

Postgres for Oracle DBAs

Comparison study (With Demos)

Logical Backups - Full backup of a database

ORACLE

```
[oracle@localhost Desktop]$ expdp directory=testdmp_dir dumpfile=fullbkp.dmp logfile=fullbkp.log full=y
```

```
Export: Release 19.0.0.0.0 - Production on Fri Feb 17 01:44:34 2023  
Version 19.3.0.0.0
```



```
pg_dump -d employee -U postgres -p 5432 -f emp_backup.sql
```

Logical backups - Backing up a list of tables

ORACLE

```
[oracle@localhost Desktop]$ expdp directory=testdmp_dir tables=HR,EMPLOYEES,HR.JOBS dumpfile=tablebkpl.dmp logfile=tablebkpl.log
```

```
Export: Release 19.0.0.0.0 - Production on Fri Feb 17 01:51:11 2023  
Version 19.3.0.0.0
```



```
pg_dump -U postgres -t <<tablename>> <<dbname>> -f <<outputfile.sql>>  
pg_dump -U postgres -t emptest employee -f empsingletabletest.sql
```

Logical backups - Backing up a Schema

ORACLE

```
[oracle@localhost Desktop]$ expdp directory=testdmp_dir schemas=HR dumpfile=schmbkp1.dmp logfile=schmbkp1.log  
Export: Release 19.0.0.0.0 - Production on Sat Feb 18 23:18:32 2023  
Version 19.3.0.0.0
```



You can use `-n` option
`pg_dump -U postgres employee -n <<schemaname>> -f empsingletableexclude.sql`

Logical backups - DDL only backup (METADATA)



```
[oracle@localhost export]$ expdp directory=testdmp_dir tables=HR.EMPLOYEES,HR.JOBS dumpfile=tablemetadata.dmp  
ogfile=tablekbpl.log CONTENT=metadata_only
```

```
Export: Release 19.0.0.0.0 - Production on Sun Feb 19 02:44:06 2023  
Version 19.3.0.0.0
```

```
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```



```
You can use --schema-only option  
pg_dump -U postgres -t emptest employee --schema-only -f empsingletabletest.sql
```

Logical backups - Backup parallelism



```
[oracle@localhost export]]$ expdp directory=testdmp_dir tables=HR.EMPLOYEES,HR.JOBS dumpfile=tablebkp1_%U.dmp  
logfile=tablebkp1.log parallel=4
```

```
Export: Release 19.0.0.0.0 - Production on Sat Feb 18 23:51:42 2023  
Version 19.3.0.0.0
```



```
pg_dump -j 8 -Fd -f /tmp/bkpemp -d employee
```

Logical backups - Full Db restore

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```
impdp full=Y DIRECTORY=data_pump_dir DUMPFILE=fullbkp.dmp LOGFILE=fullbkp_f.log
```



```
pg_restore -d employee emp.pgdump
```

Logical backups - Single table restore

ORACLE

```
impdp DIRECTORY=data_pump_dir DUMPFILE=fullbkp.dmp TABLES=JOBS LOGFILE=tabrestor_f.log
```



```
pg_restore -d employee --table=emptest empsingle.pgdump
```

Logical backups - Set of tables

ORACLE

```
impdp DIRECTORY=data_pump_dir DUMPFILE=fullbkp.dmp TABLES=JOBS,EMPLOYEES LOGFILE=
tabrestor_f.log
```



```
pg_restore -d postgres --table=emptest --table=department postgresingle.pgdump
```

Logical backups - Restore data only

ORACLE

```
impdp hr CONTENT=DATA_ONLY DIRECTORY=data_pump_dir DUMPFILE=fullbkp.dmp TABLES=JOBS  
NOLOGFILE=YES
```



```
pg_restore -d employee --table=emptest --data-only empsingle.pgdump
```

Logical backups - Replace existing data

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```
impdp directory=data_pump_dir dumpfile=fullbkp.dmp table_exists_action=replace  
TABLES=JOBS NOLOGFILE=YES
```



```
pg_restore -d postgres --table=emptest --clean postgresingle.pgdump
```

Logical backups - Parallel Restore

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```
impdp schemas=HR directory=TEST_DIR parallel=4 dumpfile=tablebkp1_%U.dmp logfile=
impdpparatest.log
```



```
pg_restore -U <username> -d postgres -Fd -j <NUM> -C <dump directory>
```

Boolean datatype



In Postgres you can use
BOOLEAN datatype for
your columns in table



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In Oracle there is no
BOOLEAN datatype

Enable archive mode



```
ALTER SYSTEM SET  
archive_mode to 'ON';
```

```
ALTER SYSTEM SET  
archive_command TO 'cp  
%p /bkp/postgres/back-  
up/archivefiles/archive%f';
```

– Restart to enable
pg_ctl restart

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```
alter system set  
log_archive_dest_1='loca-  
tion=/u01/sampdb/arch';
```

– Restart to enable
Shut immediate;
Startup mount;
alter database
archivelog;
alter database open;

Login as DBA



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Sqlplus / as sysdba



Psql -U adminusr -d database

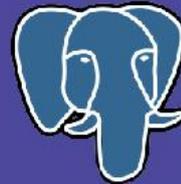
Currently connected Database		
	<pre>\conninfo Select current_data- base();</pre>	<pre>select name from V\$database;</pre>

Currently connected user



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Show user ;



\conninfo

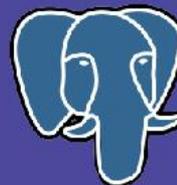
Select current_user ;

Oracle Flashback recovery area



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To recover deleted data



There is no equivalent feature

Exit from sqlplus



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EXIT/QUIT



\q

List all schemas



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```
\dn
```

```
select username from  
dba_users where  
default_tablespace not  
in ('SYSTEM','SYSAUX');
```

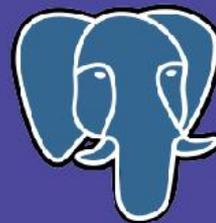
List all tables		
	<code>\dt</code>	<pre>SELECT table_name FROM dba_tables;</pre>

delete statement - from clause is required in postgres



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```
delete emp where id = 5 ;
```



```
delete from emp where id = 5 ;
```