

## Oracle Internet Directory Bundle Patch Readme

This document describes Oracle Internet Directory (OID) Bundle Patch 12.2.1.4.221222.

This document describes the bug fixes that are included with Bundle Patch 12c Release (12.2.1.4.221222) for OID and the procedure to install it. It contains the following topics:

- [Bundle Patch Considerations](#)
- [Understanding Bundle Patches](#)
- [Bundle Patch Recommendation](#)
- [Using the Oracle Patch Mechanism \(Opatch\)](#)
- [Before Applying the Bundle Patch](#)
- [Applying the Bundle Patch](#)
- [After Applying the Bundle Patch](#)
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### Bundle Patch Considerations

Before applying this OID Bundle Patch 12.2.1.4.221222 for January 2023, keep the following points in mind.

The January 2023 OID Bundle Patch 12.2.1.4.221222 is a one-of-a-kind Bundle Patch that updates the underlying DB Client for OID 12.2.1.4 `ORACLE_HOME` to version 19.14 (from 12c version). The updates are delivered via:

1. DB Client 19c Installer: Patch 34761383.
2. OSS 19c BP: Patch 34957122.
3. OID Jan 2023 BP: Patch 34947852.

The following considerations are significant for this release:

- The underlying DB Client for OID 12.2.1.4.0 (`ORACLE_HOME`) supported from Jan 2023 Bundle Patch onward will be 19.14 and higher.
- The OID Jan 2023 Bundle Patch is only applicable with Oracle Enterprise Linux 7 and higher. Oracle Enterprise Linux 6 is not supported.
- Only after updating the DB Client to 19.14 (19c) using the DB Client 19c Installer and applying the OSS 19c BP can you apply the OID Jan 2023 Bundle Patch.

## Understanding Bundle Patches

This section describes bundle patches and explains differences between bundle patches, interim patches (also known as one-offs), and patch sets.

- [Stack Patch Bundle](#)
- [Bundle Patch](#)
- [Interim Patch](#)
- [Patch Set](#)

### Stack Patch Bundle

Stack patch Bundle deploys the IDM product and dependent FMW patches using a tool. For more information about these patches, see *Quarterly Stack Patch Bundles* (Doc ID 2657920.1) at <https://support.oracle.com>.

### Bundle Patch

A bundle patch is an official Oracle patch for an Oracle product. In a bundle patch release string, the fifth digit indicated the bundle patch number. Effective November 2015, the version numbering format has changed. The new format replaces the numeric fifth digit of the bundle version with a release date in the form "YYMMDD" where:

- YY is the last 2 digits of the year
- MM is the numeric month (2 digits)
- DD is the numeric day of the month (2 digits)

Each bundle patch includes the libraries and files that have been rebuilt to implement one or more fixes. All of the fixes in the bundle patch have been tested and are certified to work with one another. Regression testing has also been performed to ensure backward compatibility with all Oracle Mobile Security Suite components in the bundle patch.

### Interim Patch

In contrast to a bundle patch, an interim patch addressed only one issue for a single component. Although each interim patch was an official Oracle patch, it was not a complete product distribution and did not include packages for every component. An

interim patch included only the libraries and files that had been rebuilt to implement a specific fix for a specific component.

You may also know an interim patch as: security one-off, exception release, x-fix, PSE, MLR, or hotfix.

## Patch Set

A patch set is a mechanism for delivering fully tested and integrated product fixes. A patch set can include new functionality. Each patch set includes the libraries and files that have been rebuilt to implement bug fixes (and new functions, if any). However, a patch set might not be a complete software distribution and might not include packages for every component on every platform. All of the fixes in a patch set are tested and certified to work with one another on the specified platforms.

## Bundle Patch Recommendation

Oracle has certified the dependent Middleware component patches for Identity Management products and recommends that Customers apply these certified patches. For more information on these patches, see the note Certification of Underlying or Shared Component Patches for Identity Management Products (Doc ID 2627261.1) at <https://support.oracle.com>.

## Using the Oracle Patch Mechanism (Opatch)

Opatch is a Java-based utility that runs on all supported operating systems and requires installation of the Oracle Universal Installer. It is used to apply patches to Oracle software.

### Note:

Oracle mandates that you have the latest version of Opatch (version 13.9.4.2.7 or higher) from [My Oracle Support](#). Opatch requires access to a valid Oracle Universal Installer (OUI) Inventory to apply patches.

The patching process uses both unzip and Opatch executables. After sourcing the `ORACLE_HOME` environment, Oracle recommends that you confirm that both of these exist before patching. Opatch is accessible at:

```
$ORACLE_HOME/Opatch/opatch
```

When Opatch starts, it validates the patch to ensure there are no conflicts with the software already installed in your `ORACLE_HOME`:

- If you find conflicts with a patch already applied to the `ORACLE_HOME`, stop the patch installation and contact Oracle Support Services.

- If you find conflicts with a subset patch already applied to the `ORACLE_HOME`, continue Bundle Patch application. The subset patch is automatically rolled back before installation of the new patch begins. The latest Bundle Patch contains all fixes from the previous Bundle Patch in `ORACLE_HOME`.

This Bundle Patch is not `-auto` flag enabled. Without the `-auto` flag, no servers need to be running. The Machine Name & Listen Address can be blank on a default install.



#### See Also:

[Patching Your Environment Using OPatch](#) in *Patching with OPatch*.

## Identifying the Version of OPatch

In general, there is a version of OPatch available for each version of the Oracle Universal Installer software.

To identify the version of OPatch:

1. Change directory to the following directory:

```
cd ORACLE_HOME/OPatch/
```

2. Run the following command:

```
./opatch version
```

For example:

```
./opatch version  
OPatch Version: 13.9.4.2.7  
  
OPatch succeeded.
```

## Obtaining Patches Required for Your Installation

You can search for and download the patches required for your installation from [My Oracle Support](#).

After you sign in to My Oracle Support, click the **Patches & Updates** tab, which provides various tools that allow you to quickly locate the patches important to your Oracle Internet Directory.

## Before Applying the Bundle Patch

This section describes the requirements before applying the bundle patch.

 **Note:**

Rollback is not supported by the OID Jan 2023 BP (12.2.1.4.221222). Therefore, before patching, you must take a backup of OID `ORACLE_HOME` and Central Inventory.

Complete the following prerequisites before applying this bundle patch:

1. If Oracle Internet Directory is installed then stop all OID server instances using `shutdown()` command:

```
shutdown(name='instance-name',type='OID')
```

Or you can also run the following script to stop OID server instances:

**UNIX**

```
stopComponent.sh 'instance-name'
```

**Windows**

```
stopComponent.cmd 'instance-name'
```

2. If Oracle Directory Integration Platform is installed:
  - a. Stop the Oracle Directory Integration Platform using the WLST command:

```
stopApplication ("DIP")
```

- b. Stop the Oracle WebLogic managed components, such as Oracle Directory Integration Platform and Oracle Directory Services Manager:

**UNIX**

```
DOMAIN_NAME/bin/stopManagedWebLogic.sh managed_server_name  
admin_url
```

**Windows**

```
DOMAIN_NAME\bin\stopManagedWebLogic.cmd managed_server_name  
admin_url
```

Where `managed_server_name` specifies the name of the Managed Server (The default value is `wls_ods1`.) and `admin_url` specifies the listen address (host name, IP address, or DNS name) and port number of the domain's Administration Server.

### Example

```
c:\Oracle\Middleware\user_projects\domains\base_domain\bin\stopManagedWebLogic.cmd wls_ods1 http://AdminHost:7001
```

- c. Stop the Oracle WebLogic Administration Server:

#### UNIX

```
DOMAIN_NAME/bin/stopWebLogic.sh
```

#### Windows

```
DOMAIN_NAME\bin\stopWebLogic.cmd
```

#### Note:

Where `DOMAIN_NAME` is the root directory of the domain. (The name of this directory is the name of the domain.). By default, this directory is `ORACLE_HOME\user_projects\domains\DOMAIN_NAME`.

#### Note:

The above steps are followed only when there is a technical need to manually stop the Oracle Directory Integration Platform application.

3. If you use NodeManager to stop instances, you need to stop NodeManager.

#### Example

##### UNIX

```
DOMAIN_NAME\bin\stopNodeManager.sh
```

##### Windows

```
DOMAIN_NAME\bin\stopNodeManager.cmd
```

4. Before you run OPatch, ensure that you set the `ORACLE_HOME` environment variable to Oracle home location (under which Oracle Internet Directory or Oracle Directory Integration is installed).

#### Example

##### UNIX

```
<bash> export ORACLE_HOME="/install_location/Oracle_Home"
```

## Windows

```
<prompt> set ORACLE_HOME="\install_location\Oracle_Home
```

5. Verify that `ORACLE_HOME` is set correctly by running the following command.

## UNIX

```
ls $ORACLE_HOME/OPatch/opatch
```

## Windows

```
dir %ORACLE_HOME%\OPatch\opatch.bat
```

## Applying the Bundle Patch

You can apply the bundle patch for Oracle Internet Directory or Oracle Directory Integration Platform either in an existing or in a new installation.

### Note:

Only after updating the DB Client to 19.14 (19c) using the DB Client 19c Installer and applying the OSS 19c BP can you apply the OID Jan 2023 BP. See [Bundle Patch Considerations](#).

- [Applying the Bundle Patch for an Existing Installation](#)
- [Applying the Bundle Patch for a New Installation](#)

## Applying the Bundle Patch for an Existing Installation

Perform the following steps to apply the bundle patch for an existing Oracle Internet Directory or Oracle Directory Integration Platform installation:

1. Unzip the patch zip file into the `PATCH_TOP`, where `PATCH_TOP` is a directory path that temporarily contains the patch for installation. For example, unzip the patch zip file as follows:

```
$ unzip -d PATCH_TOP p34947852_122140_Linux-x86-64.zip
```

### Note:

In Windows, the `unzip` command has a limitation of 256 characters in the path name. In scenarios where you face this issue, use an alternate ZIP utility like 7-Zip to unzip the patch.

2. Set your current directory to the directory where the patch is located.

#### UNIX

```
$ cd PATCH_TOP/34947852
```

#### Windows

```
PATCH_TOP\34947852
```

3. Run OPatch to apply the patch.

#### UNIX

```
$ [ORACLE_HOME]/OPatch/opatch apply
```

#### Windows

```
[ORACLE_HOME]\OPatch\opatch.bat apply
```

#### Note:

When OPatch starts, it validates the patch and makes sure that there are no conflicts with the software already installed in the `ORACLE_HOME`.

OPatch categorizes two types of conflicts:

- a. Conflicts with a patch already applied to the `ORACLE_HOME`. In this case, stop the patch installation, and contact Oracle Support Services.
- b. Conflicts with subset patch already applied to the `ORACLE_HOME`. In this case, continue the install, as the new patch contains all the fixes from the existing patch in the `ORACLE_HOME`.

## Applying the Bundle Patch for a New Installation

Perform the following steps to apply the bundle patch for a new Oracle Internet Directory or Oracle Directory Integration Platform installation:

1. Install Oracle Internet Directory binaries.  
For more information about installing the binaries, see [Installing the Oracle Internet Directory Software](#) in *Installing and Configuring Oracle Internet Directory*.
2. Apply patch, as described in [Applying the Bundle Patch for an Existing Installation](#).
3. For Oracle Internet Directory, you must configure it after you install Oracle Internet Directory binaries. For more information, see [Configuring Oracle Internet Directory Domain](#) in *Installing and Configuring Oracle Internet Directory*.



After you install and configure Oracle Internet Directory, see in [Getting Started With Oracle Internet Directory](#) in *Administering Oracle Internet Directory*.

4. For Oracle Directory Integration Platform, you must configure it after you install Oracle Internet Directory binaries.

For more information, see [Configuring Oracle Directory Integration Platform](#) in *Installing and Configuring Oracle Internet Directory*.

## After Applying the Bundle Patch

Based on the type of product installed, follow the instruction given below:

- If you use NodeManager for starting instances, you need to start NodeManager.

### UNIX

```
DOMAIN_NAME\bin\startNodeManager.sh
```

### Windows

```
DOMAIN_NAME\bin\startNodeManager.cmd
```

- If Oracle Internet Directory is installed, then restart all Oracle Internet Directory Server instances using WLST `start()` command:

```
start(name='instance-name', type='OID')
```

Or you can also run the following script to start OID server instances:

### UNIX

```
startComponent.sh 'instance-name'
```

### Windows

```
startComponent.cmd 'instance-name'
```

- If Oracle Directory Integration Platform is installed, then perform the following steps:

1. Restart the Oracle WebLogic Administration Server.

### UNIX

```
DOMAIN_NAME/bin/startWebLogic.sh
```

### Windows

```
DOMAIN_NAME\bin\startWebLogic.cmd
```

 **Note:**

Where `DOMAIN_NAME` is the root directory of the domain. (The name of this directory is the name of the domain.). By default, this directory is `ORACLE_HOME\user_projects\domains\DOMAIN_NAME`.

- Restart the Oracle WebLogic managed components, such as Oracle Directory Integration Platform and Oracle Directory Services Manager.

**UNIX**

```
DOMAIN_NAME/bin/startManagedWebLogic.sh managed_server_name  
admin_url
```

**Windows**

```
DOMAIN_NAME\bin\startManagedWebLogic.cmd managed_server_name  
admin_url
```

Where `managed_server_name` specifies the name of the Managed Server (The default value is `wls_ods1`.) and `admin_url` specifies the listen address (host name, IP address, or DNS name) and port number of the domain's Administration Server.

**Example**

```
c:\Oracle\Middleware\user_projects\domains\base_domain\bin\startM  
anagedWebLogic.cmd wls_ods1 http://AdminHost:7001
```

- If you are using Oracle Directory Server Enterprise Edition as the back-end directory for Oracle Directory Integration Platform synchronization, then update Oracle Directory Server Enterprise Edition plug-in:
  - Change to the directory where the patch was unzipped.
  - Select either `dip-plugin.so` (UNIX) or `dip-plugin.dll` (Windows) from the following directory in the Oracle Identity Management distribution package.

**UNIX**

```
ORACLE_HOME/dip/utils/dip-plugin
```

**Windows**

```
ORACLE_HOME\dip\utils\dip-plugin
```

- Copy it into your Oracle Directory Server Enterprise Edition installation:

**UNIX**

### 32-bit system

```
INSTALL-PATH/dsee7/lib
```

### 64-bit system

```
INSTALL-PATH/dsee7/lib64
```

## Windows

### 32-bit system

```
INSTALL-PATH\dsee7\lib
```

### 64-bit system

```
INSTALL-PATH\dsee7\lib64
```

4. Restart Oracle Directory Server Enterprise Edition instance using the `dsadm` command:

```
$ dsadm restart instance-path
```

## Removing the Bundle Patch

If you experience any problems after installing this patch, remove the patch as follows:

### Note:

Rollback is not supported by the OID Jan 2023 BP. Therefore, if you want to return to the pre-Jan 2023 BP level, you must restore OID `ORACLE_HOME` and Central Inventory from the backup.

### Note:

Before you remove the bundle patch, ensure that you shutdown Oracle Internet Directory, WebLogic Administration Server, and NodeManager. For more details, see [Before Applying the Bundle Patch](#).

1. After restoring from backup, start the NodeManager and the AdminServer with the following commands:

```
$DOMAIN_HOME/bin/startNodemanager.sh  
$DOMAIN_HOME/bin/startWeblogic.sh
```

 **Note:**

It is not required to start the Admin Server for Standalone installations.

2. If OID is installed, restart all Oracle Internet Directory Server instances using `startComponent.sh` command:

```
$DOMAIN_HOME/bin/startComponent.sh instance-name
```

or you can start the Oracle Internet Directory Server instances by connecting to the AdminServer via WLST and executing the WLST `start()` command.

```
start(name='instance-name', type='OID')
```

If DIP is installed, restart the Weblogic Managed server DIP was deployed to

```
$DOMAIN_HOME/bin/startManagedWeblogic.sh <managed server>
```

or you can start the Weblogic Managed server DIP was deployed to by connecting to the AdminServer via WLST and executing the WLST `start()` command.

```
start('managedServerName', 'Server')
```

## Resolved Issues

This chapter describes resolved issues in this Bundle Patch.

This Bundle Patch provides the fixes described in the below section:

- [Issues Resolved in 12c Release \(12.2.1.4.221222\)](#)
- [Issues Resolved in 12c Release \(12.2.1.4.220531\)](#)
- [Issues Resolved in 12c Release \(12.2.1.4.220325\)](#)
- [Issues Resolved in 12c Release \(12.2.1.4.210714\)](#)
- [Issues Resolved in 12c Release \(12.2.1.4.210115\)](#)

### Issues Resolved in 12c Release (12.2.1.4.221222)

The following table lists the issues resolved in OID Bundle Patch 12.2.1.4.221222:

**Table 1-1 Resolved Issues in 12c Release (12.2.1.4.221222)**

Bug Number	Bug Name
34808215	DB19 UPTAKE IN OID RELEASE 12.2.1.4.0

## Issues Resolved in 12c Release (12.2.1.4.220531)

The following table lists the issues resolved in OID Bundle Patch 12.2.1.4.220531:

**Table 1-2 Resolved Issues in 12c Release (12.2.1.4.220531)**

Bug Number	Bug Name
32525821	DIP SYNC PROFILE HANGS FOREVER - BROKEN CONNECTION ARE NEVER CLOSED
33425178	DIP 12C PROVISIONING PROFILE TO EBS 12.2 BREAKS LASTCHANGENUMBER
33261794	LACN SET TO NULL IN DIP SYNC PROFILE

## Issues Resolved in 12c Release (12.2.1.4.220325)

The following table lists the issues resolved in OID Bundle Patch 12.2.1.4.220325:

**Table 1-3 Resolved Issues in 12c Release (12.2.1.4.220325)**

Bug Number	Bug Name
33667362	POOL2 ENV ZGUD:LDAP: URECOVERABLE LOGIN ERROR OBSERVED AFTER DB PATCHING TO 19.12.0 DBRU+MLR211015 WITH ZDT
20529520	OPERATIONAL ATTRIBUTES- MODIFERSNAME AND MODFIYTIMESTAMP -GET REMOVED
31575507	OID 12.2.1.4 UNABLE TO ACCESS "SHARED PROPERTIES" FROM EM, LDAP ERROR-48
30218539	Fix for Bug 30218539
29293712	Fix for Bug 29293712
33416191	OID 12C "FAILED TO START INSTANCE PREMATURE END OF FILE" AFTER JULY 2021 BP
28860873	OID 12C NODEMANAGER ACCESSING DATABASE LISTENER LOG

## Issues Resolved in 12c Release (12.2.1.4.210714)

The following table lists the issues resolved in OID Bundle Patch 12.2.1.4.210714:

**Table 1-4 Resolved Issues in 12c Release (12.2.1.4.210714)**

<b>Bug Number</b>	<b>Bug Name</b>
29946589	DIP SYNC FOR MODDN OR MODRDN GIVES NEWSUPERIOR A NULL VALUE
32014311	ATPD D: OID INSTANCE STARTUP FAILS DUE TO-"CREATION OF WALLETS FAILED"
32640101	OID METRICS REST API
32502356	OID PROCESSES CRASH AND DISPATCHER "TERMINATE PROCESS FAILED OS ERROR 5"
31996035	DIP 12.2.1.3 - AFTER APPLYING PATCH 29946589 NEED MANUAL COPY AND RENAME OF LDAPJCLNT JAR TO WORK
32512033	DIPATCHER WRONGLY RESTARTS ALL OIDLDPD WHEN ONE SERVER PROCS IS KILLED/CRASHED
32496322	12CPS5:BULKLOAD FAILS WHEN THE FILE NAME PARAMETER LENGTH IS GREATER THAN 123 CHARS
31715764	OID 12C ON STOPS RESPONDING OPENMUTEX GLOBAL\724866268 FAILED WITH ERROR 6
32108896	EXCHANGE MIGRATION : SOME DIP SYNC EVENTS DID NOT SYNC TO DESTINATION BEFORE A MODRDN
26176227	CONFIG.SH FAILS TO CREATE OID INSTANCE, OID NOT STARTING
20630516	TIMEOUT ERROR IN OID-ODSM SECURITY TAB

## Issues Resolved in 12c Release (12.2.1.4.210115)

The following table lists the issues resolved in OID Bundle Patch 12.2.1.4.210115:

**Table 1-5 Resolved Issues in 12c Release (12.2.1.4.210115)**

<b>Bug Number</b>	<b>Bug Name</b>
20360006	LOADBALANCER PING CAUSES "SGSLUFREAD: HARD ERROR ON READ, OS ERROR = 104"
24464510	OID BECOMES UNRESPONSIVE INTERMITTENTLY
26268699	Fix for Bug 26268699
26828926	INCORPORATE ISW RESYNC CAPABILITIES INTO DIP

**Table 1-5 (Cont.) Resolved Issues in 12c Release (12.2.1.4.210115)**

Bug Number	Bug Name
27253930	DIP ERROR WHEN SAVING SYNCHRONIZATION PROFILE IN EM PASSWORD MORE THEN 15 CHARS
27825430	FEATURE TO RUN OIDDIAG WITHOUT SYS USER
29656196	NEED CORRECT /ETC/HOSTS CONFIGURATION FOR ALIASES
29692493	OID 11.1.1.9.160719 PORT STOPS RESPONDING
30091360	IMPORT USER DATA FROM LDIF FILE VIA ODSM FAILS
31040001	OID INTERNAL PRODUCTION MT - REPLICATION BETWEEN ADC AND UCF NOT WORKING FOR ORG GROUPS
31421942	OID CLEAN UP - OS RESOURCE AND SAME INSTANCE NAME FROM A PRIOR FAILED CONFIGURATION ATTEMPT FAILS TO START:(DOC ID 2535934.1)
31422015	OID11G: HOW TO AUDIT/TRACE AND CAPTURE MODIFICATION OF AN OBJECTCLASS NAME (DOC ID 2471961.1)

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

## Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Oracle Fusion Middleware Oracle Internet Directory Bundle Patch Readme, 12c (12.2.1.4.221222)  
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