**dgmgrl utility**

**dgmgrl - Data Guard Manager (Observer) Utility, in Oracle**

$dgmgrl [-silent | -echo] [username/password[@connect\_identifier] [dgmgrl\_command]]

$dgmgrl  /  
$dgmgrl sys/pwd  
$dgmgrl sys/pwd@oltp  
$dgmgrl sys/test@dgprimary "show database 'prod'"

$dgmgrl -logfile observer.log / "stop observer"  
$dgmgrl -silent sys/test@dgprimary "show configuration verbose"

$dgmgrl  / "show configuration verbose"

**ADD** - Adds a standby database to the broker configuration.

DGMGRL> ADD DATABASE db\_name [AS CONNECT IDENTIFIER IS conn\_identifier] [MAINTAINED AS {PHYSICAL|LOGICAL}];

DGMGRL> ADD DATABASE 'testdb' AS CONNECT IDENTIFIER IS testdb MAINTAINED AS [PHYSICAL](http://satya-dba.blogspot.com/2012/06/physical-standby-databases-oracle.html);  
DGMGRL> ADD DATABASE 'logdb' AS CONNECT IDENTIFIER IS logdb MAINTAINED AS [LOGICAL](http://satya-dba.blogspot.com/2012/06/logical-standby-databases-oracle.html);

DGMGRL> ADD DATABASE 'devdb' AS CONNECT IDENTIFIER IS devdb.foo.com;

**CONNECT** - Connects to an Oracle database instance.

DGMGRL> CONNECT username/password[@connect\_identifier]

DGMGRL> CONNECT /  
DGMGRL> CONNECT sys;

DGMGRL> CONNECT sys@test;

DGMGRL> CONNECT sys/pwd;

DGMGRL> CONNECT sys/pwd@dwh;

DGMGRL> CONNECT /@dwh;  
$dgmgrl connect sys

**CONVERT** - Converts a database from one type to another ([from Oracle 11g](http://satya-dba.blogspot.com/2009/01/whats-new-in-11g.html)).

DGMGRL> CONVERT DATABASE database\_name TO {SNAPSHOT STANDBY|PHYSICAL STANDBY};

DGMGRL> CONVERT DATABASE 'devdb' to [SNAPSHOT STANDBY](http://satya-dba.blogspot.com/2012/06/snapshot-standby-databases-oracle.html);

DGMGRL> CONVERT DATABASE 'devdb' to [PHYSICAL STANDBY](http://satya-dba.blogspot.com/2012/06/physical-standby-databases-oracle.html);

**CREATE** - Creates a broker configuration.

DGMGRL> CREATE CONFIGURATION config\_name AS PRIMARY DATABASE IS db\_name CONNECT IDENTIFIER IS conn\_ident;

DGMGRL> CREATE CONFIGURATION 'dg' AS PRIMARY DATABASE IS 'prod' CONNECT IDENTIFIER IS prod.foo.com;

DGMGRL> CREATE CONFIGURATION 'dg\_test' AS PRIMARY DATABASE IS 'test' CONNECT IDENTIFIER IS test;

**DISABLE** - Disables a configuration, a database, or fast-start failover (FSFO).

DGMGRL> DISABLE CONFIGURATION;

DGMGRL> DISABLE CONFIGURATION;

DGMGRL> DISABLE DATABASE database\_name;

DGMGRL> DISABLE DATABASE 'devdb';

DGMGRL> DISABLE FAST\_START FAILOVER [FORCE | CONDITION condition];

DGMGRL> DISABLE FAST\_START FAILOVER;

DGMGRL> DISABLE FAST\_START FAILOVER FORCE;  
DGMGRL> DISABLE FAST\_START FAILOVER CONDITION '1578';

**EDIT** - Edits a configuration, database, or instance.

DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS {MaxProtection|MaxAvailability|MaxPerformance};

DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS MAXPROTECTION;

DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS MAXAVAILABILITY;

DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS MAXPERFORMANCE;

DGMGRL> EDIT CONFIGURATION SET PROPERTY property\_name = value;

DGMGRL> EDIT CONFIGURATION SET PROPERTY FastStartFailoverThreshold = 45;  
DGMGRL> EDIT CONFIGURATION SET PROPERTY FastStartFailoverAutoReinstate = FALSE;  
DGMGRL> EDIT CONFIGURATION SET PROPERTY FastStartFailoverAutoReinstate = TRUE;  
DGMGRL> EDIT CONFIGURATION SET PROPERTY BYSTANDERSFOLLOWROLECHANGE= 'NONE';

DGMGRL> EDIT DATABASE database\_name SET PROPERTY property\_name = value;

DGMGRL> EDIT DATABASE devdb SET PROPERTY 'LogArchiveFormat'='log\_%t\_%s\_%r\_%d.arc';  
DGMGRL> EDIT DATABASE prodb SET PROPERTY LogXptMode=SYNC;

DGMGRL> EDIT DATABASE prodb SET PROPERTY LogXptMode=ASYNC;  
DGMGRL> EDIT DATABASE prodb SET PROPERTY LogXptMode=ARCH;  
DGMGRL> EDIT DATABASE devdb SET PROPERTY LogShipping=OFF;  
DGMGRL> EDIT DATABASE devdb SET PROPERTY LogShipping=ON;  
DGMGRL> EDIT DATABASE prodb SET PROPERTY LogArchiveTrace=8;  
DGMGRL> EDIT DATABASE prodb SET PROPERTY NetTimeout=60;  
DGMGRL> EDIT DATABASE devdb SET PROPERTY 'ReopenSecs'=300;  
DGMGRL> EDIT DATABASE prodb SET PROPERTY ArchiveLagTarget=1200;  
DGMGRL> EDIT DATABASE prodb SET PROPERTY FastStartFailoverTarget='standby\_name';  
DGMGRL> EDIT DATABASE devdb SET PROPERTY 'StandbyArchiveLocation'='/oradata/archive/';

DGMGRL> EDIT DATABASE devdb SET PROPERTY 'DbFileNameConvert' = '/u01/od01/datafile/, /oradisk/od01/datafile/';

DGMGRL> EDIT DATABASE testdb SET PROPERTY DelayMins='720';  
DGMGRL> EDIT DATABASE prodb SET PROPERTY RedoCompression ='ENABLE'  
DGMGRL> EDIT DATABASE prodb SET PROPERTY RedoCompression ='DISABLE'  
DGMGRL> EDIT DATABASE testdb SET PROPERTY LogArchiveMinSucceedDest =1

DGMGRL> EDIT DATABASE database\_name RENAME TO new database\_name;  
DGMGRL> EDIT DATABASE 'devdbb' RENAME TO 'devdb';

DGMGRL> EDIT DATABASE database\_name SET STATE = state [WITH APPLY INSTANCE = instance\_name];

DGMGRL> EDIT DATABASE devdb SET STATE='READ-ONLY';

DGMGRL> EDIT DATABASE devdb SET STATE='OFFLINE';

DGMGRL> EDIT DATABASE devdb SET STATE='APPLY-OFF';  
DGMGRL> EDIT DATABASE devdb SET STATE='APPLY-ON';

DGMGRL> EDIT DATABASE devdb SET STATE='TRANSPORT-OFF';

DGMGRL> EDIT DATABASE devdb SET STATE='TRANSPORT-ON';

DGMGRL> EDIT DATABASE prodb SET STATE='LOG-TRANSPORT-OFF';  
DGMGRL> EDIT DATABASE devdb SET STATE='ONLINE' WITH APPLY INSTANCE=devdb2;

DGMGRL> EDIT INSTANCE instance\_name [ON DATABASE database\_name] SET AUTO PFILE [={init\_file\_path|OFF}];

DGMGRL> EDIT INSTANCE 'devdb1' ON DATABASE 'devdb' SET AUTO PFILE='initdevdb1.ora';  
  
DGMGRL> EDIT INSTANCE instance\_name [ON DATABASE database\_name] SET PROPERTY property\_name = value;

DGMGRL> EDIT INSTANCE \* ON DATABASE database\_name SET PROPERTY property\_name = value;

DGMGRL> EDIT INSTANCE 'proddb' ON DATABASE 'proddb' SET PROPERTY 'StandbyArchiveLocation'='/oradata/arch/';

**ENABLE** - Enables a configuration, a database, or fast-start failover (FSFO).

DGMGRL> ENABLE CONFIGURATION;

DGMGRL> ENABLE CONFIGURATION;

DGMGRL> ENABLE DATABASE database\_name;

DGMGRL> ENABLE DATABASE 'devdb';

DGMGRL> ENABLE FAST\_START FAILOVER [CONDITION condition];

DGMGRL> ENABLE FAST\_START FAILOVER;

DGMGRL> ENABLE FAST\_START FAILOVER CONDITION '1578';  
DGMGRL> ENABLE FAST\_START FAILOVER CONDITION "Stuck Archiver";  
DGMGRL> ENABLE FAST\_START FAILOVER CONDITION 'Corrupted Controlfile';  
DGMGRL> ENABLE FAST\_START FAILOVER CONDITION 'Corrupted Dictionary';  
DGMGRL> ENABLE FAST\_START FAILOVER CONDITION 'Inaccessible Logfile';

**EXIT** - Exits the program.

DGMGRL> EXIT;

**FAILOVER** - Changes a standby database to be the primary database.

DGMGRL> FAILOVER TO standby\_database\_name [IMMEDIATE]

DGMGRL> FAILOVER TO "testdb";  
DGMGRL> FAILOVER TO "snapdb" IMMEDIATE;

**HELP** - Displays description and syntax for a command.

DGMGRL> HELP [command];

DGMGRL> HELP REINSTATE  
DGMGRL> HELP EDIT

**QUIT** - Exits the program.

DGMGRL> QUIT;

**REINSTATE** - Changes a database marked for reinstatement into a viable standby.

DGMGRL> REINSTATE DATABASE database\_name;

DGMGRL> REINSTATE DATABASE prim1;

**REM** - Comment to be ignored by DGMGRL.

DGMGRL> REM [comment];

**REMOVE** - Removes a configuration, Oracle database, or instance.

DGMGRL> REMOVE CONFIGURATION [PRESERVE DESTINATIONS];

DGMGRL> REMOVE CONFIGURATION;

DGMGRL> REMOVE CONFIGURATION PRESERVE DESTINATIONS;

DGMGRL> REMOVE DATABASE database\_name [PRESERVE DESTINATIONS];

DGMGRL> REMOVE DATABASE devdb;  
DGMGRL> REMOVE DATABASE standby PRESERVE DESTINATIONS;

DGMGRL> REMOVE INSTANCE instance\_name [ON DATABASE database\_name];

DGMGRL> REMOVE INSTANCE inst1 ON DATABASE racdb;

**SHOW** - Displays information about a configuration, database, instance or FSFO.

DGMGRL> SHOW CONFIGURATION [VERBOSE];

DGMGRL> SHOW CONFIGURATION;

DGMGRL> SHOW CONFIGURATION VERBOSE;

DGMGRL> SHOW DATABASE [VERBOSE] db\_name [property\_name];

DGMGRL> SHOW DATABASE 'devdb';

DGMGRL> SHOW DATABASE VERBOSE 'test';

DGMGRL> SHOW DATABASE 'dwhdb' 'StatusReport';

DGMGRL> SHOW DATABASE 'proddb' 'LogXptStatus';

DGMGRL> SHOW DATABASE 'proddb' 'InconsistentProperties';  
DGMGRL> SHOW DATABASE 'proddb' 'InconsistentLogXptProps';  
DGMGRL> SHOW DATABASE 'testdb' 'ArchiveLagTarget';  
DGMGRL> SHOW DATABASE 'testdb' 'LogShipping';  
DGMGRL> SHOW DATABASE 'testdb' 'PreferredApplyInstance';  
DGMGRL> SHOW DATABASE 'proddb' 'StatusReport';  
DGMGRL> SHOW DATABASE 'testdb' 'RecvQEntries';  
DGMGRL> SHOW DATABASE 'proddb' 'SendQEntries';

DGMGRL> SHOW INSTANCE [VERBOSE] instance\_name [property\_name] [ON DATABASE db\_name];

DGMGRL> SHOW INSTANCE inst1;

DGMGRL> SHOW INSTANCE VERBOSE inst3;  
DGMGRL> SHOW INSTANCE testdb 'TopWaitEvents';

DGMGRL> SHOW FAST\_START FAILOVER;  
DGMGRL> SHOW FAST\_START FAILOVER;

**SHUTDOWN** - [Shuts down](http://satya-dba.blogspot.com/2009/01/startupshutdown-options.html) a currently running Oracle instance.

DGMGRL> SHUTDOWN [NORMAL | IMMEDIATE | ABORT];

DGMGRL> SHUTDOWN;  
DGMGRL> SHUTDOWN NORMAL;  
DGMGRL> SHUT IMMEDIATE;  
DGMGRL> SHUT ABORT;

**SQL** - Executes a SQL statement  
DGMGRL> SQL "sql\_statement";

**START** - Starts the fast-start failover(FSFO) observer.

DGMGRL> START OBSERVER [FILE=observer\_configuration\_file];

DGMGRL> START OBSERVER;

**STARTUP** - [Starts](http://satya-dba.blogspot.com/2009/01/startupshutdown-options.html) an Oracle database instance.

DGMGRL> STARTUP [RESTRICT] [FORCE] [PFILE=filespec]  
[NOMOUNT  |  MOUNT | OPEN [READ ONLY|READ WRITE]];

DGMGRL> STARTUP;  
DGMGRL> STARTUP NOMOUNT;  
DGMGRL> STARTUP MOUNT;  
DGMGRL> STARTUP OPEN;

DGMGRL> STARTUP FORCE;  
DGMGRL> STARTUP FORCE RESTRICT NOMOUNT;  
DGMGRL> STARTUP PFILE=initdwh.ora NOMOUNT;

**STOP** - Stops the fast-start failover(FSFO) observer.

DGMGRL> STOP OBSERVER;

**SWITCHOVER** - Switches roles between a primary and standby database.

DGMGRL> SWITCHOVER TO standby\_database\_name;

DGMGRL> SWITCHOVER TO "standby";

**VALIDATE** - command to checks whether the database is ready for a role transition or not.

DGMGRL> VALIDATE DATABASE ...;    -- From [Oracle Database 12c](http://satya-dba.blogspot.in/2012/10/new-features-in-oracle-database-12c.html)

$BDUMP/drc\*.log  
$ORACLE\_HOME/rdbms/log/drc\*.log  
  
alter system set dg\_broker\_start=false;  
alter system set dg\_broker\_start=false sid='\*';  
alter system set dg\_broker\_start=FALSE SCOPE=spfile SID='\*';  
alter system set dg\_broker\_start=true;  
alter system set dg\_broker\_start=true sid='\*';  
alter system set dg\_broker\_start=TRUE SCOPE=spfile SID='\*';  
  
alter system set dg\_broker\_config\_file1='/u01/dg\_broker\_config\_files/dr1TESTP.dat' sid='\*';  
alter system set dg\_broker\_config\_file2='/u01/dg\_broker\_config\_files/dr2TESTP.dat' sid='\*';

|  |  |
| --- | --- |
| **Command** | **Effect** |
| **ADD DATABASE** | Adds a new standby database profile to the existing broker configuration  DGMGRL> ADD DATABASE ‘secondary’ AS CONNECT IDENTIFIER IS secondary MAINTAINED AS PHYSICAL; |
| **CONNECT** | Connects to the specified database using the specified username.  DGMGRL> connect sys/manager@primary Connected. |
| **CREATE CONFIGURATION** | Creates a broker configuration and creates and adds a primary database profile to the configuration.  DGMGRL> CREATE CONFIGURATION ‘sample’ AS PRIMARY DATABASE IS ‘primary’ CONNECT IDENTIFIER IS primary; Configuration “sample” created with primary database “primary” |
| **DISABLE CONFIGURATION** | Disables broker management of a configuration so that the configuration and all of its databases are no longer managed by the broker.  DGMGRL> disable configuration; Disabled. |
| **DISABLE DATABASE** | Disables broker management of the named standby database.  DGMGRL> disable database secondary; Disabled. |
| **EDIT CONFIGURATION** (Protection Mode) | Changes the current protection mode setting for the broker configuration  DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS  MAXPerformance; Succeeded.  DGMGRL> EDIT CONFIGURATION SET PROTECTION MODE AS  MAXPROTECTION; Operation requires shutdown of instance “primary” on database “primary” Shutting down instance “primary”… Database closed. Database dismounted. ORACLE instance shut down. Operation requires startup of instance “primary” on database “primary” Starting instance “primary”… |
| **EDIT DATABASE** (Property) | Changes the value of a property for the named database  DGMGRL> EDIT DATABASE ‘primary’ SET PROPERTY ‘ArchiveLagTarget’=200; Property “ArchiveLagTarget” updated  DGMGRL> EDIT DATABASE ‘primary’ SET PROPERTY ‘StandbyArchiveLocation’='C:\app\pa tilsa\product\11.2.0\dbhome\_1\oradata’; Property “StandbyArchiveLocation” updated |
| **EDIT DATABASE** (Rename) | Changes the name used by the broker to refer to the specified database. This command can only be done when broker management of the database that you are renaming is disabled.  DGMGRL> EDIT DATABASE ‘secondary’ RENAME TO ‘standby’; Error: ORA-16602: database must be disabled to perform this operation Failed.  DGMGRL> disable database secondary; Disabled. DGMGRL> EDIT DATABASE ‘secondary’ RENAME TO ‘standby’; Succeeded. |
| **EDIT DATABASE** (State) | Changes the state of the specified database.The state in which you want the database to be running. The possible states are: ONLINE LOG-TRANSPORT-OFF (primary database only) LOG-APPLY-OFF (standby database only) READ-ONLY (physical standby database only) OFFLINE  DGMGRL> EDIT DATABASE ‘secondary’ SET STATE=**‘READ-ONLY’;** Succeeded. DGMGRL> EDIT DATABASE ‘secondary’ SET STATE=**‘OFFLINE’;** Operation requires shutdown of instance “secondary” on database “secondary” Shutting down instance “secondary”… Database closed. Database dismounted. ORACLE instance shut down. DGMGRL> EDIT DATABASE ‘secondary’ SET STATE=’ONLINE’; Error: **ORA-16525**: the Data Guard broker is not yet available – Make sure Standby Database is started and mounted. DGMGRL> EDIT DATABASE ‘secondary’ SET STATE=’ONLINE’; Succeeded. |
| **EDIT INSTANCE** (AUTO PFILE) | Sets the name of the initialization parameter file for the specified instance.  DGMGRL> EDIT INSTANCE ‘secondary’ ON DATABASE ‘secondary’ SET AUTO PFILE=’initse condary.ora’; Instance “secondary” updated |
| **EDIT INSTANCE**(Property) | Changes the value of a property for the specified instance.  DGMGRL> EDIT instance ‘primary’ on DATABASE ‘primary’ SET PROPERTY ‘StandbyArchi veLocation’='C:\app\patilsa\product\11.2.0\dbhome\_1\oradata’; Property “StandbyArchiveLocation” updated |
| **ENABLE CONFIGURATION** | Enables broker management of the broker configuration and all of its databases.DGMGRL> enable configuration; Enabled. |
| **ENABLE DATABASE** | Enables broker management of the specified database.  DGMGRL> enable database ‘secondary’; Enabled. |
| **EXIT** | Exits the Data Guard command-line interface. |
| **FAILOVER** | Performs a database failover operation in which the standby database, to which the CLI is currently connected, fails over to the role of primary database. |
| **HELP** | Displays online help for the Data Guard command-line interface.  add            Adds a standby database to the broker configuration  connect        Connects to an Oracle database instance  convert        Converts a database from one type to another  create         Creates a broker configuration  disable        Disables a configuration, a database, or fast-start failover  edit           Edits a configuration, database, or instance  enable         Enables a configuration, a database, or fast-start failover  exit           Exits the program  failover       Changes a standby database to be the primary database  help           Displays description and syntax for a command  quit           Exits the program  reinstate      Changes a database marked for reinstatement into a viable standby  rem            Comment to be ignored by DGMGRL  remove         Removes a configuration, database, or instance  show           Displays information about a configuration, database, or instance  shutdown       Shuts down a currently running Oracle database instance  start          Starts the fast-start failover observer  startup        Starts an Oracle database instance  stop           Stops the fast-start failover observer  switchover     Switches roles between a primary and standby database  Use "help <command>" to see syntax for individual commands |
| **QUIT** | Quits the Data Guard command-line interface. |
| **REMOVE CONFIGURATION** | Removes the broker configuration including all of its database profiles from the broker configuration file. |
| **REMOVE DATABASE** | Removes the specified standby database profile from the broker configuration.  DGMGRL> remove database secondary; Removed database “secondary” from the configuration |
| **REMOVE INSTANCE** | Removes knowledge of an instance from an existing database profile in the broker configuration. |
| **SHOW CONFIGURATION** | Displays information about the broker configuration.  DGMGRL> SHOW CONFIGURATION Configuration – sample Protection Mode: MaxPerformance Databases: primary   – Primary database Warning: ORA-16789: standby redo logs not configured secondary – Physical standby database Fast-Start Failover: DISABLED Configuration Status: WARNING |
| **SHOW DATABASE** | Displays information about the specified database.  DGMGRL> show database secondary; Database – secondary Role:            PRIMARY Intended State:  TRANSPORT-ON Instance(s): secondary Database Status: SUCCESS |
| **SHOW INSTANCE** | Displays information about the specified instance.  DGMGRL> show instance primary; Instance ‘primary’ of database ‘primary’ Host Name: sagar-pc Instance Status: SUCCESS  DGMGRL> show instance secondary; Instance ‘secondary’ of database ‘secondary’ Host Name: sagar-pc Instance Status: SUCCESS |
| **SHUTDOWN** | Shuts down a currently running Oracle database.  DGMGRL> connect sys/manager@primary Connected. DGMGRL> shutdown abort; ORACLE instance shut down. |
| **STARTUP** | Starts an Oracle instance with the same options as SQL\*Plus, including mounting and opening a database.  DGMGRL> connect sys/manager@primary Connected. DGMGRL> startup; ORACLE instance started. Database mounted. Database opened. |
| **SWITCHOVER** | Performs a switchover operation in which the current primary database becomes a standby database, and the specified standby database becomes the primary database.  DGMGRL> switchover to secondary; Performing switchover NOW, please wait… New primary database “secondary” is opening… Operation requires shutdown of instance “primary” on database “primary” Shutting down instance “primary”… ORA-01109: database not open Database dismounted. ORACLE instance shut down. Operation requires startup of instance “primary” on database “primary” Starting instance “primary”… Unable to connect to database ORA-12514: TNS:listener does not currently know of service requested in connectdescriptor Failed. (IGNORE TNS error) Warning: You are no longer connected to ORACLE. Please complete the following steps to finish switchover: start up and mount instance “primary” of database “primary” |

The following commands are available:

add            Adds a standby database to the broker configuration  
connect        Connects to an Oracle database instance  
convert        Converts a database from one type to another  
create         Creates a broker configuration  
disable        Disables a configuration, a database, or fast-start failover  
edit           Edits a configuration, database, or instance  
enable         Enables a configuration, a database, or fast-start failover  
exit           Exits the program  
failover       Changes a standby database to be the primary database  
help           Displays description and syntax for a command  
quit           Exits the program  
reinstate      Changes a database marked for reinstatement into a viable standby

rem            Comment to be ignored by DGMGRL  
remove         Removes a configuration, database, or instance  
show           Displays information about a configuration, database, or instance

shutdown       Shuts down a currently running Oracle database instance  
start          Starts the fast-start failover observer  
startup        Starts an Oracle database instance  
stop           Stops the fast-start failover observer  
switchover     Switches roles between a primary and standby database

Use “help <command>” to see syntax for individual commands