Oracle® GoldenGate

Upgrading to Oracle GoldenGate Monitor 12.2.1

12*c* (12.2.1)

E60963-01

October 2015

This document contains the procedures for upgrading Oracle GoldenGate Monitor 11g and 12*c* (12.1.3.0) to Oracle GoldenGate Monitor Server 12*c* (12.2.1).

ORACLE®

Oracle GoldenGate Upgrading to Oracle GoldenGate Monitor 12.2.1 12*c* (12.2.1)

E60963-01

Contents

4 Performing Post-Upgrade Tasks

Preface

This document describes how to upgrade Oracle GoldenGate Monitor Server 12*c* (12.1.3) release to the 12*c* (12.2.1) release. This information includes the upgrade process, details regarding the components involved in that process, pre-requisites for upgrading, and post-upgrade instructions.

Audience

This document is intended for administrators who are familiar with Oracle Fusion Middleware installation, upgrade, and administration tasks.

Documentation Accessibility

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

Access to Oracle Support

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

Related Documents

For more information, see the following documents in the Oracle GoldenGate Monitor documentation set:

- *Administering Oracle GoldenGate Monitor*
- *Oracle GoldenGate Monitor Console Online Help*
- *Installing and Configuring Oracle GoldenGate Monitor Server*
- *Installing and Configuring Oracle GoldenGate Monitor Agent*
- *Release Notes for Oracle GoldenGate Monitor*

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.

1

Preparing to Upgrade Oracle GoldenGate Monitor Server

This chapter summarizes the main points you should understand before upgrading Oracle Oracle GoldenGate Monitor Server from the 12*c* (12.1.3) release to the 12*c* (12.2.1) release.

This chapter contains the following topics:

- Section 1.1, "Overview"
- Section 1.2, "Upgrade Roadmap"
- Section 1.3, "Upgrade Prerequisites"
- Section 1.4, "Upgrade Tools"

1.1 Overview

The upgrade process described in this document applies only for an upgrade from Oracle GoldenGate Monitor releases 11g (11.x) or 12*c* (12.1.3) to the Oracle GoldenGate Monitor Server release 12.2.1.

1.2 Upgrade Roadmap

Upgrading the Oracle GoldenGate Monitor 12*c* (12.2.1) schema requires the following steps:

> **Note:** This roadmap assumes that you have stopped your 11g (11.x) or 12*c* (12.1.3) Oracle GoldenGate Monitor Server and backed up the database and `ORACLE_HOME` directory.

1. Perform the upgrade readiness check.

2. Upgrade the Oracle GoldenGate Monitor schema to 12.2.1 by following the instructions for your specific database:

   - For Oracle, see Chapter 2, "Upgrading for Oracle Database".

   - For SQL Server, see Chapter 2, "Upgrading for Oracle Database".

3. Create a WebLogic domain for Oracle GoldenGate Monitor Server. For instructions, see "Configuring Oracle GoldenGate Monitor Server for Oracle Databases" in *Installing and Configuring Oracle GoldenGate Monitor Server*.

4. Run the post upgrade configuration scripts. For instructions, see Chapter 4, "Performing Post-Upgrade Tasks".

5. Create an Oracle GoldenGate Monitor Agent 12.2.1 instance. For instructions, see "Creating and Configuring an Oracle GoldenGate Monitor Agent Instance" in *Installing and Configuring Oracle GoldenGate Monitor Agent*.

6. Start the Oracle GoldenGate Monitor Server 12.2.1. For instructions, see "Starting Oracle GoldenGate Monitor Server" in *Installing and Configuring Oracle GoldenGate Monitor Server*.

1.3 Upgrade Prerequisites

Before you can upgrade an existing 12.1.3 Oracle GoldenGate Monitor implementation to Oracle GoldenGate Monitor Server 12.2.1, ensure that the following prerequisites are met:

- JDK 1.8 is installed on the target machine.

- WebLogic Server with JRF is installed on the target machine in the same directory in which you installed Oracle GoldenGate Monitor. This creates an Oracle Middleware home (`ORACLE_HOME`). The `ORACLE_HOME` indicator is used throughout this book..

- Oracle GoldenGate Monitor 12*c* (12.2.1) is installed. For installation instructions see *Installing and Configuring Oracle GoldenGate Monitor Server*.

- Your Oracle GoldenGate Monitor 12.1.3 server is stopped and supported databases are installed. For current platform support information for Oracle GoldenGate Monitor 12*c* (12.2.1), log in to Oracle Support and click the **Certifications** tab. For more detailed instructions, see "Platform Support" in *Installing and Configuring Oracle GoldenGate Monitor Server*.

- The Oracle GoldenGate Monitor manager and the JAgent are stopped.

1.4 Upgrade Tools

You will use the following tools to upgrade Oracle GoldenGate Monitor Server.

- **Repository Creation Utility (RCU)**; Use this tool to create the other relevant schemas for Oracle GoldenGate Monitor.

  For more information on creating a repository with RCU, see *Oracle Fusion Middleware Creating Schemas with the Repository Creation Utility*.

- **Upgrade Assistant (UA)**; Use this tool to upgrade Oracle GoldenGate Monitor Server schema/repository to 12.2.1.

  For more information on using UA, see *Upgrading with the Upgrade Assistant*.

- **Reconfiguration Wizard**; Use this tool to upgrade an existing Oracle GoldenGate Monitor Server 12.1.3 domain to an Oracle WebLogic Server 12.2.1 domain.

2

Upgrading for Oracle Database

This chapter describes the tasks you perform to upgrade Oracle GoldenGate Monitor with an Oracle Database.

This chapter includes the following sections:

> **Note:** This upgrade supports only latest version of Oracle 11g R3 and Oracle 12*c* R1 database software releases. For current database support information for Oracle GoldenGate Monitor 12*c* (12.2.1), see "Platform Support" in *Installing and Configuring Oracle GoldenGate Monitor Server*.

2.1 Creating the Required 12.2.1 Schema Using RCU for 11g Upgrades

This section is only applicable to 11g upgrades. It is *not* applicable to 12c upgrades because the required schema already exists.

> **Important:** Before running RCU for Oracle 12*c* databases, ensure the following:
>
> - The character set is AL32UTF8. You *must* do this because the default character set is not supported by RCU.
>
> - You are using a plug-able database. By default, a container database will enable in Oracle12*c*, so RCU supports only plug-able database, not container database.

To create the 12.2.1 database schema, run the Repository Creation Utility, which is part of the product installation. To launch RCU, navigate to `ORACLE_HOME/oracle_common/bin` and enter:

For Linux or UNIX:

```
$ ./rcu
```

For Windows:

```
C:\ rcu.bat
```

RCU will open, displaying the Welcome screen.

Navigate the RCU screens as instructed in the following table to update the database.

> **Note:** Some of the RCU items that this procedure instructs you to select might already be selected by default. If an item on a screen is already selected and the instructions below tell you to select it, be careful not to *deselect* it.

Screen	Upgrade Action
Welcome	Click **Next**.
Create Repository	1. Select **System Load and Product Load**. 2. Click **Next**.
Database Connection Details	1. Enter the Oracle GoldenGate Monitor database details. 2. Click **Next**.

Select Components	1. Under the AS Common Services node, select the following schemata:
	    ■ **Audit Services**
	    ■ **Audit Services Append**
	    ■ **Audit Services Viewer**
	    ■ **Oracle Platform Security Services**
	 Note: Do not select the **Monitor Server** schema in this step.
	 2. Click **Next**.
	 A progress window appears, checking off each schema as its prerequisites ar e met.
	 3. Click **OK**.

Schema Passwords	1. Enter the necessary password, if it's not already there, and confirm it. 2. Click **Next**.
Map Tablespaces	Click **Next**. Schema creation for the selected services will commence.
Summary	Review the schema information and click **Create**.
Creation Summary	Click **Close**.

2.2 Upgrade Readiness Check

Before beginning an upgrade, you must use the UA to perform an upgrade readiness check. The UA runs a read-only check on various database contents including the schema version, required tables, and columns. If the schema version is already at the upgraded or latest version of Oracle GoldenGate Monitor or there are unexpected or missing tables or columns found, the readiness test will fail. If a failure occurs, the UA provides the test details and any exceptions in the UA logs, and the readiness test results are provided in the `ORACLE_HOME`/oracle_ common/upgrade/logs/postreadiness.txt file. Like RCU, UA is included in the product installation.

Use one of the following sections to perform your readiness check:

- Section 2.2.1, "Performing an 11g Readiness Check"
- Section 2.2.3, "Performing a 12.1.3 Domain Readiness Check"

2.2.1 Performing an 11g Readiness Check

On your existing 11g Oracle GoldenGate Monitor server, navigate to *ORACLE_HOME*/oracle_common/upgrade/bin and enter:

For Linux or UNIX:

```
$ ./ua -readiness
```

For Windows:

```
C:\ ua.bat -readiness
```

Navigate the UA screens as instructed in the following table to upgrade your server.

Screen	Upgrade Action
Welcome	Click **Next**.
Schemas	Ensure Schemas is selects and click **Next**.
Available Components	1. Select **Oracle GoldenGate Monitor.** 2. Click **Next**.
OGGMON Schema	1. Enter the Oracle GoldenGate Monitor schema name and password. 2. Click **Next**.
Readiness Summary	Click **Next**.
Readiness Check	Click **Continue**. You can use the View Readiness Report button to view your results.
Readiness Success	Click **Close**.

2.2.2 Performing a 12.1.3 Schema Readiness Check

On your existing Oracle GoldenGate Monitor server, navigate to *ORACLE_HOME*/oracle_common/upgrade/bin and enter:

For Linux or UNIX:

```
$ ./ua -readiness
```

For Windows:

```
C:\ ua.bat -readiness
```

Navigate the UA screens as instructed in the following table to upgrade your server.

Screen	Upgrade Action
Welcome	Click **Next**.
WebLogic Components	Ensure **WebLogic Component Configurations - offline checks only** is selected and click **Next**.
Component List	Click **Next**.

Screen	Upgrade Action
Readiness Summary	Click **Next**.
Readiness Check	Click **Continue**. You can use the View Readiness Report button to view your results.
Readiness Success	Click **Close**.

2.2.3 Performing a 12.1.3 Domain Readiness Check

On your existing Oracle GoldenGate Monitor server, navigate to *WEBLOGIC_HOME*/oracle_common/upgrade/bin and enter:

> **Note:** Ensure that you go to your Oracle WebLogic home directory *not* your Oracle home directory.

For Linux or UNIX:

```
$ ./ua -readiness
```

For Windows:

```
C:\ ua.bat -readiness
```

Navigate the UA screens as instructed in the following table to upgrade your server.

Screen	Upgrade Action
Welcome	Click **Next**.
WebLogic Components	Ensure **WebLogic Component Configurations - offline checks only** is selected and click **Next**.
Component List	Click **Next**.
Readiness Summary	Click **Next**.
Readiness Check	Click **Continue**. You can use the View Readiness Report button to view your results.
Readiness Success	Click **Close**.

2.3 Schema Upgrade Instructions

Upgrading Oracle GoldenGate Monitor Server for Oracle databases is a two-stage process:

1. Creating the Required 12.2.1 Schema Using RCU for 11g Upgrades

2. Upgrade the Server and Schema by Running UA

> **Note:** Enure that the existing Monitor server is stopped before you proceeding with the following steps.

2.3.1 Upgrade the Server and Schema by Running UA

> **Warning:** Ensure that the existing Oracle GoldenGate Monitor Server 11g pointed to the schema you are going to upgrade is stopped before commencing with this procedure.

With the repository created, you next run UA to upgrade the database to version 12*c* (12.2.1). Navigate to *ORACLE_HOME*/oracle_common/upgrade/bin and enter:

For Linux or UNIX:

```
$ ./ua
```

For Windows:

```
C:\ ua.bat
```

The UA Welcome screen appears.

Use one of the following sections to perform your schema upgrade:

- Section 2.3.1.1, "Upgrading an 11g Schema"
- Section 2.3.1.2, "Upgrading 12.1.3"

2.3.1.1 Upgrading an 11g Schema

Upgrading the Server
Navigate the UA screens as instructed in the following table to upgrade your server.

Screen	Upgrade Action
Welcome	Click **Next**.
Schemas	Ensure **Schemas** is selects and click **Next**.
Available Components	1. Select **Oracle GoldenGate Monitor.**
	2. Click **Next**.
Prerequisites	1. Select all three prerequisites.
	2. Click **Next**.
OGGMON Schema	1. Enter the Oracle GoldenGate Monitor schema name and password.
	2. Click **Next**.
OGGMON Schema Prefix	1. Enter the same schema prefix you used when creating the STB schema in RCU.
	2. Click **Next**.
Examine	Click **Next**.
Upgrade Summary	Click **Upgrade**.
Upgrade Progress	Click **Next**.
Upgrade Success	Click **Close**.

The /ua_timestamp.log, ua_timestamp.out files are generated at $oracle_common/upgrade/logs under the 12g *ORACLE_HOME*.

Upgrading the Oracle GoldenGate Monitor Server Configuration

The UA updates the Monitor Server configuration files to the latest 12.2.1 configuration by maintaining your existing set property values. It creates a `oggmon.properties` file in the `domain_name`/config/monitorserver/cfg/ directory, with an encrypted password entry that is used in JMX communication between Monitor Server and Agent.

Navigate to `ORACLE_HOME`/oracle_common/upgrade/bin and enter:

For Linux or UNIX:

```
$ ./ua
```

For Windows:

```
C:\ ua.bat
```

Navigate the UA screens as instructed in the following table to upgrade your server.

The UA Welcome screen appears.

Screen	Upgrade Action
Welcome	Click **Next**.
Schemas	Ensure **Schemas** is selects and click **Next**.
WebLogic Components	1. Select **WebLogic Component Configurations** and enter the domain directory to be upgraded.
	2. Click **Next**.
Component List	Click **Next**.
Prerequisites	1. Select all three prerequisites.
	2. Click **Next**.
OGGMON Schema	1. Enter or select the OGGMON schema connect string, and the DBA and schema user names and passwords.
	2. Click **Next**.
OGG Monitor Installed Version	1. Select **OGG Monitor 11g**.
	2. Enter the directory that contains your 11g configuration files.
	3. Click **Next**.
Examine	Click **Next**.
Upgrade Summary	Click **Upgrade**.
Upgrade Progress	Click **Next**.
Upgrade Success	Click **Close**.

This completes the Oracle GoldenGate Monitor Server for Oracle database upgrade process.

2.3.1.2 Upgrading 12.1.3

Use this section to upgrade your 12.1.3 schema, WebLogic domain, and Oracle GoldenGate Monitor Server.

Upgrading the Server

Navigate the UA screens as instructed in the following table to upgrade your server.

Screen	Upgrade Action
Welcome	Click **Next**.
Schemas	Ensure **Schemas** is selects and click **Next**.
Available Components	1. Select **Oracle GoldenGate Monitor** and Oracle Platform Security Services. Oracle Audit Services is automatically selected.
	2. Click **Next**.
Domain Directory	Enter the directory for the domain you are upgrading or browse for it, then click **Next**.
Prerequisites	1. Select all three prerequisites.
	2. Click **Next**.
IAU Schema	1. Enter or select the IAU schema connect string, and the DBA and schema user names and passwords.
	2. Click **Next**.
OPSS Schema	1. Enter or select the OPSS schema connect string, and the DBA and schema user names and passwords.
	2. Click **Next**.
OGGMON Schema	1. Enter or select the OGGMON schema connect string, and the DBA and schema user names and passwords.
	2. Click **Next**.
Examine	Click **Next**.
Upgrade Summary	Click **Upgrade**.
Upgrade Progress	Click **Next**.
Upgrade Success	Click **Close**.

The `/ua_timestamp.log,ua_timestamp.out` files are generated at `$oracle_common/upgrade/logs` under the 12g *ORACLE_HOME*.

Upgrading the WebLogic Domain

Next, you must update the existing 12.1.3 WebLogic domain configuration to a 12.2.1 domain. Navigate to *ORACLE_HOME*`/wlserver/common/bin` and enter:

For Linux or UNIX:

```
$ ./reconfig.sh
```

For Windows:

```
C:\ reconfig.bat
```

The Fusion Middleware Reconfiguration Wizard opens, displaying the Select Domain screen.

Navigate the wizard screens as instructed in the following table to upgrade your domain.

Screen	Upgrade Action
Select Domain	Enter the directory for the domain you are upgrading or browse for it, then click **Next**.
Setup Progress	Click **Next**.

Screen	Upgrade Action
Domain Mode and JDK	Enter your JDK directory or browse for it, then click **Next**.
Database Configuration Type	1. Click **Get RCU Configuration** to retrieve your database configuration and ensure that it successfully connects. 2. Click **Next**.
Component Datasources	Click **Next**.
JDBC Test	1. Select all connections. 2. Click **Test Selected Connections**. 3. Click **Next**.
Advanced Configuration	Do not select anything. Click **Next**.
Configuration Summary	Click **Reconfig**.
Reconfiguration Progress	Click **Next**.
Reconfiguration Success	Click **Finish**.

Upgrading the Oracle GoldenGate Monitor Server Configuration

The UA updates the Monitor Server configuration files to the latest 12.2.1 configuration by maintaining your existing set property values. It creates a oggmon.properties file in the *domain_name*/config/monitorserver/cfg/ directory, with an encrypted password entry that is used in JMX communication between Monitor Server and Agent.

Navigate to *ORACLE_HOME*/oracle_common/upgrade/bin and enter:

For Linux or UNIX:

```
$ ./ua
```

For Windows:

```
C:\ ua.bat
```

Navigate the UA screens as instructed in the following table to upgrade your server.

The UA Welcome screen appears.

Screen	Upgrade Action
Welcome	Click **Next**.
Schemas	Ensure **Schemas** is selects and click **Next**.
WebLogic Components	1. Select **WebLogic Component Configurations** and enter the domain directory to be upgraded. 2. Click **Next**.
Component List	Click **Next**.
Prerequisites	1. Select all three prerequisites. 2. Click **Next**.
OGG Monitor Installed Version	1. Select **OGG Monitor 12.1.3**. 2. Click **Next**.

Screen	Upgrade Action
OGGMON Schema	1. Enter or select the OGGMON schema connect string, and the DBA and schema user names and passwords. 2. Click **Next**.
Examine	Click **Next**.
Upgrade Summary	Click **Upgrade**.
Upgrade Progress	Click **Next**.
Upgrade Success	Click **Close**.

This completes the Oracle GoldenGate Monitor Server for Oracle database and domain upgrade process.

2.4 Next Step: Perform Post-Upgrade Tasks

With the upgrade process complete for your database type, you next need to perform certain post-upgrade tasks, which are described in Chapter 4, "Performing Post-Upgrade Tasks".

3

Upgrading for SQL Server

This chapter describes the tasks you perform to upgrade Oracle GoldenGate Monitor with a SQL Server database.

This chapter includes the following sections:

- Section 3.1, "Upgrade Readiness Check"
- Section 3.2, "Schema Upgrade Instructions for SQL Server Database Users"
- Section 3.3, "Upgrading the WebLogic Domain"
- Section 3.4, "Upgrading the Oracle GoldenGate Monitor Server Configuration"
- Section 3.5, "Next Step: Perform Post-Upgrade Tasks"

3.1 Upgrade Readiness Check

Before beginning an upgrade, you must use the UA to perform an upgrade readiness check. The UA runs a read-only check on various database contents including the schema version, required tables, and columns. If the schema version is already at the upgraded or latest version of Oracle GoldenGate Monitor or there are unexpected or missing tables or columns found, the readiness test will fail. If a failure occurs, the UA provides the test details and any exceptions in the UA logs, and the readiness test results are provided in the *ORACLE_HOME*/oracle_common/upgrade/logs/postreadiness.txt file. Like RCU, UA is included in the product installation.

Use one of the following sections to perform your readiness check:

- Section 3.1.1, "Performing an 11g Readiness Check"
- Section 3.1.2, "Performing a 12.1.3 Domain Readiness Check"

3.1.1 Performing an 11g Readiness Check

On your existing 11g Oracle GoldenGate Monitor server, create a database user in the database with same default schema as dbo using the following:

```
use <monitor_11g_database_name>
CREATE LOGIN dbo WITH PASSWORD = <password_of_your_choice>';
create USER <username_of_your_choice> FOR LOGIN dbo  WITH DEFAULT_
SCHEMA = dbo;
grant select to <username_of_your_choice>
```

This user is used only in the readiness check wizard and *not* in the upgrade schema wizard. In the Monitor 11g upgrade schema wizard, use the DBA user *only*.

Navigate to *ORACLE_HOME*/oracle_common/upgrade/bin and enter:

For Linux or UNIX:

```
$ ./ua -readiness
```

For Windows:

```
C:\ ua.bat -readiness
```

Navigate the UA screens as instructed in the following table to upgrade your server.

Screen	Upgrade Action
Welcome	Click **Next**.
Schemas	Ensure **Schemas** is selects and click **Next**.
Available Components	1. Select **Oracle GoldenGate Monitor.** 2. Click **Next**.
OGGMON Schema	1. Enter the Oracle GoldenGate Monitor schema name and password. 2. Click **Next**.
Readiness Summary	Click **Next**.
Readiness Check	Click **Continue**. You can use the View Readiness Report button to view your results.
Readiness Success	Click **Close**.

3.1.2 Performing a 12.1.3 Domain Readiness Check

On your existing Oracle GoldenGate Monitor server, navigate to *ORACLE_HOME*/oracle_common/upgrade/bin and enter:

For Linux or UNIX:

```
$ ./ua -readiness
```

For Windows:

```
C:\ ua.bat -readiness
```

Navigate the UA screens as instructed in the following table to upgrade your server.

Screen	Upgrade Action
Welcome	Click **Next**.
Schemas	Ensure **Schemas** is selects and click **Next**.
Available Components	1. Select **Oracle GoldenGate Monitor.** 2. Click **Next**.
OGGMON Schema (SQLSERVER)	1. Enter the Oracle GoldenGate Monitor schema name and password. 2. Click **Next**.
OGGMON Schema Prefix	1. Enter **SQLSERVER**. 2. Click **Next**.
Readiness Summary	Click **Next**.

Screen	Upgrade Action
Readiness Check	Click **Continue**. You can use the View Readiness Report button to view your results.
Readiness Success	Click **Close**.

3.2 Schema Upgrade Instructions for SQL Server Database Users

Upgrading Oracle GoldenGate Monitor Server for SQL Server databases is a two-stage process:

1. Update the SQL Server Database by Running RCU

2. Upgrade the Database by Running UA

Oracle GoldenGate Monitor Release 10a supports SQL Server versions 2008 and 2012. See "Install the Database Software" in *Installing and Configuring Oracle GoldenGate Monitor Server*.

3.2.1 Update the SQL Server Database by Running RCU

Since Oracle GoldenGate Monitor Server is released with Weblogic Server 12*c* (12.2.1) with JRF and to comply with Fusion Middleware standards and requirements, you must upgrade the existing Oracle GoldenGate Monitor by adding STB schemas to the SQL Server database.

Before you begin, do the following:

- set:

  ```
  ISOLATION LEVEL,ALTER DATABASE $(DATABASE_NAME) SET READ_COMMITTED_SNAPSHOT ON
  ```

- Ensure the database is case-sensitive:

  ```
  DECLARE @collate sysname
     select @collate = convert(sysname, serverproperty('Collation'))
  IF ( charindex(N'_CI', @collate) > 0 )
  BEGIN
     select @collate = replace(@collate, N'_CI', N'_CS')
     exec ('ALTER database $(DATABASE_NAME) COLLATE ' + @collate)
  END
  ```

To add these dependent schemas, use RCU, which is included in the product installation. To launch RCU, navigate to *ORACLE_HOME*/oracle_common/bin and enter:

```
$ ./rcu
```

RCU opens, displaying the Welcome screen.

Navigate the RCU screens as instructed in the following table to update the database. If you want further information on any screen, click its name in the left-hand column.

Screen	Upgrade Action
Welcome	Click **Next**.
Create Repository	1. Select **System Load and Product Load**. 2. Click **Next**.
Database Connection Details	1. Enter the Oracle GoldenGate Monitor database details. 2. Click **Next**.

Screen	Upgrade Action

Select Components	1. Under the AS Common Services node, select the following schemata:
	
	   ■ **Audit Services**
	
	   ■ **Audit Services Append**
	
	   ■ **Audit Services Viewer**
	
	   ■ **Oracle Platform Security Services**
	
	Note: Do not select the Monitor Server schema in this step.
	
	2. Click **Next**.
	
	A progress window appears, checking off each schema as its prerequisites ar e met.
	
	3. Click **OK**.

Schema Passwords	1. Enter the necessary password, if it's not already there, and confirm it. 2. Click **Next**.
Summary	Review the schema information and click **Create**.
Creation Summary	Click **Close**.

3.2.2 Upgrade the Database by Running UA

With the repository created, next run the Upgrade Assistant to upgrade the database to version 12.2.1. Navigate to *ORACLE_HOME*/oracle_common/upgrade/bin and enter:

For Linux or UNIX:

```
$ ./ua
```

For Windows:

```
C:\ ua.bat
```

The UA Welcome screen appears.

Navigate the UA screens as instructed in the following table to upgrade your server. If you want further information on any screen, click its name in the left-hand column.

Screen	Upgrade Action
Welcome	Click **Next**.
Schemas	Ensure Schemas is selects and click **Next**.
Available Components	1. Select **Oracle GoldenGate Monitor.** 2. Click **Next**.
Prerequisites	1. Select all three prerequisites. 2. Click **Next**.
OGGMON Schema	1. Ensure that the proper information is supplied. 2. Click **Next**.
OGGMON Schema Prefix	1. Enter the same schema prefix you used when creating the STB schema in RCU. 2. Click **Next**.

Screen	Upgrade Action
Examine	Click **Next**.
Upgrade Summary	Click **Upgrade**.
Upgrade Progress	Click **Next**.
Upgrade Success	Click **Close**.

This completes the Oracle GoldenGate Monitor Server for SQL Server databases upgrade process.

3.3 Upgrading the WebLogic Domain

Next, you must create a new domain with an 11g upgrade and with a 12c upgrad you update the existing 12.1.3 WebLogic domain configuration to a 12.2.1 domain. Navigate to *ORACLE_HOME*/wlserver/common/bin and enter:

For Linux or UNIX:

```
$ ./config.sh
```

For Windows:

```
C:\ config.bat
```

The Configuration Wizard starts and the Configuration Type screen appears.

To create the domain, navigate the Configuration Wizard screens providing the necessary information as described on the following table and providing the details from your previous domain (Tomcat for 11g and WebLogic domain for 12c):

Screen	Configuration Action
Create Domain	Ensure Create a new domain is selected then: ■ In Domain location, enter the absolute path outside of *ORACLE_HOME*.; for example: /scratch/*my_user*/oggmon1221_domain ■ Click **Next**.
Templates	1. Select **Oracle GoldenGate Monitor Server Domain-12.2.1 (oggmon)**. Additional packages are automatically selected. 2. Click **Next**.
Administrative Account	1. Enter a Name and Password (and confirm the password). These are your WebLogic Server console log-in credentials. 2. Click **Next**.
Domain Mode and JDK	1. In Domain Mode, select **Production**. 2. In JDK, select your preferred JDK; for example: Oracle HotSpot 1.8.0_40-ea /usr/java/jdk1.8.0_40 3. Click **Next**.

Screen	Configuration Action
Database Configuration Type	1. Ensure RCU data radio button is selected.
	2. Enter the database connection information.
	3. Enter the Schema owner, which is the prefix you specified when creating your repository appended with _STB; for example, DEV_STB.
	4. Enter the Password.
	5. Click **Get RCU Configuration**.
	6. Click **Next**.
JDBC Component Schema	Verify the schema information and click **Next**.
JDBC Component Schema Test	Verify the schema information and click **Next**.
Credentials	1. For each Key Name, enter a Username and Password.
	2. Click **Next**.
Advanced Configuration	1. Select **Administrative Server** and **Managed Serves, Cluster, and Coherence**.
	2. Click **Next**.
Administration Server	By default, the server name is AdminServer and the port is 7001, although you can always change default values. For example, you can change the server name AdminServer to OGGMONAdminServer.
	If port 7001 is already in use, replace it with an unused port number.
	Make selections as necessary and click **Next**.
Managed Servers	The managed server name is already populated with the default, *MONITORSERVER_server1*, and the port number with 7003. You can change these values, if desired. Also, if port 7003 is already in use, replace it with an unused port number.
	Either accept the defaults of update the data and click **Next**.
Clusters	Click **Next**.
Coherence Cluster	Click **Next**.
Machines	Click **Next**.
Configuration Summary	Review the configuration details and click **Create**.
Configuration Progress	When configuration creation is complete, click **Next**.
Configuration Success	1. Make note of the Administration Server URL for MonitorServer administration.
	2. Click **Finish**.

3.4 Upgrading the Oracle GoldenGate Monitor Server Configuration

The UA updates the Monitor Server configuration files to the latest 12.2.1 configuration by maintaining your existing set property values. It creates a oggmon.properties file in the *domain_name*/config/monitorserver/cfg/ directory, with an encrypted password entry that is used in JMX communication between Monitor Server and Agent.

Navigate to *ORACLE_HOME*/oracle_common/upgrade/bin and enter:

For Linux or UNIX:

```
$ ./ua
```

For Windows:

```
C:\ ua.bat
```

Navigate the UA screens as instructed in the following table to upgrade your server.

The UA Welcome screen appears.

Screen	Upgrade Action
Welcome	Click **Next**.
Schemas	Ensure **Schemas** is selects and click **Next**.
WebLogic Components	1. Select **WebLogic Component Configurations** and enter the domain directory to be upgraded. 2. Click **Next**.
Component List	Click **Next**.
Prerequisites	1. Select all three prerequisites. 2. Click **Next**.
OGG Monitor Installed Version	1. Select **OGG Monitor 11g** or **OGG Monitor 12.1.3**. 2. Click **Next**.
OGGMON Schema	1. Enter or select the OGGMON schema connect string, and the DBA and schema user names and passwords. 2. Click **Next**.
Examine	Click **Next**.
Upgrade Summary	Click **Upgrade**.
Upgrade Progress	Click **Next**.
Upgrade Success	Click **Close**.

This completes the Oracle GoldenGate Monitor Server for Oracle database and domain upgrade process.

3.5 Next Step: Perform Post-Upgrade Tasks

With the upgrade process complete for your database type, you next need to perform certain post-upgrade tasks, which are described in Chapter 4, "Performing Post-Upgrade Tasks".

4

Performing Post-Upgrade Tasks

This chapter describes the tasks required once you have updated Oracle GoldenGate Monitor to the 12*c* (12.2.1) release.

This chapter contains the following sections:

- Section 4.1, "Create WebLogic Domain for Monitor Server"
- Section 4.2, "Create the Oracle GoldenGate Monitor Agent Instance 12c (12.2.1)"
- Section 4.3, "Starting the Oracle GoldenGate Monitor Server"

Note: After upgrading to Oracle GoldenGate Monitor 12*c* (12.2.1), Oracle GoldenGate Monitor 11*g* users cannot immediately log in to it. You must create users and assign privileges by using the Oracle WebLogic Administration Console. For more information, see "Managing Users from the WebLogic Administration Console" in *Installing and Configuring Oracle GoldenGate Monitor Server*.

4.1 Create WebLogic Domain for Monitor Server

With the existing Oracle GoldenGate Monitor Server database successfully upgraded from 11g (11.x) to 12*c* (12.2.1), you need to create an expanded WebLogic domain for the server implementation that runs with the upgraded schema. *You must use the upgraded Monitor schema during this process*. Follow the "Creating the WebLogic Server Domain" procedure described in *Installing and Configuring Oracle GoldenGate Monitor Server*:

4.2 Create the Oracle GoldenGate Monitor Agent Instance 12*c* (12.2.1)

After running the upgrade configuration scripts described in the previous chapters, use the following procedure to create an Oracle GoldenGate Monitor Agent instance:

1. Stop the Oracle GoldenGate Monitor Agent instance that is pointing to the Oracle GoldenGate Monitor 11g or 12*c* (12.1.3) server.

2. Create a new Oracle GoldenGate Monitor Agent 12*c* (12.2.1) instance by following the instance set up instructions in *Installing and Configuring Oracle GoldenGate Monitor Agent*.

> **Note:** If you are upgrading from 11g, you must create both a 12*c* (12.2.1) Monitor Agent and Monitor Agent instance. If you are upgrading from 12*c*, you only need to create a 12*c* (12.2.1) Monitor Agent instance because the Agent already exists.

3. Manually copy the `oggmon.properties` file from the *MONITOR_SERVER_DOMAIN*`/config/monitorserver/cfg` directory into the *MONITOR_AGENT_PRODUCT_HOME*`/cfg_templates` directory.

4. Go to the *MONITOR_AGENT_PRODUCT_HOME* directory and run the `upgradeToMonitorAgent1221` utility.

   On Linux:

   ```
   $ ./upgradeToMonitorAgent1221.sh
   ```

   On Windows:

   ```
   $ upgradeToMonitorAgent1221.bat
   ```

   The system responds with:

   Please enter absolute path of Oracle GoldenGate home directory:

5. Enter the absolute path of your Oracle GoldenGate home directory.

   The system responds with:

   Please enter absolute path of Monitor Agent 12.1.3 Instance:

6. Enter the absolute path of your Monitor Agent 12.1.3 Instance.

   > **Note:** The Monitor Agent 12.1.3 Instance directory should be the directory path to where Monitor Agent 12.1.3 Instance is installed.

   The system responds with:

   Please enter unique name to replace timestamp in startMonitorAgent script:

7. The `startMonitorAgent` script suffix is the timestamp by default. Enter a unique name to override the timestamp suffix or press Enter to continue.

   The script will continue with the upgrade to completion.

8. Remove existing Oracle GoldenGate JAgent (JAGENT) software that was bundled with Oracle GoldenGate Software by doing the following:

   a. Delete *OGG_HOME*`/cfg folder`

   b. Delete *OGG_HOME*`/dirjar folder`

   c. Delete *OGG_HOME*`/pw_agent_util.*` files

   d. Delete *OGG_HOME*`/jagent.*` files

9. Start the Oracle GoldenGate Monitor Agent from Oracle GoldenGate Core GGSCI console by entering `start jagent`.

4.3 Starting the Oracle GoldenGate Monitor Server

Finally, start the Oracle GoldenGate Monitor Server.

Expanded domains are used for Oracle databases. To start Oracle GoldenGate Monitor Server running with this type of database, do the following:

1. Navigate to *MONITORSERVER_GOLDENGATE_DOMAIN* and run the following scripts to start the Weblogic Administration Server as described in "Start the WebLogic Administration Server" in *Installing and Configuring Oracle GoldenGate Monitor Server*.

2. Navigate to *MONITORSERVER_GOLDENGATE_DOMAIN/bin*, and start the Weblogic 12*c* (12.2.1) Managed Server, as described in "Start the WebLogic Managed Server" in *Installing and Configuring Oracle GoldenGate Monitor Server*.

3. Run this script with the arguments noted:

   ```
   $ ./startManagedWebLogic.sh MONITOR_server1 http://<hostname>:7001
   ```

4. Open the WebLogic Administration Console and, following the instructions in "Managing Monitor Server Users from the WebLogic Administration Console" in *Installing and Configuring Oracle GoldenGate Monitor Server*, create a Oracle GoldenGate Monitor user.

5. Once you have completed the preceding steps, log in to Oracle GoldenGate Monitor with the username and password created in the Weblogic Server and verify system functionality.