Hyperion Infrastructure Training
Appling OPatch

Download the video tutorial from www.bispsolutions.com

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Session Agenda

➤ What is OPatch and Patching Mechanism
➤ Prerequisites for Using Opatch
➤ Identify the right OPatch and Download.
➤ Environment Variables OPatch Uses
➤ OPatch File System
➤ Opatch Readme
➤ Apply or Rollback Opatch
➤ OPatch Log Files

What is Patching

As an Oracle Hyperion administrator you are supposed to download patches and apply them on your database using OPatch tool. This process is called patching. Patches are a small collection of files copied over to an existing installation. When applied to the correct version of an installed product, patches result in an upgraded version of the product.

What is OPatch

The basic functionality of OPatch is to copy files from source to target file system. The list of files to be copied mentioned in the action script available in $EPM_ORACLE_HOME/OPatch/13905088/etc/config. In addition to this, one can place OS instructions in the post script which gets executed posy Opatch execution($EPM_ORACLE_HOME/OPatch/14464522/custom/scripts). Patch is an Oracle-supplied utility that assists you with the process of applying interim patches to Oracle's software and rolling back interim patches from Oracle's software.

Prerequisites for Using Opatch

Check for JRE and JDK

```
java version "1.6.0_24"
Java(TM) SE Runtime Environment (build 1.6.0_24-b07)
Java HotSpot(TM) Server VM (build 19.1-b02, mixed mode)
```

Check ORACLE_HOME Environment Variable

```
dit
[bsp601@gokul-pc ~]$ #End of Hyperion enviroment section
[bsp601@gokul-pc ~]$ echo $ORACLE_HOME
/home/oracle/app/oracle/11.2.0.2/bin
```

Check for System Space

When OPatch processes the script for the installation of a patch, it simultaneously generates a rollback script and saves a copy of every file edited or deleted during the patching. OPatch also backs up the inventory information. Therefore, Oracle recommends that you have sufficient system space to accommodate the patch and the backup information.

Check for Oracle Universal Installer and OPatch Version Compatibility

```
Oracle Home       : /u02/bsp601/Oracle/Middleware/EPMSystem11R1
Central Inventory : /home/oracle/oraInventory
   from           : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/oraInst.loc
OPatch version    : 11.1.0.9.0
OUI version       : 11.1.0.9.0
```

Check for Patch Applicable on Operating System

OPatch detects if a particular patch is applicable for an operating system. If it is not applicable, it gives out a suitable error message.

Identify The Right OPatch and Download

1. Login to metalink/support.oracle.com.
2. Click "Patches & Updates" link on top menu.
3. On the patch search section enter 13905088.
4. Click search.
5. On the search results page select the most recent version and download the zip file.
6. Copy the zip file under $EPM_ORACLE_HOME/OPatch/ 13905088 folder.
7. Unzip this file and type "All" when prompted.

Environment Variables OPatch Uses

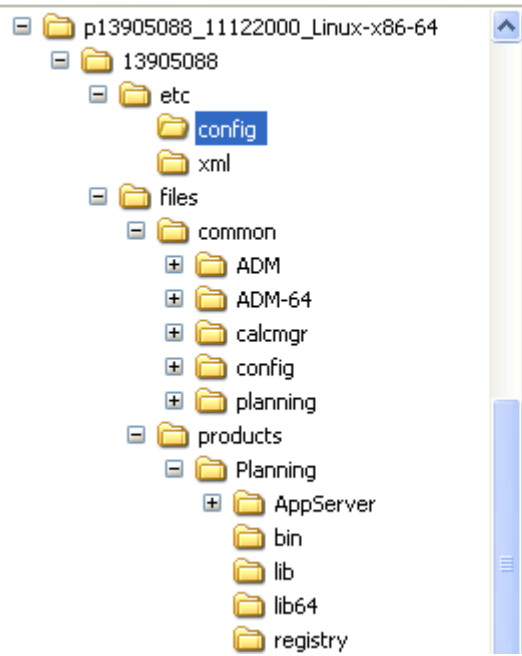OPatch uses the following environment variables:

ORACLE_HOME — Oracle home location.

OPATCH_DEBUG — Log level that specifies the amount of logging OPatch should perform.

OPATCH_PLATFORM_ID — Unique platform ID.

PATH — Path information.

Opatch File System

Check the Readme carefully to ensure all the base patches are already apply

Prerequisites

Microsoft Patch

Microsoft has identified a security issue that could allow a hacker to compromise your Windows-based system. You MUST install the Microsoft VC 2005 SP1 ATL redistributable pack before applying this patch.

The updated VC 2005 redistributable is available here for both x86 (32-bit) and x64 (64-bit):

http://www.microsoft.com/en-us/download/default.aspx

EPM System, OPatch, and Oracle Application Development Framework (ADF) Patches

EPM System Patches

Before applying this patch, install these patches as described in the readme for each patch:

- Calculation Manager patch 13925741. Before applying this Planning patch, apply Calculation Manager patch first on every computer on which both Calculation Manager and Planning are installed.
- Performance Management Architect patch 14031912
- Smart View patch 14362638
- Shared Services patch 14020629
- EPM Workspace patch 13936087
- Financial Reporting patch 13997553
- Reporting and Analysis patch 14200932

Note:

- Install the Calculation Manager patch first.
- Apply the Shared Services patch on all servers, and the EPM Workspace patch on any machine where Foundation Services is installed.

Access the patches from: http://support.oracle.com/.

ADF Patches

Install these patches in this order:

- 13952743 (select release 11.1.1.6.2)
- 14339256

Appling Opatch

./opatch apply $EPM_ORACLE_HOME\OPatch -oh $EPM_ORACLE_HOME -jre $MIDDLEWARE_HOME/jdk160_29
-invPtrLoc $EPM_ORACLE_HOME/oraInst.loc

```
OPatch completed with warnings.
[bsp601@gokul-pc OPatch]$ ./opatch apply $EPM_ORACLE_HOME/OPatch/13905088 -oh $EPM_ORACLE_HOME -jre $MIDDLEWARE_HOME/jdk160_29 -invPtrLoc $EPM_ORACLE_H
aInst.loc
Oracle Interim Patch Installer version 11.1.0.9.0
Copyright (c) 2011, Oracle Corporation.  All rights reserved.


Oracle Home       : /u02/bsp601/Oracle/Middleware/EPMSystem11R1
Central Inventory : /home/oracle/oraInventory
   from           : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/oraInst.loc
OPatch version    : 11.1.0.9.0
OUI version       : 11.1.0.9.0
OUI location      : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/oui
Log file location : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/cfgtoollogs/opatch/13905088_Oct_30_2012_15_51_23/apply2012-10-30_15-51-22PM_1.log

Patch history file: /u02/bsp601/Oracle/Middleware/EPMSystem11R1/cfgtoollogs/opatch/opatch_history.txt


OPatch detects the Middleware Home as "/u02/bsp601/Oracle/Middleware"

OPatch will do the following:
[Oracle Home discovery]                    : Configure and Validate Oracle Home info.
[Prerequisite for apply]                   : Invoke prerequisites to see if patch can be applied.
[Patch conflict detection for apply patch] : Check if any conflict with already installed patches in Oracle Home.

ApplySession applying interim patch '13905088' to OH '/u02/bsp601/Oracle/Middleware/EPMSystem11R1'

Running prerequisite checks...
```

OPatch Utility simply copy files from source to target file system. The list of files, source file path and the target path in mentioned in the action script. $EPM_ORACLE_HOME/13905088/etc/config

```
<copy name="deletable" path="%ORACLE_HOME%\common\config\11.1.2.0\indexes\HyperionPlanning\zh_CN" file_name="common\config\11.1.2.0\indexes\HyperionPlanning\zh_CN\deletable"/>
<copy name="segments" path="%ORACLE_HOME%\common\config\11.1.2.0\indexes\HyperionPlanning\zh_CN" file_name="common\config\11.1.2.0\indexes\HyperionPlanning\zh_CN\segments"/>
<copy name="_1a6.cfs" path="%ORACLE_HOME%\common\config\11.1.2.0\indexes\HyperionPlanning\zh_TW" file_name="common\config\11.1.2.0\indexes\HyperionPlanning\zh_TW\_1a6.cfs"/>
<copy name="deletable" path="%ORACLE_HOME%\common\config\11.1.2.0\indexes\HyperionPlanning\zh_TW" file_name="common\config\11.1.2.0\indexes\HyperionPlanning\zh_TW\deletable"/>
<copy name="segments" path="%ORACLE_HOME%\common\config\11.1.2.0\indexes\HyperionPlanning\zh_TW" file_name="common\config\11.1.2.0\indexes\HyperionPlanning\zh_TW\segments"/>
```

```
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/ko/deletable"
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/ko/segments"
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/pt_BR/_1a6.cfs"
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/pt_BR/deletable"
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/pt_BR/segments"
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/zh_CN/_1a6.cfs"
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/zh_CN/deletable"
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/zh_CN/segments"
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/zh_TW/_1a6.cfs"
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/zh_TW/deletable"
Copying file to "/u02/bsp601/Oracle/Middleware/EPMSystem11R1/common/config/11.1.2.0/indexes/HyperionPlanning/zh_TW/segments"
ApplySession adding interim patch '13905088' to inventory


OPatch completed
[bsp601@gokul-pc OPatch]$
```

Rollback Opatch

./opatch rollback -id <PatchNo> -oh $EPM_ORACLE_HOME -jre
$MIDDLEWARE_HOME/jdk160_29 -invPtrLoc $EPM_ORACLE_HOME/oraInst.loc

```
[bsp601@gokul-pc OPatch]$ ./opatch rollback -id 13905088 -oh $EPM_ORACLE_HOME -jre $MIDDLEWARE_HOME/jdk160_29 -invPtrLoc $EPM_ORACLE_HOME/oraInst.lc
Oracle Interim Patch Installer version 11.1.0.9.0
Copyright (c) 2011, Oracle Corporation.  All rights reserved.


Oracle Home       : /u02/bsp601/Oracle/Middleware/EPMSystem11R1
Central Inventory : /home/oracle/oraInventory
   from           : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/oraInst.loc
OPatch version    : 11.1.0.9.0
OUI version       : 11.1.0.9.0
OUI location      : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/oui
Log file location : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/cfgtoollogs/opatch/13905088_Oct_30_2012_16_16_38/rollback2012-10-30_16-16-37PM_1.log

Patch history file: /u02/bsp601/Oracle/Middleware/EPMSystem11R1/cfgtoollogs/opatch/opatch_history.txt


OPatch detects the Middleware Home as "/u02/bsp601/Oracle/Middleware"

OPatch will do the following:
[Oracle Home discovery]        : Configure and Validate Oracle Home info.
[Prerequisite for rollback]    : Invoke prerequisites to see if patch can be rolled back.

RollbackSession rolling back interim patch '13905088' from OH '/u02/bsp601/Oracle/Middleware/EPMSystem11R1'

Running prerequisite checks...
To continue, OPatch will do the following:
[Back up for restore]              : Back up 91 files for Oracle Home restore in case of patching error.
[Patch Oracle Home for rollback]   : Copy 73 file(s) to Oracle Home.
[Update inventory for rollback]    : Modify the inventory to record  patch [13905088].

Do you want to proceed? [y|n]
y
User Responded with: Y

OPatch detected non-cluster Oracle Home from the inventory and will patch the local system only.

Backing up files affected by the patch '13905088' for restore. This might take a while...

RollbackSession removing interim patch '13905088' from inventory

OPatch succeeded.
[bsp601@gokul-pc OPatch]$
```

OPatch Log Files

```
Oracle Home        : /u02/bsp601/Oracle/Middleware/EPMSystem11R1
Central Inventory  : /home/oracle/oraInventory
    from           : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/oraInst.loc
OPatch version     : 11.1.0.9.0
OUI version        : 11.1.0.9.0
OUI location       : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/oui
Log file location  : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/cfgtoollogs/opatch/13905088_Oct_30_2012_15_51_23/apply2012-10-30_15-51-22PM_1.log
```

```
Patch history file: /u02/bsp601/Oracle/Middleware/EPMSystem11R1/cfgtoollogs/opatch/opatch_history.txt
```

```
Date & Time : Tue Oct 30 15:40:43 IST 2012
Oracle Home : /u02/bsp601/Oracle/Middleware/EPMSystem11R1
OPatch Ver. : 11.1.0.9.0
Current Dir : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/OPatch
Command     : rollback -id 13905088 -oh /u02/bsp601/Oracle/Middleware/EPMSystem11R1 -jre /u02/bsp601/Oracle/Middleware/jdk160_29 -invPtrLoc /u02/bsp601/Oracle/Middleware/EPMS
Log File    : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/cfgtoollogs/opatch/opatch2012-10-30_15-40-43PM_1.log


Date & Time : Tue Oct 30 15:40:56 IST 2012
Oracle Home : /u02/bsp601/Oracle/Middleware/EPMSystem11R1
OPatch Ver. : 11.1.0.9.0
Current Dir : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/OPatch
Command     : apply /u02/bsp601/Oracle/Middleware/EPMSystem11R1/OPatch/13905088 -oh /u02/bsp601/Oracle/Middleware/EPMSystem11R1 -jre /u02/bsp601/Oracle/Middleware/jdk160_29 -
Log File    : /u02/bsp601/Oracle/Middleware/EPMSystem11R1/cfgtoollogs/opatch/13905088_Oct_30_2012_15_40_56/apply2012-10-30_15-40-56PM_1.log
```

QUESTIONS ANSWERS