Oracle RMAN Backups

Recovery Manager (RMAN)

All Live Oracle databases are backed up using RMAN.

They are backed up to the Fast Recovery Area, which must be configured for all new live databases

```
db_recovery_file_dest /backup/fast_recovery_area db_recovery_file_dest_size {Size to be determined}
```

NOTE: The Fast Recovery Area will contain Archive/Redo logs, RMAN Backups and at least 1 copy of the control file. It will need to be sized by the DBA; however it is a dynamic parameter and can be changed with no downtime.

The backups are scheduled via Cloud Control (https://sheffield.dubetech.co.uk:7803/em)
You can view the jobs by selecting Enterprise - Job - Library
The currently scheduled jobs can be seen via Enterprise - Job - Activity
All jobs contain a RMAN script which will be similar to below ...

```
run {
    backup device type disk database;
    backup device type disk archivelog all not backed up;
}
allocate channel for maintenance type disk;
delete noprompt archivelog all completed before 'sysdate -2';
delete noprompt obsolete device type disk;
release channel:
```

The scheduled jobs will backup spfile, control files, data files and archive logs. They will then delete all backup sets and archive logs that are obsolete.

The backup files are then themselves backed up to tape by IT Infrastructure.

Recovery Catalog

Hostname: SHEFFIELD
Database: RMAN11G
Schema: RMAN

All backup jobs will connect to the recovery catalog.

This enables metadata information regarding the backups to be stored in a database schema as well as the control file.

Datapump Exports

Datapump export jobs are scheduled for all Oracle database (live and test) using crontab

An example crontab entry is ...

```
0 21 * * * /home/oracle/datapump/DUBELIVE_export.sh > /home/oracle/logs/DUBELIVE_export.log 2>&1
```

The shell script looks like this (Using DUBELIVE on leopard as an example) ...

```
export ORACLE_BASE=/u01/app/oracle
export ORACLE_HOME=/u01/app/oracle/product/11.2.0/dbhome_1
export PATH=$ORACLE_HOME/bin:$PATH
export LD_LIBRARY_PATH=$ORACLE_HOME/lib
export ORACLE_SID=DUBELIVE

export MYDATE=`date +%Y%m%d%H%M`

expdp system/<password> dumpfile=expdp_DUBELIVE_full_$MYDATE.dmp
logfile=expdp_DUBELIVE_full_$MYDATE.log parfile=/home/oracle/datapump/export.par

gzip /backup/exports/expdp_DUBELIVE_full_$MYDATE.dmp
find /backup/exports/ -mtime +2 -exec rm -f {} \;
```

An example datapump parameter file is ...

```
FLASHBACK_TIME="TO_TIMESTAMP(TO_CHAR(SYSDATE,'DD-MM-YYYY HH24:MI:SS'), 'DD-MM-YYYY HH24:MI:SS')"

EXCLUDE=SCHEMA:"IN ('SYS', 'SYSMAN', 'ANONYMOUS', 'OLAPSYS', 'OUTLN', 'SCOTT', 'TSMSYS', 'SYSTEM', 'ORDDATA', 'APEX_040200', 'FLOWS_FILES', 'APEX_PUBLIC_USER')"

DIRECTORY=DATA_PUMP_DIR

REUSE_DUMPFILES=Y

FULL=Y
```

This will take a full export of the database, excluding any schemas listed in the exclude clause.