

# Oracle Patch Installation and Rollback Guide

## Introduction

This document provides a detailed step-by-step guide on applying and rolling back patches for Oracle Grid Infrastructure and Database homes. It includes prerequisite checks, patch application instructions, and post-installation verification steps.

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## Patch Deployment Procedure

### 1. Preparing the Patch Files

Ensure the patch files are properly configured before proceeding with installation.

```
su - root
```

```
chmod 775 p37257886_190000_Linux-x86-64.zip
```

```
chown grid:oinstall p37257886_190000_Linux-x86-64.zip
```

```
chmod 775 p6880880_190000_Linux-x86-64.zip
```

```
chown grid:oinstall p6880880_190000_Linux-x86-64.zip
```

```
su - grid
```

```
unzip p37257886_190000_Linux-x86-64.zip
```

```
unzip p6880880_190000_Linux-x86-64.zip
```

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### 2. Patch Prerequisites

The following patches should be applied to the corresponding Oracle homes:

- **37260974** - Both Oracle home and Grid home
- **37268031** - Both Oracle home and Grid home
- **37266638** - Only Grid home
- **37461387** - Only Grid home
- **36758186** - Only Grid home

Check for conflicts against the Oracle Home with the following commands:

```
su - grid
```

```
$ORACLE_HOME/OPatch/patch prereq CheckConflictAgainstOHWithDetail -phBaseDir /u01/patch19.26/37257886/37260974
```

```
$ORACLE_HOME/OPatch/patch prereq CheckConflictAgainstOHWithDetail -phBaseDir /u01/patch19.26/37257886/37268031
```

```
$ORACLE_HOME/OPatch/patch prereq CheckConflictAgainstOHWithDetail -phBaseDir /u01/patch19.26/37257886/37266638
```

```
$ORACLE_HOME/OPatch/patch prereq CheckConflictAgainstOHWithDetail -phBaseDir /u01/patch19.26/37257886/37461387
```

```
$ORACLE_HOME/OPatch/patch prereq CheckConflictAgainstOHWithDetail -phBaseDir /u01/patch19.26/37257886/36758186
```

Repeat the process for the **Oracle home**:

```
su - oracle
```

```
$ORACLE_HOME/OPatch/patch prereq CheckConflictAgainstOHWithDetail -phBaseDir /u01/patch19.26/37257886/37260974
```

```
$ORACLE_HOME/OPatch/patch prereq CheckConflictAgainstOHWithDetail -phBaseDir /u01/patch19.26/37257886/37268031
```

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### 3. Running OPatch System Space Check

Verify that there is sufficient space available before proceeding with the patch installation.

## Grid Home

```
su - grid
```

```
vi /tmp/patch_list_gihome.txt
```

```
# Add the following lines to the file:
```

```
/u01/patch19.26/37257886/37260974
```

```
/u01/patch19.26/37257886/37268031
```

```
/u01/patch19.26/37257886/37266638
```

```
/u01/patch19.26/37257886/37461387
```

```
/u01/patch19.26/37257886/36758186
```

```
# Run space check
```

```
$ORACLE_HOME/OPatch/patch prereq CheckSystemSpace -phBaseFile /tmp/patch_list_gihome.txt
```

## Database Home

```
su - oracle
```

```
vi /tmp/patch_list_dbhome.txt
```

```
# Add the following lines to the file:
```

```
/u01/patch19.26/37257886/37260974
```

```
/u01/patch19.26/37257886/37268031
```

```
# Run space check
```

```
$ORACLE_HOME/OPatch/patch prereq CheckSystemSpace -phBaseFile /tmp/patch_list_dbhome.txt
```

---

## 4. Patch Installation Process

### Pre-Patch Validation

```
su - root
```

```
export OPATCH_NO_FUSER=true
```

```
/u01/app/19.3.0/grid/OPatch/patchauto apply /u01/patch19.26/37257886 -analyze
```

```
Run Cluster Verification Utility:
```

```
su - grid
```

```
cluvfy stage -pre patch
```

### Apply the Patches

```
su - grid
```

```
/u01/app/19.3.0/grid/OPatch/patch apply -oh /u01/app/19.3.0/grid -local /u01/patch19.26/37257886/37260974
```

```
/u01/app/19.3.0/grid/OPatch/patch apply -oh /u01/app/19.3.0/grid -local /u01/patch19.26/37257886/37268031
```

```
/u01/app/19.3.0/grid/OPatch/patch apply -oh /u01/app/19.3.0/grid -local /u01/patch19.26/37257886/37266638
```

```
/u01/app/19.3.0/grid/OPatch/patch apply -oh /u01/app/19.3.0/grid -local /u01/patch19.26/37257886/37461387
```

```
/u01/app/19.3.0/grid/OPatch/patch apply -oh /u01/app/19.3.0/grid -local /u01/patch19.26/37257886/36758186
```

Repeat for Database Home:

```
su - oracle
```

```
/u01/app/oracle/product/19.3.0/dbhome_1/OPatch/opatch apply -oh /u01/app/oracle/product/19.3.0/dbhome_1 -local /u01/patch19.26/37257886/37260974
```

```
/u01/app/oracle/product/19.3.0/dbhome_1/OPatch/opatch apply -oh /u01/app/oracle/product/19.3.0/dbhome_1 -local /u01/patch19.26/37257886/37268031
```

## Repeat for patching Node2

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### 5. Post-Patch Steps

```
su - root
```

```
/u01/app/19.3.0/grid/rdbms/install/rootadd_rdbms.sh
```

```
/u01/app/19.3.0/grid/crs/install/rootcrs.sh -postpatch
```

```
su - oracle
```

```
/u01/app/oracle/product/19.3.0/dbhome_1/bin/srvctl start home -o /u01/app/oracle/product/19.3.0/dbhome_1 -s status.log -n node1
```

Run the **datapatch** utility:

```
sqlplus /nolog
```

```
SQL> Connect / as sysdba
```

```
SQL> startup
```

```
SQL> quit
```

```
cd $ORACLE_HOME/OPatch
```

```
./datapatch -verbose
```

---

### Rolling Back the Patch

To roll back the patch, execute the following steps:

#### 1. Stop the Database and Grid Infrastructure

```
su - oracle
```

```
<ORACLE_HOME>/bin/srvctl stop home -o <ORACLE_HOME> -s <status file location> -n <node name>
```

#### 2. Roll Back the Patch

```
su - grid
```

```
/GI_HOME>/OPatch/opatch nrollback -local -id <PATCH_ID> -oh <GI_HOME>
```

Repeat for Database Home:

```
su - oracle
```

```
/ORACLE_HOME>/OPatch/opatch nrollback -local -id <PATCH_ID> -oh <ORACLE_HOME>
```

#### 3. Run Post-Rollback Steps

```
su - root
```

```
/GI_HOME>/crs/install/rootcrs.sh -postpatch -rollback
```

Restart the database:

```
su - oracle
```

```
<ORACLE_HOME>/bin/srvctl start home -o <ORACLE_HOME> -s <status file location> -n <node name>
```

Run **datapatch** utility again to complete rollback:

```
cd $ORACLE_HOME/OPatch
```

```
./datapatch -verbose
```

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## Conclusion

This document outlines the necessary steps for applying and rolling back patches in an Oracle Grid and Database environment. It is essential to follow the steps carefully to ensure a smooth patching process. Always verify the patch status and system readiness before proceeding with any changes.

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