude.instrcomments	Instring Comments
ddlerror.error_code.exclude.instrcommentswo rds	Instruction Comments Words
ddlerror.error_code.exclude.instrwords	Instruction Words
ddlerror.error_code.exclude.mapped	Mapped
ddlerror.error_code.exclude.objname	Object Name
ddlerror.error_code.exclude.objtype	Object Type
ddlerror.error_code.exclude.optype	Operation Type
ddlerror.error_code.exclude.other	Other
ddlerror.error_code.exclude.sourcecatalog	Source Catalog
ddlerror.error_code.exclude.staymetadata	Stay Metadata
ddlerror.error_code.exclude.unmapped	Unmapped

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
ddlerror.error_code.ignore	Ignore
ddlerror.error_code.include	Include
ddlerror.error_code.include.all	All
ddlerror.error_code.include.allcatalogs	All Catalogs
<pre>ddlerror.error_code.include.allowemptyobjec t</pre>	Allow Empty Object
ddlerror.error_code.include.allowemptyowner	Allow Empty Owner
ddlerror.error_code.include.eventactions	Event Actions
ddlerror.error_code.include.instr	Instring
ddlerror.error_code.include.instrcomments	Instring Comments
ddlerror.error_code.include.instrcommentswo rds	Instruction Comments Words
ddlerror.error_code.include.instrwords	Instruction Words
ddlerror.error_code.include.mapped	Mapped
ddlerror.error_code.include.objname	Object Name
ddlerror.error_code.include.objtype	Object Type
ddlerror.error_code.include.optype	Operation Type
ddlerror.error_code.include.other	Other
ddlerror.error_code.include.sourcecatalog	Source Catalog

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
ddlerror.error_code.include.staymetadata	Stay Metadata
ddlerror.error_code.include.unmapped	Unmapped
ddlerror.error_code.retryop	Retry Operation
ddlerror.error_code.retryop.maxretries	Max Retries
ddlerror.error_code.retryop.retrydelay	Retry Delay
ddlerror.ignoremissingobjects	Ignore Missing Objects
ddlerror.ignoremissingtables	Ignore Missing Tables
ddlerror.norestartcollisions	Do Not Restart With HandleCollisions
ddlerror.restartcollisions	Restart With HandleCollisions
ddlerror.restartskip	Restart And Skip
ddlerror.skiptriggererror	Skip Trigger Error
ddloptions	DDL Options
ddloptions.NOADDTRANDATA	No Add Trandata
ddloptions.NOCAPTUREGLOBALTEMPTABLE	No Capture Global Temp Table
ddloptions.NOCROSSRENAME	No Cross Rename
ddloptions.USEPASSWORDVERIFIERLEVEL	Use Password Verifier Level
ddloptions.addtrandata	Add Trandata

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
ddloptions.addtrandata.abend	Abend
ddloptions.addtrandata.retryop	Retry Operation
ddloptions.addtrandata.retryop.maxretries	Max Retries
ddloptions.addtrandata.retryop.retrydelay	Retry Delay
ddloptions.captureglobaltemptable	Capture Global Template
ddloptions.defaultuserpassword	Default User Password
ddloptions.defaultuserpassword.aes128	AES128
ddloptions.defaultuserpassword.aes192	AES192
ddloptions.defaultuserpassword.aes256	AES256
ddloptions.defaultuserpassword.blowfish	Blowfish
ddloptions.defaultuserpassword.encryptkey	Encrypt Key
ddloptions.defaultuserpasswordalias	Default User Password Alias
ddloptions.defaultuserpasswordalias.domain	Domain
ddloptions.getapplops	Get Application Operations
ddloptions.getreplicates	Get Replicat Transactions
ddloptions.ignoremapping	Ignore Mapping
ddloptions.mapderived	Map Derived

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
ddloptions.mapschemas	Map Schemas
ddloptions.mapsessionschema	Map Session Schema
ddloptions.noremovecomments	Don't Remove Comments
ddloptions.notag	No Tag
ddloptions.password	Password
ddloptions.password.aes128	AES128
ddloptions.password.aes192	AES192
ddloptions.password.aes256	AES256
ddloptions.password.blowfish	Blowfish
ddloptions.password.encryptkey	Encryption Key
ddloptions.removecomments	Remove Comments
ddloptions.replicatepassword	Replicate Password
ddloptions.report	Log DDL Operations To Report File
ddloptions.target	Target
ddloptions.updatemetadata	Update Metadata
ddloptions.useownerforsession	Use Owner for Session
ddlrulehint	DDL Rule Hint

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
ddlsubst	DDL Substitution
ddlsubst.allcatalogs	All Catalogs
ddlsubst.allowemptyobject	Allow Empty Object
ddlsubst.allowemptyowner	Allow Empty Owner
ddlsubst.eventactions	Event Actions
ddlsubst.exclude	Exclude
ddlsubst.exclude.all	All
ddlsubst.exclude.mapped	Mapped
ddlsubst.exclude.other	Other
ddlsubst.exclude.unmapped	Unmapped
ddlsubst.include	Include
ddlsubst.include.all	All
ddlsubst.include.mapped	Mapped
ddlsubst.include.other	Other
ddlsubst.include.unmapped	Unmapped
ddlsubst.instr	Apply to String
ddlsubst.instrcomments	Comments

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
ddlsubst.instrcommentswords	Comment Words
ddlsubst.instrwords	Apply to Instructions
ddlsubst.objname	Object Name
ddlsubst.objtype	DB Object Type
ddlsubst.optype	DDL Operation Type
ddlsubst.sourcecatalog	Source Catalog
ddlsubst.staymetadata	Stay metadata
ddlsubst.with	With
ddltable	DDL Table Name Override
decrypttrail	Decrypt Trail
decrypttrail.algorithm	Algorithm
decrypttrail.aes128	AES128
decrypttrail.aes192	AES192
decrypttrail.aes256	AES256
decrypttrail.keyname	Key Name
deferapplyinterval	Defer Apply Interval
defsfile	DEFGEN Definition File

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
defsfile.append	Append
defsfile.charset	Character Set
defsfile.format	Format Release
defsfile.format.level	Level
defsfile.format.release	Release
defsfile.purge	Purge
deletelogrecs	Delete Log Records
discardfile	Discard File
discardfile.append	Append
discardfile.maxbytes	Max Bytes
discardfile.megabytes	Megabytes
discardfile.purge	Purge
discardrollover	Discard Rollover
discardrollover.at	At
discardrollover.on	On
downcritical	Down Critical
downinfo	Down Info

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
downreporthours	Down Report Hours
downreportminutes	Down Report Minutes
dsoptions	Teradata Data Server Options
dsoptions.checkopcomplete	Check Op Complete
dsoptions.checktrandata	Check Trandata
dsoptions.committedtranlog	Committed Tranlog
dsoptions.createtranlog	Create Tranlog
dsoptions.excludetrans	Exclude Tranlog
dsoptions.excludeuser	Exclude User
dsoptions.excludeuserid	Exclude User ID
dsoptions.ignoremetadatafromvam	Ignore VAM Metadata
dsoptions.restartappend	Restart Append
dsoptions.sorttranlog	Sort Tranlog
dsoptions.vamcompatibility	VAM Compatibility
dumpddlcolumns	Dump DDL Columns
dumpddlloggroups	Dump DDL Log Groups
dumpddlobjects	Dump DDL Objects

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
dumpddlpartitions	Dump DDL Partitions
dumpddlprimarykeys	Dump DDL Primary Keys
dynamicportlist	Dynamic Port List
dynamicportreassigndelay	Dynamic Port Reassign Delay
dynamicresolution	Dynamic Resolution
dynsql	Dynamic SQL
ebcdicmixedccsid	EBCDIC Mixed CCSID
ebcdictoascii	EBCDIC to ASCII
enablecatalognames	Enable Catalog Names
enableheartbeat	Enable Heartbeat
enablemonitoring	Enable Monitoring
enablemonitoring.bdb	BDB (Berkeley DB)
enablemonitoring.lmdb	LMDB (Lightning DB)
enablemonitoring.shmid	SHMID (Shared Memory ID)
enablenewmanager	Enable New Manager
encrypttrail.0	Encrypt Trail
encrypttrail.1	Algorithm

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
encrypttrail.keyname	Key Name
end	End
eofdelay	EOF Delay (seconds)
eofdelaycsecs	EOF Delay (centiseconds)
etoldformat	ET Old Format
excludetag	Exclude Tag
excludewildcardobjectsonly	Exclude Wildcard Objects Only
extfile	Extract File
extfile.format	Format Release
extfile.level	Format Level
extfile.maxfiles	Max Files
extfile.megabytes	Megabytes
extfile.objectdefs	Object Definitions
extfile.purge	Purge
extfile.release	Release
extfile.trailbyteorder	Trail Byte Order
extract	Extract

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
exttrail	Trail
exttrail.format	Format Release
exttrail.level	Format Level
exttrail.objectdefs	Object Definitions
exttrail.release	Format Release
exttrail.trailbyteorder	Trail Byte Order
fetchoptions	Fetch Options
fetchoptions.detaileddiagnostics	Detailed Diagnostics
fetchoptions.diagnosticsonall	Diagnostics On All
fetchoptions.fetchpkupdatecols	Fetch PK Updates Columns
fetchoptions.inconsistentrow	Inconsistent Row
fetchoptions.maxfetchstatements	Max Fetch Statements
fetchoptions.missingrow	Missing Row
fetchoptions.nofetch	No Fetch
fetchoptions.nosuppressduplicates	No Suppress Duplicates
fetchoptions.usediagnostics	Use Diagnostics
fetchoptions.usekey	Use Key

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
fetchoptions.uselatestversion	Use Latest Version
fetchoptions.userowid	Use Row ID
fetchoptions.usesnapshot	Use Snapshot
fetchuserid	Fetch User ID
fetchuserid.algorithm	Algorithm
fetchuserid.encryptkey	Encrypt Key
fetchuserid.password	Password
fetchuserid.sysdba	Sysdba
filterdups	Filter Duplicates
flushcsecs	Flush Memory Buffer (csecs)
flushsecs	Flush (secs)
formatascii	Format ASCII
formatascii.bcp	MSSQL Bulk Load
formatascii.charset	Character Set
formatascii.date	Date Time Format
formatascii.delimiter	Delimiter
formatascii.extracols	Extra Columns

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
formatascii.ind	Include Before and After Ind
formatascii.names	Include Columns Names
formatascii.nohdrfields	Suppress Header Fields
formatascii.noquote	Exclude Quotes
formatascii.nullisspace	Convert Null to Blank
formatascii.op	Include Operation Type
formatascii.placeholders	Placeholders
formatascii.sqlloader	Oracle SQL Loader
formatascii.time	Time
formatascii.ts	Timestamp
formatsql	Write SQL Format File
formatsql.nonames	Omit Column Names
formatsql.nopkupdates	No PK Updates
formatsql.oracle	Oracle Date-Times
formatxml	Format XML
formatxml.encoding	Encoding
formatxml.inlineproperties	Write Properties Inline With XML Tab

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
formatxml.trans	Include Commit Markers
functionstacksize	Function Stack Size
genloadfiles	Generate Load Files
genloadfiles.charset	Character Set
getalters	Get Alters
getapplops	Get Application Operations
getcreates	Get Creates
getdeletes	Get Deletes
getdrops	Get Drops
getenv	Get Environment
getinserts	Get Inserts
getreplicates	Get Replicat Transactions
gettruncates	Get Truncates
getupdateafters	Get Update After Images
getupdatebefores	Get Updates Before Images
getupdates	Get Updates
ggschema	Schema Name

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
grouptransops	Group Transaction Operations
handlecollisions	Handle Collisions
handlecollisions.thread	Threads
handletpkupdate	Handle Transient Primary-Key Update
haveudtwithnchar	User Data Type Contains NCHAR
heartbeat_table	Heartbeat Table
ignore_unrecognized	Ignore Unrecognized
include	Include
initializeheap	Initialize Heap
insertallrecords	Insert All Records
insertappend	Insert Append
insertdeletes	Insert Deletes
insertmissingupdates	Convert failed updates to inserts
insertupdates	Insert Updates
jvmadditionalopts	JVM Additional Options
jvmclasspath	JVM Classpath
jvmcompiler	JVM Compiler

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
jvmentryclass	JVM Entry Class
jvmentrymethod	JVM Entry Method
jvmentrymethodarguments	JVM Entry Method Arguments
jvmentrymethodsignature	JVM Entry Method Signature
jvmlibrarypath	JVM Library Path
lagcriticalhours	Critical Hours Lag Threshold
lagcriticalminutes	Critical Minutes Lag Threshold
lagcriticalseconds	Critical Seconds Lag Threshold
laginfohours	Info Hours Lag Threshold
laginfominutes	Info Minutes Lag Threshold
laginfoseconds	Lag Info Seconds
lagreporthours	Report Hours Lag Threshold
lagreportminutes	Report Minutes Lag Threshold
lfmmemory	LFM (Long Field Memory)
lfmmemory.directory	Directory
lfmmemory.inittransram	Init Trans RAM
lfmmemory.ram	RAM

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
lfmmemory.ramincrement	RAM Increment
lfmmemory.transallsources	Trans All Sources
lfmmemory.transram	Trans RAM
list	List
lobmemory	LOB Memory
lobmemory.directory	Directory
lobmemory.inittransram	Init Trans RAM
lobmemory.ram	RAM
lobmemory.ramincrement	RAM Increment
lobmemory.transallsources	Trans All Sources
lobmemory.transram	Trans RAM
logallsupcols	Capture All Supplementally Logged Columns
logfilesbehind	Log Files Behind
logfilesbehindinfo	Log Files Behind Message
macro	Macro
macro.begin	Body
macro.params	Parameters

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
macrochar	Macro Character
mapexclude	Map Exclude
mapexclude.norename	No Rename
mapinvisiblecolumns	Map Invisible Columns
mapinvisiblecolumns.thread	Thread
markertable	Marker Table
masterkeyname	Master Key Name
masterkeyname.version	Version
maxabendrestarts	Max Abend Restarts
maxdiscardrecs	Max Discard Records
maxetcheckptsecs	Max Checkpoint Seconds
maxfetchstatements	Max Fetch Statements
maxfieldlen	Max Field Length
maxgroups	Max Process Groups
maxsqlstatements	Max SQL Statements
maxtaclrestarts	Max Tacl Restarts
maxtransops	Max Transaction Operations

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
maxtraprestarts	Max Trap Restarts
mgrservname	Manager Server Name
monitoring_heartbeat_timeout	Monitoring Heartbeat Timeout (secs)
nameccsid	DB Name CCSID
namematchexact	Exact Match
namematchignorecase	Ignore Case
namematchnowarning	No Name Match Warning
noasciiformat	No ASCII Format
nocatalog	Remove Catalog Name
nodiscardfile	Disallow Discard File
nodupmsgsuppression	Disallow Duplicate Message Suppression
noencrypttrail	Disallow Encrypt Trail
nosqlformat	No SQL Format
nostats	Disable Performance Statistics
notracetable	Disallow Trace Table
nouserid	No User ID
nousethreads	Disallow Use Threads

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
numfiles	Memory Structures Initial Number
obey	Obey
outputfileumask	Output File umask
overridedups	Override Duplicates
param_parse_error	Parameter Parsing Error
param_parse_error.force	Force
passthru	Enable PassThru
passthrumessages	Enable PassThru Messages
port	Port
preservetargettimezone	Preserve Target Timezone
ptkcapturebatchsql	Capture Batch SQL Statistics
ptkcapturecachemgr	Capture Cache Statistics
ptkcaptureift	Capture Inflight Transactions
ptkcapturenetwork	Capture Network Statistics
ptkcaptureprocstats	Enable Process/Thread Statistics
ptkcapturequeuestats	Capture Queue Statistics
ptkcapturetablestats	Capture Table Statistics

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
ptkirstatsfrequency	Statistics Frequency
ptkmaxtables	Max Tables for Statistics
ptkmonitorfrequency	Monitoring Collection Frequency (sec)
ptkspstats	Capture Superpool Statistics
ptktablepollfrequency	Poll Interval for Table Statistics
purgeddlhistory	Purge DDL_HISTORY
purgeddlhistory.frequencyhours	Frequency Hours
purgeddlhistory.frequencyminutes	Frequency Minutes
purgeddlhistory.maxkeepdays	Max Keep Days
purgeddlhistory.maxkeephours	Max Keep Hours
purgeddlhistory.minkeepdays	Minimum Keep Days
purgeddlhistory.minkeephours	Minimum Keep Hours
purgeddlhistoryalt	Purge DDL_HISTORY_ALT
purgeddlhistoryalt.frequencyhours	Frequency Hours
purgeddlhistoryalt.frequencyminutes	Frequency Minutes
purgeddlhistoryalt.maxkeepdays	Max Keep Days
purgeddlhistoryalt.maxkeephours	Max Keep Hours

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
purgeddlhistoryalt.minkeepdays	Minimum Keep Days
purgeddlhistoryalt.minkeephours	Minimum Keep Hours
purgemarkerhistory	Purge MARKER_HISTORY table
purgemarkerhistory.frequencyhours	Frequency Hours
purgemarkerhistory.frequencyminutes	Frequency Minutes
purgemarkerhistory.maxkeepdays	Max Keep Days
purgemarkerhistory.maxkeephours	Max Keep Hours
purgemarkerhistory.minkeepdays	Minimum Keep Days
purgemarkerhistory.minkeephours	Minimum Keep Hours
purgeoldextracts	Purge Old Extracts
purgeoldextracts.frequencyhours	Frequency Hours
purgeoldextracts.frequencyminutes	Frequency Minutes
purgeoldextracts.maxkeepdays	Max Keep Days
purgeoldextracts.maxkeepfiles	Max Keep Files
purgeoldextracts.maxkeephours	Max Keep Hours
purgeoldextracts.minkeepdays	Minimum Keep Days
purgeoldextracts.minkeepfiles	Minimum Keep Files

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
purgeoldextracts.minkeephours	Minimum Keep Hours
purgeoldextracts.usecheckpoints	Use Checkpoints
purgeoldhistory	Purge Old History
purgeoldhistory.maxkeepdays	Max Keep Days
purgeoldhistory.maxkeephours	Max Keep Hours
purgeoldhistory.minkeepdays	Minimum Keep Days
purgeoldhistory.minkeephours	Minimum Keep Hours
purgeoldtasks	Purge Old Tasks
purgeoldtasks.after	After
purgeoldtasks.er	Extract/Replicat
purgeoldtasks.extract	Extract
purgeoldtasks.replicat	Replicat
purgeoldtasks.usestopstatus	Use Top Status
randomrollbacks	Random Rollbacks
recoveryoptions	Recovery Options
recoveryoptions.appendmode	Append Mode
recoveryoptions.overwritemode	Overwrite Mode

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
reperror	Replicat Error
reperror.reset	Reset
repfetchedcoloptions	Replicat Fetched Column Options
repfetchedcoloptions.inconsistentrow	Inconsistent Row
repfetchedcoloptions.latestrowversion	Latest Row Version
repfetchedcoloptions.missingrow	Missing Row
repfetchedcoloptions.nofetch	Prevent Fetch
repfetchedcoloptions.redundantrow	Redundant Row
repfetchedcoloptions.setifmissing	Set If Missing
repfetchedcoloptions.snapshotrow	Snapshot Row
replacebadchar	Replaces Invalid Character
replacebadchar.abort	Abort
replacebadchar.enablefallback	Enable Fallback
replacebadchar.escape	Escape
replacebadchar.forcecheck	Force Check
replacebadchar.nowarning	No Warning
replacebadchar.null	Null

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
replacebadchar.skip	Skip
replacebadchar.space	Space
replacebadchar.substitute	Substitute
replacebadchar.unprintable	Unprintable
replacebadnum	Replace Invalid Numbers
replicat	Replicat
repobackupdir	Repository Backup Directory
repobackupfrequency	Repository Backup Frequency
reponumbackupsbeforefullbackup	Repository Backups Before Full Backup
report	Report
report.AT	At
report.ON	On
reportcount	Transaction Record Report Count
reportcount.every	Every
reportcount.rate	Report Rate
reportformatnoremote	Report Format No Remote
reportrollover	Report Rollover

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
reportrollover.AT	At
reportrollover.ON	On
restartcollisions	Restart Collisions
restartinterval	Restart Interval
retrydelay	Retry Delay
rmtfile	Remote File
rmtfile.append	Append
rmtfile.format	Format Release
rmtfile.level	Format Level
rmtfile.maxfiles	Max Files
rmtfile.megabytes	Megabytes
rmtfile.objectdefs	Object Definitions
rmtfile.purge	Purge
rmtfile.release	Format Release
rmtfile.trailbyteorder	Trail Byte Order
rmthost	Remote Host
rmthost.compress	Compress

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
rmthost.compressthreshold	Compress Threshold
rmthost.cpu	CPU
rmthost.encrypt	Encrypt
rmthost.hometerm	Device
rmthost.keyname	Key Name
rmthost.mgrport	Manager Port
rmthost.nostreaming	No Streaming
rmthost.params	Parameters
rmthost.password	Password
rmthost.port	Collector Port
rmthost.pri	Priority
rmthost.processname	Process Name
rmthost.socksproxy	Socks Proxy
rmthost.socksproxy.proxycsalias	Proxy Credential Store Alias
rmthost.socksproxy.proxycsdomain	Proxy Credential Store Domain
rmthost.streaming	Streaming
rmthost.tcpbufsize	TCP Buffer Size

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
rmthost.tcpflushbytes	TCP Flush Bytes
rmthost.timeout	Timeout
rmthost.user	User ID
rmthostoptions	Remote Host Options
rmthostoptions.compress	Compress
rmthostoptions.compressthreshold	Compress Threshold
rmthostoptions.encrypt	Encrypt
rmthostoptions.keyname	Key Name
rmthostoptions.nostreaming	No Streaming
rmthostoptions.params	Parameters
rmthostoptions.streaming	Streaming
rmthostoptions.tcpbufsize	TCP Buffer Size
rmthostoptions.tcpflushbytes	TCP Flush Bytes
rmthostoptions.timeout	Timeout
rmttask	Remote Task
rmttask.format	Format Release
rmttask.group	Group

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
rmttask.level	Format Level
rmttask.params	Parameters
rmttask.release	Format Release
rmttrail	Remote Trail
rmttrail.format	Format Release
rmttrail.level	Format Level
rmttrail.objectdefs	Object Definitions
rmttrail.release	Format Release
rmttrail.trailbyteorder	Trail Byte Order
rollover	Rollover
rollover.at	At
rollover.on	On
rollover.report	Report
schemaexclude	Exclude Replicat Schema
schemaexclude.norename	No Rename
sequence	Sequence
sessioncharset	Session Character Set

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
setenv	Set Environment
showsyntax	Show SQL Syntax
showsyntax.all	All
showsyntax.includelob	Include LOB
showsyntax.noapply	No Apply
sourcecatalog	Source Catalog
sourcecharset	Source Character Set
sourcecharset.character_set_name	Character Set Name
sourcecharset.db2zos	DB2 On z/OS
sourcecharset.override	Override
sourcecharset.passthru	PassThru
sourcedb	Source DB
sourcedb.credentialgroup	Credential Group
sourcedb.domain	Domain
sourcedb.encryptkey	Encrypt Key
sourcedb.password	Password
sourcedb.password.aes128	AES128

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
sourcedb.password.aes192	AES192
sourcedb.password.aes256	AES256
sourcedb.password.blowfish	Blowfish
sourcedb.sessioncharset	Session Character Set
sourcedb.sqlid	
sourcedb.sysdba	Sysdba
sourcedb.thread	Threads
sourcedb.userid	User ID
sourcedb.useridalias	User Alias
sourcedefs	Source Definitions
sourcedefs.override	Override
sourceisfile	Source Is File
sourceistable	Source Is Table
sourcetimezone	Source Timezone
spacestonull	Convert Spaces to Null
specialrun	Special Run
sqlduperr	SQL Duplicate Error

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
sqlexec	SQL Execution
sqlexec.every	Every
sqlexec.onexit	On Exit
sqlexec.thread	Thread
startupvalidationdelay	Startup Validation Delay (secs)
startupvalidationdelaycsecs	Startup Validation Delay (csecs)
statoptions	Statistic Options
statoptions.reportcharconv	Report Character Conversion
statoptions.reportdetail	Operation Statistics
statoptions.reportfetch	Fetch Statistics
statoptions.resetreportstats	Reset Report Statistics
statoptions.thread	Thread
syslog	Sys Log
syslog.all	All
syslog.error	Error
syslog.info	Info
syslog.none	None

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
syslog.warn	Warning
tableexclude	Exclude Table
tableexclude.norename	No Rename
targetdb	Target DB
targetdb.domain	Domain
targetdb.dsn	DSN
targetdb.encryptkey	Encrypt Key
targetdb.libfile	Library File
targetdb.password	Password
targetdb.password.aes128	AES128
targetdb.password.aes192	AES192
targetdb.password.aes256	AES256
targetdb.password.blowfish	Blowfish
targetdb.sessioncharset	Session Character Set
targetdb.set	Set
targetdb.sqlid	SQL ID
targetdb.sysdba	Sysdba

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
targetdb.thread	Threads
targetdb.userid	User ID
targetdb.useridalias	User Alias
targetdefs	Target Definitions
targetdefs.override	Override
tcpsourcetimer	Compensate For System Clock Differences
threadoptions	Thread Options
threadoptions.eofdelaycsecs	EOF Delay Centiseconds
threadoptions.eofdelayms	EOF Delay (ms)
threadoptions.except	Except
threadoptions.inqueuesize	Input Queue Size
threadoptions.outqueuesize	Output Queue Size
threadoptions.processthreads	Process Threads
threadoptions.select	Select
threadoptions.stacksize	Stack Size
tltrace	Transaction Log Trace
tltrace.data	Use Raw Format

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
tltrace.ddl	DDL
tltrace.debug	Debug
tltrace.file	File
tltrace.level	Level
tltrace.pause	Pause
trace	Trace
trace2	Trace2
traceapi	Trace API
tracetable.0	Trace Table
tracetable.1	Name
trail_seqlen_9d	Trail Sequence Length 9 digits
trailbyteorder	Trail Byte Order
trailcharset	Trail Character Set
trailcharset.replacebadchar	Replace Bad Character
trailcharsetascii	Trail Character Set ASCII
trailcharsetebcdic	Trail Character Set EBCDIC
trailcharsetunicode	Unicode Trail Character Set

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
tranlogoptions	Transaction Log Options
tranlogoptions.USE_ROOT_CONTAINER_TIMEZONE	Use Root Container Timezone
tranlogoptionsallowtablecompression	Allow Table Compression
tranlogoptions.activationidpadlen	Activation ID Pad Length
tranlogoptions.activesecondarytruncationpoint	Active Secondary Truncation
tranlogoptions.adgapplycheckfreq	ADG Apply Check Frequency
tranlogoptions.adgretrycount	ADG Retry Count
tranlogoptions.adgtimeout	ADG Timeout
tranlogoptions.allowdataloss	Allow Data Loss
tranlogoptions.allowtablecompression	Allow Table Compression
tranlogoptions.altarchivedlogformat	Alt Archive Log Format
tranlogoptions.altarchivelogdest	Alt Archive Log Destination
tranlogoptions.altlogdest	Alt Log Destination
tranlogoptions.altonlinelogs	Alt Online Logs
tranlogoptions.apifilter	API Filter
tranlogoptions.archivedlogonly	Archived Log Only
tranlogoptions.archiverestoreexecutable	Archive Restore Executable

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
tranlogoptions.archiverestoreparams	Archive Restore Parameters
tranlogoptions.asmbufsize	ASM Buffer Size
tranlogoptions.asmuser	ASM User
tranlogoptions.asmuser.aes128	AES128
tranlogoptions.asmuser.aes192	AES192
tranlogoptions.asmuser.aes256	AES256
tranlogoptions.asmuser.asmpassword	ASM Password
tranlogoptions.asmuser.blowfish	Blowfish
tranlogoptions.asmuser.encryptkey	Encrypt Key
tranlogoptions.asmuser.sysdba	Sysdba
tranlogoptions.asmuseralias	ASM User Alias
tranlogoptions.asmuseralias.domain	Domain
tranlogoptions.asynctransprocessing	Async Transaction Processing
tranlogoptions.bufsize	Buffer Size
tranlogoptions.checkpointretentiontime	Checkpoint Retention
tranlogoptions.checkpointtable	Checkpoint Table
tranlogoptions.checkposition	Check Position

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
tranlogoptions.checktablelevelsupplog	Checktable Level Suppl Log
tranlogoptions.completearchivedlogonly	Complete Archived Log
tranlogoptions.completearchivedlogtimeout	Complete Archived Log Timeout
tranlogoptions.convertucs2clobs	Convert UCS to CLOBS
tranlogoptions.createtranlog	Create Transaction Log
tranlogoptions.databaseidpadlen	Database ID Pad Len
tranlogoptions.dblogreader	DB Log Reader
tranlogoptions.dblogreaderbufsize	DB Log Reader Buffer Size
tranlogoptions.excludetag	Exclude Tag
tranlogoptions.excludetrans	Exclude Transaction
tranlogoptions.excludeuser	Exclude User
tranlogoptions.excludeuserid	Exclude User ID
tranlogoptions.failovertargetdestid	Failover Target Destination ID
tranlogoptions.fetchinlinesflob	Fetch Inline FS Lob
tranlogoptions.fetchlobonerror	Fetch LOB On Error
tranlogoptions.fetchpartiallob	Fetch Partial LOB
tranlogoptions.fetchpartialxml	Fetch Partial XML

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
tranlogoptions.fetchxmlonerror	Fetch XML On Error
tranlogoptions.filtertable	Filter Table
tranlogoptions.flush	Flush
tranlogoptions.forcefetchlob	Force Fetch LOB
tranlogoptions.getctasdml	Get CTAS DML
tranlogoptions.getmetadatafromvam	Get Metadata From VAM
tranlogoptions.handledlfailover	Handled Failover
tranlogoptions.iflockseconds	If Lock (secs)
tranlogoptions.ignoredatacapturechanges	Ignore Data Capture Changes
tranlogoptions.ignoredirectloadinserts	Ignore Direct Load Inserts
tranlogoptions.ignoregap	Ignore Gap
tranlogoptions.ignorekeyerror	Ignore Key Error
tranlogoptions.includeaux	Include AUX
tranlogoptions.includeregionid	Include Region ID
tranlogoptions.includeregionidwithoffset	Include Region ID With Offset
tranlogoptions.integratedparams	Integrated Parameters
tranlogoptions.legacylobreading	Legacy LOB Reading

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
tranlogoptions.logretention	Log Retention
tranlogoptions.logretention.days	Days
tranlogoptions.logsource	Log Source
tranlogoptions.logswitchmsg	Log Switch Message
tranlogoptions.managesecondarytruncationpoint	Manage Secondary Truncation Point
tranlogoptions.maxparallelrec	Max Parallel Records
tranlogoptions.maxreadsize	Max Read Size
tranlogoptions.maxwarneof	Max Warn EOF
tranlogoptions.minefromactivedg	Mine From Active DG
tranlogoptions.minefromsnapshotstby	Mine From Snapshots
tranlogoptions.mininguser	Mining User
tranlogoptions.mininguser.algorithm	Algorithm
tranlogoptions.mininguser.aes128	AES128
tranlogoptions.mininguser.aes192	AES192
tranlogoptions.mininguser.aes256	AES256
tranlogoptions.mininguser.blowfish	Blowfish
tranlogoptions.mininguser.encryptkey	Encrypt Key

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
tranlogoptions.mininguser.miningpassword	Mining Password
tranlogoptions.mininguser.sysdba	Sysdba
tranlogoptions.mininguseralias	Mining User Alias
tranlogoptions.mininguseralias.domain	Domain
tranlogoptions.noadgtimeout	No ADG Timeout
tranlogoptions.noasynctransprocessing	No Async Transaction Processing
tranlogoptions.noddlchangewarning	No DDL Change Warning
tranlogoptions.noflush	No Flush
tranlogoptions.noignoredatacapturechanges	Do Not Ignore Data Capture
tranlogoptions.norequirelongdatacapturechan ges	Do Not Require Long Data Capture
tranlogoptions.onephase	One Phase
tranlogoptions.pathmap	Path Map
tranlogoptions.pollinterval	Poll Interval
tranlogoptions.prepareforupgradetoie	Prepare For Upgrade To IE
tranlogoptions.purgeorphanedtransactions	Purge Orphaned Transactions
tranlogoptions.queryretrycount	Query Retry Count
tranlogoptions.readqueuesize	Read Queue Size

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
tranlogoptions.requirelongdatacapturechange s	Require Long Data Capture
tranlogoptions.resetlogsidpadlen	Reset Logs ID Pad Length
tranlogoptions.restartappend	Restart Append
tranlogoptions.seqpadlen	Sequence Pad Length
tranlogoptions.server	Server
tranlogoptions.skipdirloadinsert	Skip DIR Load Insert
tranlogoptions.startatactivelsn	Start At Active LSN
tranlogoptions.threadpadlen	Thread Pad Length
tranlogoptions.transcleanupfrequency	Trans Cleanup Frequency (min)
tranlogoptions.truncpointoff	Truncation Point Off
tranlogoptions.tslookupbeginlri	Timestamp Lookup Start
tranlogoptions.tslookupendlri	Timestamp Lookup Stop
tranlogoptions.unprivileged	Unprivileged
tranlogoptions.usenativeobjsupport	Use Native Object Support
tranlogoptions.useocithreads	Use OCI Threads
tranlogoptions.useprevresetlogsid	Use Previous Reset Log SID
tranlogoptions.userexit	User Exit

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
tranlogoptions.validateinlinesflob	Validate Inline FS Lob
tranlogoptions.vamcompatibility	VAM Compatibility
transactiontimeout	Transaction Timeout
transmemory	Transaction Memory
transmemory.directory	Directory
transmemory.inittransram	Initial Trans RAM
transmemory.ram	RAM
transmemory.ramincrement	RAM Increment
transmemory.transallsources	Trans All Sources
transmemory.transram	Trans RAM
trimspaces	Trim CHAR to VARCHAR Spaces
trimvarspaces	Trim VARCHAR to CHAR Spaces
unlockedtrailfiles	Unlocked Trail Files
updatedeletes	Update Deletes
updateinserts	Update Inserts
updaterecordformat	Update Record Format
upreporthours	Up Report Hours

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
upreportminutes	Up Report Minutes
use_traildefs	Use Trail Definitions
useansisqlquotes	ANSI SQL Quotes
usedateprefix	Use Date Prefix
usededicatedcoordinationthread	Use Dedicated Coordination Thread
useipv4	IPV4
useipv6	IPV6
userid	Userid
userid.password	Password
userid.password.algorithm	Algorithm
userid.password.aes128	AES128
userid.password.aes192	AES192
userid.password.aes256	AES256
userid.password.blowfish	Blowfish
userid.password.encryptkey	Encrypt Key
userid.sysdba	Sysdba
userid.thread	Threads

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
useridalias	User Alias
useridalias.domain	Domain
useridalias.sysdba	Sysdba
useridalias.thread	Threads
usethreads	Use Threads
usetimeprefix	Use Time Prefix
usetimestampprefix	Use Timestamp Prefix
vam	Vendor Access Module
vam.params	Parameters
varwidthnchar	Treat NCHAR, NVARCHAR2, NCLOB As UTF-16
veridatareportage	Veridata Report Age
walletlocation	Wallet Location
warnlongtrans	Warn Long Transaction
warnlongtrans.checkinterval	Check Interval
warnlongtrans.nousethreads	No Use Threads
warnlongtrans.uselastreadtime	Use Last Read Time
warnrate	Warn Rate

Oracle GoldenGate Parameter/Option	Oracle GoldenGate Studio Label
wildcardresolve	Resolve Wildcard
wildcardresolve.both	Intermediate and Dynamic Resolve
wildcardresolve.dynamic	Dynamic Resolve
wildcardresolve.ignoremissing	Ignore Missing
wildcardresolve.immediate	Immediate Resolve
xagenable	XAG Integration