

Configuring Change Capture

by Ahmed Baraka

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:

- Perform the procedure to create a classic Extract process
- Add a local and remote trail files
- Start and stop an Extract process group
- Delete an Extract process group



Configuring Oracle GoldenGate Roadmap

1. Prepare the environment
2. Configure Initial Load
3. Configure the Change Synchronization:
 - a) Configure the Extract (Change Capture)
 - b) Configure the Replicate (Delivery)



About the Extract Process

- Reads committed transactions from database transaction log file or archive log files
- An additional Extract can be configured, called a Data Pump, to send the data from local trails to remote systems
- Data Pump process:
 - sends the data to target system(s)
 - can manipulate the data before sending
 - can be configured to multiple systems



Setting Up Change Capture (Extract)

1. Edit Extract parameters
2. Add the Extract process
3. Add a local (primary Extract) and remote trail (Data Pump)
4. Start the Extract processes



Edit Extract Parameter File

- To edit a parameter:

```
Edit Params <group name>
```

- Configure the following parameters:

```
Extract EHR1
SETENV (ORACLE_SID = 'ORADB')
ExtTrail ./dirdat/es
UserID ogguser@mysid, Password mypasswd
LOGALLSUPCOLS
Table HR.*;
Table SALES.INVENTORY;
```



Edit Data Pump Parameters

- Configure the following parameters:

```
EXTRACT PHR1
RMTHOST srv2, MGRPORT 7809, TCPBUFSIZE 1048576,
  TCPFLUSHBYTES 1048576
RMTTRAIL /u01/app/ogg/dirdat/rt
PASSTHRU
Table HR.*;
Table SALES.INVENTORY;
```



Ahmed Baraka
Oracle Database Administrator

Protecting Database User Password

- Credential Store to maintain encrypted database passwords and user IDs and associate them with an alias
- Encrypt the password



Add an Extract process

```
ADD EXTRACT <group_name>, {TRANLOG | EXTTRAILSOURCE  
trail_name}, BEGIN time [option[, ...]]
```

```
GGSCI> DBLogin UserID myuser, Password mypasswd  
GGSCI> Add Extract EHR1, TranLog, Begin Now  
GGSCI> Add Extract EFI1, TranLog, Begin 2017-01-01 08:00  
GGSCI> Add Extract PHR1, ExtTrailSource /ggs/dirdat/es
```



Ahmed Baraka
Oracle Database Administrator

Adding a Local and Remote Trail

```
ADD EXTTRAIL trail_name, EXTRACT group_name  
[, MEGABYTES n]
```

```
ADD RMTTRAIL trail_name, EXTRACT group_name  
[, MEGABYTES n]
```

- Add a local trail for the Extract process:

```
Add ExtTrail ./dirdat/e, Extract es, Megabytes 10
```

- Add a remote trail for the Data Pump process:

```
Add RmtTrail ./dirdat/d, Extract rt, Megabytes 50
```

Starting the Extract

- To start an Extract:

```
Start Extract <group_name>
```

- To obtain information about a process status:

```
Info Extract <group_name>  
Info All
```



Stopping the Extract

- To start an Extract:

```
Stop Extract <group_name>
```



Deleting the Extract

- To Delete an Extract Group:

```
# login to the database:
DBLOGIN {USERID user, PASSWORD password}

# Stop the Extract process:
STOP EXTRACT <group_name>

# delete the Extract:
DELETE EXTRACT <group_name>

# for an Oracle database and an integrated Extract:
UNREGISTER EXTRACT group_name,database_name
```

Summary

In this lecture, you should have learnt how to:

- Perform the procedure to create a classic Extract process
- Add a local and remote trail files
- Start and stop an Extract process group
- Delete an Extract process group

