

Troubleshooting Oracle GoldenGate

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Introduction to Oracle Data Guard

In this lecture, we are going to talk about the basic concepts of Oracle Data Guard

Objectives

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

- Specify the Oracle GoldenGate troubleshooting tools
- Generate a general health checkup report on an Oracle GoldenGate configuration
- Recognize some troubleshooting scenarios and understand how to handle them
- Recover from a corrupted trail file



Troubleshooting Tools

- OGG Error Log File (ggserr.log)

```
GGSCI> View GGSEVT
```

- Report file

```
GGSCI> View Report <group name> | Mgr
```

- Discard file

```
GGSCI> View Report ./dirrpt/ehrl.dsc
```

- LOGDUMP utility



Using SHOWSYNTAX Parameter

- View each Replicat SQL statement before it is applied

```
SHOWSYNTAX [ APPLY | NOAPPLY ]  
           [ INCLUDELOB [ max bytes | ALL ] ]
```

- Replicat must be started from OS command shell:

```
replicat paramfile /app/ggs/dirprm/ehr1.prm
```

- Work with it on a testing environment
- Use it with guidance from Oracle support



Health Checkup Script

- Can be downloaded from Document ID 1448324.1
- A different script for each supported Oracle database version
- The output file is a HTML organized file



Common Process Issues: abending status

- The symptom: one process is abending
- Common root causes:
 - GoldenGate issue
 - Database issue or failure
 - Hardware or operating system issue
 - Network issue
 - User error
 - Software Bugs



Common Extract Issues: Example 1

- **Error reported:**

```
GG5 ERROR 501 GoldenGate Capture for Oracle,  
ehr1.prm: Extract read, error 13 (Permission denied)  
opening redo log ...
```

- **Root cause:** OGG user does not have access privilege on the redo log files.
- **Remedy action:** grant read access on the archive redo log files to the OGG user



Common Extract Issues: Example 2

- **Error reported:**

```
GG5 ERROR 103 Oracle GoldenGate Collector: Unable to  
write to file "..." (error28, No space left on device)
```

- **Root cause:** no free disk space.
- **Remedy action:** delete old unneeded trail files, use the PURGEOLDEXTRACTS parameter, arrange to extend the disk space



Common Extract Issues: Example 3

- **Error reported:**

```
ERROR 112 There is a problem in network  
communication, a .. Lock currently held by  
process id (PID) 9257217).
```

- **Root cause:** remote file locked because of a network issue
- **Remedy action:** wait till the lock is releases, kill the locking process and start again



Common Replicat Issues: Example 1

- **Error reported:**

```
Extract read, Checkpoint table ... does not  
exist. Please create the table or recreate the RHR1  
group using the correct table.
```

- **Root cause:** checkpoint table is missing
- **Remedy action:** recreate the checkpoint table and synch it with the checkpoint file:

```
convchk RHR1 OGG.CHECKPOINT_TAB
```



Trail Files Issues: Corruption

- Following message usually means corrupted trail file:

```
ERROR OGG-01028 Incompatible record (123) in
./dirdat/ehr1000012, rba 1234 (getting header)
```

- To verify, in LOGDUMP:

```
Logdump>open /app/ogg/dirdat/ehr1000012
Logdump>count
Bad record found at (RBA 1234, format 5.50 Unknown
TokenID 12)
```



- In OGG 12.2, restart the Data Pump

Summary

In this lecture, you should have learnt the following:

- Specify the Oracle GoldenGate troubleshooting tools
- Generate a general health checkup report on an Oracle GoldenGate configuration
- Recognize some troubleshooting scenarios and understand how to handle them
- Recover from a corrupted trail file

