

Upgrading Oracle GoldenGate to 19c

by Ahmed Baraka

Objectives

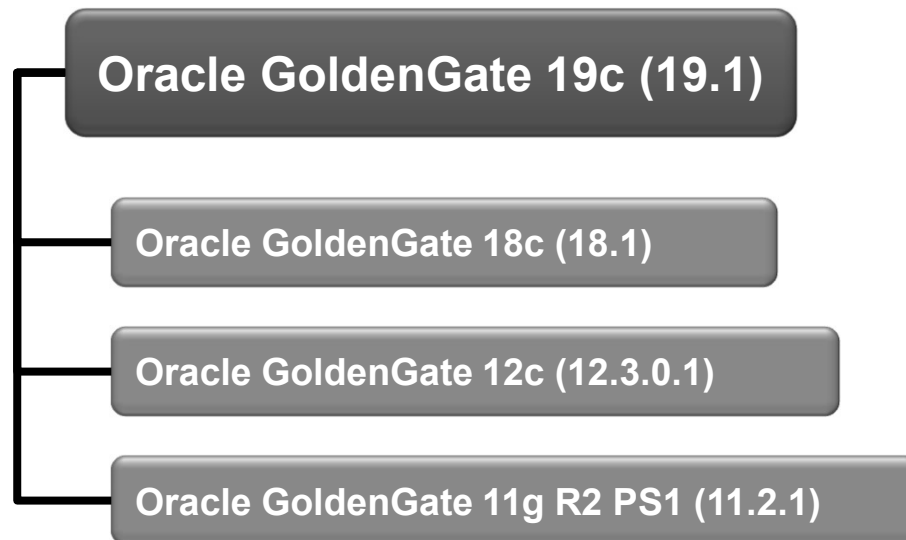
By the end of this lecture, you should be able to:



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- List the recent Oracle GoldenGate releases
- Describe and implement the procedure of upgrading Oracle GoldenGate from 12c to 19c
- Decide on which trail file format release should be used and how to use it

Oracle GoldenGate Releases



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About New Release Notes Document

- It contains the following:
 - New process behaviors
 - Changes on the parameters
 - Changes on the database might be required



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About Upgrading Oracle GoldenGate Classic

- Upgrade reference: Oracle Fusion Middleware Upgrading Oracle GoldenGate, 19c (19.1.0)
 - Considerations if using charset conversion
 - Considerations if using quoted object names
 - Considerations if upgrading a configuration that includes DDL support
- You may only upgrade the source or target

Obtaining the Oracle GoldenGate Distribution

- Go to edelivery: edelivery.oracle.com
- Find the Oracle GoldenGate 19c (19.1.0) release and download the ZIP file
- Oracle GoldenGate 19.1 for Oracle on Linux x86-64: V983658-01.zip



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Overview of Upgrading Oracle GoldenGate Classic for Oracle Database from 12c to 19c

1. Stop user DML and DDL operations (optional)
2. Stop the processes (properly and in correct order)
3. Take backup of Oracle GoldenGate homes
4. Upgrade the Oracle GoldenGate homes
5. If DDL support is active, take required steps
6. Start the processes (decide on the trail file release format)
7. Allow the DML and DDL to proceed



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Stopping GoldenGate Processes for Upgrade

- On the source system:

```
GGSCI> SEND EXTRACT esrv1 LOGEND  
GGSCI> STOP EXTRACT esrv1  
GGSCI> STOP EXTRACT psrv1
```



- On the target system:

```
# the status should be "At EOF"  
GGSCI> SEND REPLICAT rsrv2 STATUS  
GGSCI> STOP REPLICAT rsrv2
```

- Stop the Manager processes in the source and target systems

Upgrading GoldenGate Software Homes

Oracle GoldenGate 19.1.0.0.4 - Install Wizard - Step 2 of 5

Specify Installation Details

Installation Option
Installation Details
Summary
Install Product
Finish

Specify a location to install Oracle GoldenGate. If installing on a cluster, it is recommended to install Oracle GoldenGate binaries on local storage on each node in the cluster. Optionally, specify the location of the Oracle Database and a free port to automatically start the Oracle GoldenGate Manager after installation.

Software Location : /u01/app/oracle/product/ogg

☐ Start Manager

Database Location : /u01/app/oracle/product/12.1.0/db_1

Manager Port : 7809

SQL> @ \$GG_HOME/utlg.sql

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Determining Trail File Format Release

- In 19c, if processes are started, by default they use the same format as the existing trail
- To use the new release format, **ALTER** the extract using **ETROLLOVER** option before starting it
- If you are **not** upgrading the target, you must keep the existing format
- To check the format release number of a trail file, open it with the **logdump** utility then issue the **env** command

Starting GoldenGate Processes After the Upgrade (Using the New Release Trail File Format)

- On the source system:

```
ALTER EXTRACT esrv1, ETROLLOVER  
START esrv1  
ALTER EXTRACT psrv1, EXTSEQNO <seq_no>, EXTRBA 0  
START psrv1
```



- On the target system:

```
ALTER REPLICAT rsrv2, EXTSEQNO <seq_no>, EXTRBA 0  
START REPLICAT rsrv2
```

Starting GoldenGate Processes After the Upgrade (Using the Existing Release Trail File Format)

- On the source system:

```
START esrv1  
START psrv1
```



- On the target system:

```
ALTER REPLICAT rsrv2, EXTSEQNO <seq_no>, EXTRBA 0  
START REPLICAT rsrv2
```

Summary

In this lecture, you should have learnt how to perform the following:

- List the recent Oracle GoldenGate releases
- Describe and implement the procedure of upgrading Oracle GoldenGate from 12c to 19c
- Decide on which trail file format release should be used and how to use it