

Oracle Unified Directory Bundle Patch Readme

This document describes Bundle Patch 12.2.1.4.241003 for Oracle Unified Directory.

Note:

For issues documented after the release of OUD Bundle Patch 12.2.1.4.241003, log into [My Oracle Support](#). In the Search Knowledge Base field, enter 2602696.1. This is the ID of the document that describes the Oracle Fusion Middleware 12.2.1.4.0 Known Issues.

This readme document requires base installation of Oracle Unified Directory 12c (12.2.1.4.0). It includes the following sections:

- [New Features and Enhancements in OUD Bundle Patch 12.2.1.4.241003](#)
- [Understanding Bundle Patches](#)
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New Features and Enhancements in OUD Bundle Patch 12.2.1.4.241003

Oracle Unified Directory 12.2.1.4.241003 BP includes the following new features and enhancements:

- Support for configuring tombstone entries for purging. See [Configurable Tombstone Entry Purging](#).

Understanding Bundle Patches

This section describes Bundle Patches and explains differences between Stack Patch Bundles, Bundle Patches, Interim Patches (also known as patch set exceptions), 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 Oracle Unified Directory. 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 "YYMMDD" format 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 libraries and files that have been rebuilt to implement one or more fixes. All of the fixes in a Bundle Patch are tested and certified to work with one another. Each Bundle Patch is cumulative. That is, the latest Bundle Patch includes all fixes in earlier Bundle Patches for the same release.

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.

Recommendations

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>.

Bundle Patch Requirements

Before you run OPatch, find the OPatch utility in the Oracle Home (`ORACLE_HOME`) and verify that you have the latest version.

Complete the following steps before you apply the Bundle Patch:

- Verify that the OPatch version is 13.9.4.2.13 or higher.
 1. Access and log into My Oracle Support at the following location:
<https://support.oracle.com/>
 2. In the Search Knowledge Base field, enter **1587524.1**. This is the ID of the document that describes Using OUI NextGen OPatch 13 for Oracle Fusion Middleware 12c.
 3. In the search results, click the link corresponding to document ID **1587524.1**.
 4. In the document, click the **Patch 28186730** link which will take you to the screen where you can obtain the OPatch 13.9.4.2.13 or higher version.
 5. After obtaining the OPatch, follow the instructions in the OPatch zip README file to upgrade it to the appropriate version.
- Verify the OUI Inventory:

OPatch needs access to a valid OUI inventory to apply patches. Validate the OUI inventory with the following commands:

Unix

```
$ opatch lsinventory
```

Windows

```
opatch.bat lsinventory
```

If the command throws errors, then contact Oracle Support and work to validate and verify the inventory setup before proceeding.

- Confirm the executables appear in your system `PATH`.

Unix

```
$ which opatch
```

```
$ which unzip
```

Windows

```
where opatch.bat
```

```
where unzip
```

If the command throws errors, then contact Oracle Support and work to validate and verify the inventory setup before proceeding. If either of these executables do not show in the `PATH`, correct the problem before proceeding.

- Create a location for storing the unzipped patch. This location will be referred later in the document as `PATCH_TOP`.

Before Applying the Bundle Patch

Before you apply the Bundle Patch for Oracle Unified Directory 12c (12.2.1.4.0), you must set the environment variable and stop all the Directory Server instances and domains.

Note:

You must read about the OUDSM auto redeployment instructions in [Documentation Updates](#) before applying this Bundle Patch.

Note:

Before applying the Bundle Patch, you must take a tar backup of the configuration directory of an OUD instance. For example: `asinst_1/OU/ config`. If regular backups are not in place, then a complete cold backup/tar of entire OUD instance is recommended. Example: `<Path to asinst_1>`.

You must complete the following prerequisites for applying the Bundle Patch:

1. Set the `ORACLE_HOME` environment variable for Oracle Middleware Home Location (where Oracle Unified Directory is installed).

For example:

Unix

```
$ <bash> export ORACLE_HOME="Oracle Middleware Home Location"
```

Windows

```
<prompt> set ORACLE_HOME="Oracle Middleware Home Location"
```

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

Unix

```
ls $ORACLE_HOME/OPatch/patch
```

Windows

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

3. Stop all the Directory Server instances and domains where Oracle Unified Directory Services Manager (OUDSM) is installed, depending upon the domain configuration.

- a. **Stop the Standalone Oracle Unified Directory Server**

If you installed Oracle Unified Directory in a Standalone Oracle Unified Directory Server (Managed independently of WebLogic Server) mode, stop all the Directory Server instances using the `stop-ds` command.

Unix

```
ORACLE_HOME/INSTANCE_NAME/OU/bin/stop-ds
```

Windows

```
ORACLE_HOME\INSTANCE_NAME\OU\bin\stop-ds.bat
```

- b. **Stop the Collocated Oracle Unified Directory Server**

If you installed Oracle Unified Directory in a Collocated Oracle Unified Directory Server (Managed through WebLogic Server) mode, complete the following steps:

- i. Stop the OUD instance by running the following command from command line interface.

Unix

```
DOMAIN_HOME/bin/stopComponent.sh INSTANCE_NAME
```

Windows

```
DOMAIN_HOME\bin\stopComponent.bat INSTANCE_NAME
```

- ii. Stop the Node Manager.

Unix

```
DOMAIN_HOME/bin/stopNodeManager.sh
```

Windows

```
DOMAIN_HOME\bin\stopNodeManager.cmd
```

- iii. Stop the Oracle WebLogic Administration Server.

Unix

```
DOMAIN_HOME/bin/stopWebLogic.sh
```

Windows

```
DOMAIN_HOME\bin\stopWebLogic.cmd
```

- c. **Stop the OUDSM Configured in a Single Domain**

If you created and configured a WebLogic domain for OUDSM, then you must stop the Administration Server.

Stop the Oracle WebLogic Administration Server:

Unix

```
DOMAIN_HOME/bin/stopWebLogic.sh
```

Windows

```
DOMAIN_HOME\bin\stopWebLogic.cmd
```

- d. **Stop the Oracle Directory Integration Platform and OUDSM Configured in a Single Domain**

Note:

This is optional only for configurations with DIP/OUDSM in a Single Domain.

If you added OUDSM and Oracle Directory Integration Platform in a single domain, you must stop the Admin Server and Managed Server.

- i. Stop the Oracle Directory Integration Platform Managed Server:

Unix

```
DOMAIN_HOME/bin/stopManagedWebLogic.sh <managed_server_name>  
<ADMIN_SERVER_URL>
```

Windows

```
DOMAIN_HOME\bin\stopManagedWebLogic.cmd  
<managed_server_name> <ADMIN_SERVER_URL>
```

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

- ii. Stop the Oracle WebLogic Administration Server:

Unix

```
DOMAIN_HOME/bin/stopWebLogic.sh
```

Windows

```
DOMAIN_HOME\bin\stopWebLogic.cmd
```

Note:

See [Understanding the Oracle Unified Directory Installation Directories](#) to know about OUD installation directories.

Using the Oracle Patch Mechanism (OPatch)

Use OPatch to perform the necessary steps for applying a patch to an Oracle Home.

Note:

You must have the latest version of OPatch (version 13.9.4.2.13 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.

See Also:

[Patching with OPatch](#)

Identifying the Version of OPatch Included with Oracle Unified Directory 12c

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: 13.9.4.2.13
```

```
OPatch succeeded.
```

Applying the Bundle Patch

Unzip the patch zip file and run OPatch to apply the patch.

To apply the Bundle Patch, complete the following steps:

1. Unzip the patch zip file into the `PATCH_TOP`, where `PATCH_TOP` is a directory path that temporarily contains the patch for installation.

Unix

```
$ unzip -d PATCH_TOP p37129794_122140_Generic.zip
```

Windows

```
unzip -d PATCH_TOP p37129794_122140_Generic.zip
```

Note:

On Windows, the unzip command has a limitation of 256 characters in the path name. If you encounter this, use an alternate ZIP utility such as 7-Zip to unzip the patch. For example, run the following command to unzip using 7-Zip:

```
"c:\Program Files\7-Zip\7z.exe" x  
p37129794_122140_Generic.zip
```

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

Unix

```
$ cd PATCH_TOP/37129794
```

Windows

```
cd PATCH_TOP\37129794
```

3. Run OPatch to apply the patch.

Unix

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

Windows

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

ORACLE_HOME

- Conflicts with a patch already applied to the ORACLE_HOME.
In this case, stop the patch installation, and contact Oracle Support Services.
- 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.

After Applying the Bundle Patch

You need to perform certain tasks after applying the Bundle Patch.

Perform the following steps after applying the Bundle Patch:

1. Verify if the Oracle Unified Directory installation has been patched by running the `start-ds` command.

For example:

Unix

```
$ [ORACLE_HOME]/<dsInstanceName>/OUD/bin/start-ds -F
```

Windows

```
[ORACLE_HOME]\<dsInstanceName>\OUD\bat\start-ds.bat -F
```

Note:

OID patch version can be determined from the output, based on the values for Build ID, Platform Version and Label Identifier fields.

2. Start all the Directory Server instances depending upon the domain configuration.

Start the Standalone Oracle Unified Directory Server

If you installed Oracle Unified Directory in a Standalone Oracle Unified Directory Server (Managed independently of WebLogic Server) mode, start all the Directory Server instances using the `start-ds` command. For example:

Unix

```
$ [ORACLE_HOME]/<dsInstanceName>/OUD/bin/start-ds
```

Windows

```
[ORACLE_HOME]\<dsInstanceName>\OUD\bat\start-ds.bat
```

Start the Collocated Oracle Unified Directory Server

If you installed Oracle Unified Directory in a Collocated Oracle Unified Directory Server (Managed through WebLogic Server) mode, complete the following steps:

- a. Start the Oracle WebLogic Administration Server.

Unix

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

Windows

```
DOMAIN_HOME\bin\startWebLogic.cmd
```

- b. Start the Node Manager.

Unix

```
$DOMAIN_NAME/bin/startNodeManager.sh
```

Windows

```
DOMAIN_HOME\bin\startNodeManager.cmd
```

- c. Start the OUD instance by running the following command from command line interface.

Unix

```
startComponent.sh INSTANCE_NAME
```

For example:

```
$DOMAIN_HOME/bin/startComponent.sh oud1
```

where `oud1` is the instance name/server name created using WLST

Windows

```
startComponent.bat INSTANCE_NAME
```

For example:

```
DOMAIN_HOME\bin\startComponent.bat oud1
```

where `oud1` is the instance name/server name created using WLST

3. If you created and configured a WebLogic domain for OUDSM, then you must restart the Administration Server. Allow the application server instance to redeploy the new `oudsm.ear` file in the patch.
4. If you added OUDSM and Oracle Directory Integration Platform in a single domain, you must start the Admin Server and Managed Server.
 - a. Start the Oracle WebLogic Administration Server.

Unix

```
DOMAIN_HOME/bin/startWebLogic.sh
```

Windows

```
DOMAIN_HOME\bin\startWebLogic.cmd
```

- b. Start the Oracle Directory Integration Platform Managed Server:

Unix

```
DOMAIN_HOME/bin/startManagedWebLogic.sh <managed_server_name>  
<ADMIN_SERVER_URL>
```

Windows

```
DOMAIN_HOME\bin\startManagedWebLogic.cmd <managed_server_name>  
<ADMIN_SERVER_URL>
```

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

5. You may need to update `config.ldif` file to remove PIN file.
 - a. The attributes `ds-cfg-key-store-pin-file`, `ds-cfg-trust-store-pin-file`, and `ds-cfg-key-pin-file` are not removed for an updated instance for backward compatibility. You will see a warning during server startup process stating that those attributes are still populated. Use `dsconfig` to remove the value of the attributes after server startup has been done successfully.
 - b. If a truststore configuration entry does not have its pin attribute populated, then you will see a warning during server startup. Use `dsconfig` to update the pin attribute with the password of the truststore to prevent those warnings.
 - c. While creating a new instance with SSL port disabled, the default configuration entry for any disabled keystore or truststore would still have attribute `ds-cfg-key-store-pin-file` populated. This can be ignored. Whenever you enable that keystore or truststore, then you will have to reset the pin-file attribute. You need to provide the pin of the keystore or truststore by using the pin attribute only.
 - d. Any error messages seen for disabled keystore/truststore during server startup can be ignored.

Creating the File Based Access Control Log Publisher

You can create a File Based Access Control Log publisher for diagnosing ACI evaluation.

 **Note:**

The steps mentioned in this section are optional.

The File Based Access Control Log publisher should be disabled as soon as diagnostic is over as it impacts server performance.

 **Note:**

Once this publisher is created, the de-installation of this patch will not be possible as the server would no longer be able to start.

To create the File Based Access Control Log publisher, a server administrator must invoke the following `dsconfig` command against a server instance that is already up and running:

```
dsconfig create-log-publisher \  
  --publisher-name "ACI logger" \  
  --type file-based-access-control \  
  --set enabled:true \  
  --set log-file:logs/acilog \  
  --hostname serverHostName --port 4444 \  
  --trustAll --bindDN cn=Directory\ Manager \  
  --bindPasswordFile passwordFile \  
  --no-prompt
```

The following entry is created in the `config.ldif`: server configuration file:

```
dn: cn=ACI logger,cn=Loggers,cn=config  
  objectClass: ds-cfg-log-publisher  
  objectClass: ds-cfg-access-control-log-publisher  
  objectClass: ds-cfg-file-based-access-control-log-publisher  
  objectClass: top  
  ds-cfg-enabled: true  
  ds-cfg-java-class:  
org.opensds.server.loggers.accesscontrol.TextAccessControlLogPublisher  
  ds-cfg-asynchronous: true  
  cn: ACI logger  
  ds-cfg-log-file-permissions: 640  
  ds-cfg-log-file: logs/acilog
```

Removing the Bundle Patch

If you experience any problems after installing the Bundle Patch, you can remove the Bundle Patch.

 **Note:**

Before you remove the Bundle Patch, ensure that you shutdown Oracle Unified Directory, WebLogic Administration Server, and Node Manager. For more information, refer [Before Applying the Bundle Patch](#).

Execute the following commands to remove the Bundle Patch:

1. Set the `ORACLE_HOME` environment variable for Oracle Middleware Home Location (where Oracle Unified Directory is installed).

Unix

```
$ <bash> export ORACLE_HOME="Oracle Middleware Home Location"
```

Windows

```
<prompt> set ORACLE_HOME="Oracle Middleware Home Location"
```

2. Verify the OUI inventory by running the following command:

Unix

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

Windows

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

3. Run `OPatch` to deinstall the patch:

Unix

```
$ [ORACLE_HOME]/OPatch/opatch rollback -id 37129794
```

Windows

```
[ORACLE_HOME]\OPatch\opatch.bat rollback -id 37129794
```

4. In the case of a Directory Server instance created after the application of this patch or once after the patch is removed/rollback, the instance `buildinfo` still looks like:

```
$ cat [ORACLE_HOME]/<dsInstanceName>/OUD/config/buildinfo
12.2.1.4.241003.0712
```

5. The instance `buildinfo` must be manually changed back:

```
$ cp [ORACLE_HOME]/oud/config/buildinfo [ORACLE_HOME]/  
<dsInstanceName>/OUD/config/buildinfo
```

For example,

```
$ cat [ORACLE_HOME]/<dsInstanceName>/OUD/config/buildinfo  
12.2.1.4.241003.0712
```

6. After removing the Bundle Patch, start the OUD instance by running the following command:

Unix

```
$ [ORACLE_HOME]/<dsInstanceName>/OUD/bin/start-ds
```

Windows

```
[ORACLE_HOME]\<dsInstanceName>\OUD\bat\start-ds.bat
```

Post Action After Rollback

After roll-back, restore respectively either the configuration and schema from the backup (by restoring the configuration directory of the OUD instance) or the OUD instance complete tar backup (if available), before you start an OUD instance.

Resolved Issues

This section lists the issues resolved in 12c (12.2.1.4.0) Release.

- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.241003\)](#)
- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.240603\)](#)
- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.240319\)](#)
- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.230928\)](#)
- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.230406\)](#)
- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.221009\)](#)
- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.220405\)](#)
- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.211008\)](#)
- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.210406\)](#)
- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.200827\)](#)
- [Resolved Issues in OUD Bundle Patch \(12.2.1.4.200526\)](#)
- [Resolved Issues in OUD Bundle Patch 12.2.1.4.200204](#)

Resolved Issues in OUD Bundle Patch (12.2.1.4.241003)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.241003:

Table 1-1 Issues Resolved in 12c Release 12.2.1.4.241003

Bug Number	Description
36776228	OULD CAUSED OAM CONSOLE FAILURES AFTER INSTALLING IDM BP PATCH 12.2.1.4.240415
36524164	OULD ENHANCEMENT TO SCHEDULE PURGER THREAD VIA TASK
35790794	OULD12CPS4: ACCUMULATION OF UNRELEASED CONNECTIONS FROM DPS TO DS
35861508	RDBMS WORKFLOW ELEMENT FAILS WHEN USING SIMPLE-POOL
36425896	OULD CERTIFICATE WAS REPLACED AND REPLICATION WITH PARTNERS WAS NON-OPERATIONAL
36398567	OULD12PS4: LDAPSEARCH USING UNIQUEMEMBER FILTER DOES NOT RETURN EXPECTED RESULTS
36175219	OULD DYNAMIC GROUPS FAILS TO LIST ALL OF THE GROUP MEMBERS.
36015211	OULD PROXY FAILS WITH " RDBMSEXTENSION POOLDATASOURCE 'EXCEPTION OCCURRED WHILE GETTING CONNECTION" "LOW CHANCE TO GET A CONNECTION" ""

Resolved Issues in OUD Bundle Patch (12.2.1.4.240603)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.240603:

Table 1-2 Issues Resolved in 12c Release 12.2.1.4.240603

Bug Number	Description
35902509	CVE-2023-36478

Resolved Issues in OUD Bundle Patch (12.2.1.4.240319)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.240319:

Table 1-3 Issues Resolved in 12c Release 12.2.1.4.240319

Bug Number	Description
35741913	CUSTOMIZE MESSAGE TEMPLATE FILES ARE UNDER \$OUD_INSTANCE/OUD/CONFIG/MESSAGES
35708773	SORTING ORDER OPTION IN LDAPSEARCH OUTPUT FOR A MULTIVALUED ATTRIBUTES
34743083	OUD QUERY FOR "VERSION ATTRIBUTE STRING" IS DIFFERENT THAN ODSEE.
34760868	CUSTOMIZING THE SERVER.OUT FILE RECORDS TO ADD INSTANCE NAME.
33551848	REPLICATION DOMAIN RE-APPEARS IN ECL COOKIE MODE AFTER REMOVAL FROM REPLICATION
33160429	OUD REPLICATION SERVER IS LIMITED TO 128 CONNECTIONS
35574518	OUD12CPS4: NPE FOR MULTIPLE CHANGES ON SAME ATTRIBUTE (ON SAME DN) INTO SAME MOD
35636446	OUD12CPS4: NPE: NULLPOINTEREXCEPTION (ACCESSLOGPUBLISHER.JAVA:
35915586	OUD LOCKTIMEOUTEXCEPTION: LOCK EXPIRED ON TOMBSTONE PURGE WAITED FOR READ LOCK

Resolved Issues in OUD Bundle Patch (12.2.1.4.230928)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.230928:

Table 1-4 Issues Resolved in 12c Release 12.2.1.4.230928

Bug Number	Description
35155826	OUD METRICS ARE NOT PROPERLY FORMATTED
35398216	OUD COLLECTIVE ATTRIBUTES NOT ADDING ALL REQUIRED ATTRIBUTES
35385421	DSREPLICATION ENABLE-CHANGELOG FAIL DUE WRONG INDEX IN KMS ARRAY
35470364	REBUILD-INDEX --REBUILDALL CORRUPTS INDEXES WITH JAPANESE CHARACTERS ON A JAPANESE WINDOWS VERSION.
19561137	Fix for Bug 19561137
35358723	CVE-2021-28165

Table 1-4 (Cont.) Issues Resolved in 12c Release 12.2.1.4.230928

Bug Number	Description
34748606	"COULD NOT DECRYPT AN ATTRIBUTE" ERROR AFTER APPLYING OUD BP 12.2.1.4.221009
33858063	ADDING IDLE-TIMEOUT FEATURE TO QOS POLICIES/NETWORK GROUP - OUD PROXY
34965896	SYMMETRIC KEYS CANNOT BE DECODED
31008920	ER OUD - AUTOMATE TRIMMING OF BACKUP.INFO FILE AND REMOVAL OF OLD BACKUPS
35540014	PERFORMANCE SEVERELY AFFECTED AFTER ENABLING PRIVILEGE VIRTUAL ATTRIBUTES AND VIRTUAL ATTRIBUTE
34901825	CUSTOMER IS REPORTING A POSSIBLE SECURITY ISSUE
33920490	VLV INDEX LOGGING
35278836	DSREPLICATION INIT SHOWING "THEY ARE POTENTIALLY STOPPED OR TOO SLOW" ERROR
35752862	OUD - OAM - OAUTH 2.0 SUPPORT FOR OUD REST BACKEND APIS

Resolved Issues in OUD Bundle Patch (12.2.1.4.230406)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.230406:

Table 1-5 Issues Resolved in 12c Release 12.2.1.4.230406

Bug Number	Description
34669884	OUD PROXY INSTANCE CORRUPTS OUTPUT OF USERCERTIFICATE ATTRB.
34661482	CHANGELOGDB SIZE IS TOO HIGH IN ONE OF THE SERVER IN REPLICATION GROUP.
34513966	QOS ENHANCEMENT FOR INTERNAL CONTEXT ACCESS (LIKE CHANGELOG DB)
34748268	DUPLICATE "MODIFIERSNAME" AND "MODIFYTIMESTAMP" IN USER ENTRY AND GROUP ENTRY
34951663	NULLPOINTEREXCEPTION (NPE) WHEN RUNNING VERIFY-INDEX, REBUILD-INDEX, OR DBTEST
34769296	ACI EVALUATION CHANGES OVER TIME
34778119	FILTER-TO-INCLUDE CAUSES SEARCH TO FAIL WITH ERROR 50
34719962	OUD 12C SEARCH FILTER IGNORES BAD ENTRYDN VALUE TO PERFORM SEARCH

Table 1-5 (Cont.) Issues Resolved in 12c Release 12.2.1.4.230406

Bug Number	Description
34477930	POOR SEARCH PERFORMANCE OBSERVED WITH "LDAPSEARCH" CASEEXACTMATCH
34427815	REQUEST FOR ADDITIONAL SNMP TRAPS TO BE INCLUDED WITH OUD
34964109	LOUD BUG 26141190 FIX IS BROKEN IN PS4 AS IT SENDS PASSWORD EXPIRED POLICY CODE
33585017	ACI EVALUATION ENGINE OF CHILD SUFFIX NOT WORKING AFTER REINDEX OF PARENT SUFFIX
33647244	LOUD REPLICATION SERVER CONNECT TIMEOUT IS HARD CODED TO 500MSEC
34460281	NODEMANAGER FAILS TO MANAGE OUD INSTANCE AFTER RESTART OF NODEMANAGER
34951280	CONT'D FROM BUG 34460281 - NEED A FIX TO WITH SAVED/UNUSED INSTANCES AS WELL
29759915	LOUDSM CANNOT ASSIGN A NON-NUMERIC OID LIKE THE STRING VALUE "ATTRIBUTENAME-OID"
34244811	LOUD MULTI VALUED ATTRIBUTE IS NOT TAKING MORE THAN ONE VALUE UNTIL RESTART.
34533876	REST JETTY SERVER 30S TIMEOUT SHOULD BE ABLE TO BE CHANGED

Resolved Issues in OUD Bundle Patch (12.2.1.4.221009)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.221009:

Table 1-6 Issues Resolved in 12c Release 12.2.1.4.221009

Bug Number	Description
34536207	CHANGING ACCESS LOG FORMAT MODE FOR HTTP ADMIN LOGGER DOES NOT SHOW COMPLETE ERROR MESSAGE IN CASE OF FAILURE.
34465429	LOUD RDBMS MYSQL QUERY HANG
34143081	LOUDSM IS NOT ALLOWING TO CREATE ATTRIBUTE WITH UNDERSCORE ('_') CHARACTER
33803966	MAKE JETTY LOG LEVEL CONFIGURABLE
34011413	ENHANCE VIRTUAL ATTRIBUTE HANDLING FOR ACI IN USER ENTRY CACHE

Table 1-6 (Cont.) Issues Resolved in 12c Release 12.2.1.4.221009

Bug Number	Description
31097732	OULD 12C - MODIFY LOGGING OF /TMP/ OULD-REPLICATION AND /TMP/OULD-STATUS FILES
26963341	OULD11G - ER PROXY DOES NOT TRANSFORM THE ORCLGUID TO OBJECTGUID VALUE ON SEARCH
33793294	OULD 12C ABILITY TO LOG TLS CONNECTIONS TO HTTP ACCESS LOG
29416071	OULD 12C ABILITY TO LOG TLS CONNECTIONS TO STANDARD ACCESS LOG
31737231	IMPLEMENT CONTROL FILTERING APPROACH TO FILTER OUT UNDESIRE D CONTROLS FROM THE REQUEST
33690183	HIGH RESPONSE TIME AND CONCURRENTMODIFICATIONEXCEPTI ON ON OUD PROXY SERVER
33806327	OULD 12.2.1.4.211008 TAKES A LONG TIME TO DELETE A OBJECTCLASS=LDAPSUBENTRY ENTRY
34249006	"SIGNED " VERSION OF THE OIDPWDCN.DLL FOR ORACLE UNIFIED DIRECTORY
33886328	OULD REPLICATION GATEWAY ADMIN- BACEND.LDIF DISAPEARED
33359196	FORK JOIN WFE WITH LEFT-OUTER JOI N ISSUE
33811580	DEFINED VIRTUAL ATTRIBUTES NOT INHERITED BY GROUP-DN
33434640	NULLPOINTEREXCEPTION DURING BINDOPERATION
33438452	USING LOG-CONNECTION-DETAILS ENABLED THROWS NULLPOINTER
33690457	DELETED VALUES REAPPEAR IN MULTIVALUED ATTRIBUTE IN A REPLICATED OUD

Resolved Issues in OUD Bundle Patch (12.2.1.4.220405)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.220405:

Table 1-7 Issues Resolved in 12c Release 12.2.1.4.220405

Bug Number	Description
33593111	ENCRYPT NEWLY ADDED ATTRIBUTE AND/OR SUFFIX FOR ATTRIBUTE ENCRYPTION
31087872	FIX FOR BUG 31087872
28176112	REPLACE DEPRECATED API'S OF JETTY WITH RECOMMENDED
33496397	ANT PRECOMMIT ON OUD MAIN FAILS DUE TO MISSING MESSAGES
33625029	DATA ATTRIBUTE ENCRYPTION CONFIG VALIDATION AND REENCRYPT TASK TO CONSIDER ONLY THE REQUIRED SUFFIXES FOR RE-ENCRYPTION
33818980	ENHANCE VIRTUAL ATTRIBUTE HANDLING IN USER ENTRY CACHE
33716315	REENCRYPT TASK TO HANDLE CANCELLATION OF RECURRING TASK AS WELL AS INDIVIDUAL SCHEDULED TASK.
30784370	INCORRECT OUDSM VERSION IN 12.2.1.4 : POSSIBLE REGRESSION OF BUG :30248015
32656018	--PROPERTIESFILEPATH" IS NOT WORKING WITH OUD STATUS COMMAND
32283362	OUD DOES NOT RESPECT SIZE LIMITS WHEN USING PROXY AUTHORIZATION
32576057	OUD 12C USER PASSWORD POLICY ATTRIBUTES NOT REMOVED FROM UNTRUSTED REPLICA
33377025	MODIFICATIONS RESULTS IN 2 PWDFAILURETIME ATTRIBUTES WHILE REPLICATION WORKS.
32577340	OUD - UPDATES TO SCHEMA NOT BEING WRITTEN OUT TO 99USER.LDIF
33276603	OUD 12.2.1.4 REPLICATION GATEWAY REPLICATING INCOMPLETE TOMBSTONES FROM ODSEE 11
33277588	CREATE-PASSWORD-VALIDATOR --TYPE CHARACTER-SET DISPLAYS AN EXTRA CHARACTER WHEN AND EXCLUDED CHARACTER IS ENCOUNTERED
33517788	OUD12C: ISMEMEBEROF FILTER DOES NOT WORK AS EXPECTED
33521773	AD EXTENSION DOWN AFTER APPLYING THE LATEST OUD BP 33448950 12.2.1.4.211008

 **Note:**

As part of this bundle patch, Entry Cache is enabled by default for OUD instances created after applying the patch. However, if in your deployment scenario, Entry Cache is not required, then you can disable it after creating the instance using the `dsconfig` command.

Resolved Issues in OUD Bundle Patch (12.2.1.4.211008)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.211008:

Table 1-8 Issues Resolved in 12c Release (12.2.1.4.211008)

Bug Number	Description
33340220	OUD 12CPS4 OCT'21 BP - DSREPLICATION ENABLE FAILING WITH NEW LISTENADDRESS1 PARAMETER
32643974	OUD 12C ACI NOT EVALUATED PROPERLY W/SASL EXTERNAL AND OBJECTCLASS=GROUPOFURLS
33055228	REPLICATION NULLPOINTEREXCEPTION CAUSED BY CONFLICTS-HISTORICAL-PURGE-DELAY AND REPLICATION-PURGE-DELAY
25719578	LEVERAGE STRING CONSTANT POOL FOR ACI PERFORMANCE
27870572	OUD11G -SUPPORT MULTI VALUE ATTRIBUTE LIKE GROUP MEMBERSHIP IN CASE OF RDBMS
32814167	DSCONFIG COMMANDS SHOULD NOT HAVE --RESET KEY-STORE-PIN-FILE
32958797	ANALYSIS OF PERFORMANCE ISSUE FOR BUG 32532350
32959469	SUPPORT FOR GCM, AES OPTIONS ETC. FOR ATTRIBUTE ENCRYPTION
32959482	SUPPORT CUSTOM PASSWORD STORAGE SCHEMES
32288501	OUD PROXY- LOAD BALANCING ALGORITHM NOT DETECTING DISABLED BACKENDS
32488611	"LOG-CONNECTION-DETAILS" ENABLED THROWS "NULLPOINTEREXCEPTION"
32440224	LAST-LOGIN-TIME FOR REPLICATED SERVERS LOCATED IN DIFFERENT TIMEZONES
32477736	REPLICATION INITIALIZE FAILS ON BASE DN CONTAINING SLASH CHAR

Table 1-8 (Cont.) Issues Resolved in 12c Release (12.2.1.4.211008)

Bug Number	Description
32690984	CERTIFICATES GET CORRUPTED THROUGH THE REPLICATION GATEWAY:ODSEE-OUT 12.2.1.4
32441706	OUT12.2.1.4.0:PASSWORD POLICY ALLOWING TO RE-USE OLD PASSWORDS STORED IN PWDHIST
32968947	OUT KERBEROS PTA /TMP FILE JAASXXXXXXXXXXXXXXXXXXXXX.CONF
31852977	OUT SHOULD USE SHA256 ALGORITHM IN ALL CASES WHERE AUTO CERTIFICATES ARE GENERATED
32130922	OUT 12C FORKJOIN LDAPSEARCH FAILS WITH COMPLEX FILTER
32038977	OUT REPLICATION STOPPED WHILE BATCH DELETING WITH MANAGEDSAIT CONTROL
31661241	NEED TO DEFINE LISTEN-ADDRESS FOR REPLICATION SERVER

Resolved Issues in OUD Bundle Patch (12.2.1.4.210406)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.210406:

Table 1-9 Issues Resolved in 12c Release (12.2.1.4.210406)

Bug Number	Description
32562107	ODSEE-OUT 12.2.1.4 CERTIFICATES GET CORRUPTED THROUGH THE REPLICATION GATEWAY
25471403	FIX FOR 25471403
31851470	OUT 12C: ISMEMBER SEARCH RECEIVES STACKOVERFLOWERROR
29651080	REPLICATION SUMMARY SHOWS INCORRECT DATA WITH OEM13C AND OUT 12.2.1.3.0
31745920	OUT UNION PROXY SEARCHES RECEIVE A RESULT=4 WHEN PAGE-SIZE=0 FOR WFE
30513440	SUPPORT PASSWORD VALIDATORS AND GENERATORS IN SUBENTRY PASSWORD POLICY
29530047	PASSWORD VISIBLE IN ACCESS LOG FOR DB WORKFLOWS
32547317	FORWARD MERGE OF BUG 29376960 TO MAIN VIEW

Table 1-9 (Cont.) Issues Resolved in 12c Release (12.2.1.4.210406)

Bug Number	Description
32208265	CRYPTO MANAGER ORDERS CIPHERS ALPHABETICALLY (DIFFERENT THEN OTHER SSL HANDLERS)
32065140	REPLICATION IGNORES SCHEMA VIOLATION
31546491	CPU SPIKES AND UTILIZATION RESULTING IN TIMETHREAD ERROR
31878749	STACKING TRANSFORMATIONS MODIFY OPERATION FAILS
31931564	LOUD 12C - LOG-CONNECTION-DETAILS CONFIG INCORRECTLY SHOWING IN FILE BASED AUDIT LOGGER MENU
32019006	SUPPORTING PWDMINLENGTH IN PASSWORD POLICY AT SUBENTRY LEVEL
30666508	NPE WHEN EXECUTING LDAPSEARCH ON OUD PROXY WITH PAGESIZE SET IN LDAPSERVEREXTENSION
31666925	THE OUD-SETUP SCRIPT DOES NOT RECOGNIZE A EXABYTE FS

Resolved Issues in OUD Bundle Patch (12.2.1.4.200827)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.200827:

Table 1-10 Issues Resolved in 12c Release (12.2.1.4.200827)

Bug Number	Description
28401694	ADD OPTION FOR ADDITIONAL BINDDN, CLIENTIP, AND PROTOCOL TO LOGGERS
29868285	OU DSM CRASHES WHEN ACCESSING CORE CONFIG, WITH LATEST BP 28569189
30386441	(JE 7.0.7) INTERRUPTED EXCEPTION MAY CAUSE INCORRECT INTERNAL STATE
30403293	CANNOT UPGRADE 11G BECAUSE OF THE "DS-CFG-FETCH-AUTHENTICATED-USER" PROPERTY
30767720	EXCLUDE SEARCH FILTER IN WORKFLOW CONFIG RETURNS RESULT: 50 OR 80
30832284	LOUD 12C VIRTUAL ATTRIBUTE SUB CONTAINER PASSWORD POLICY INCONSISTENTLY APPLIED
30871004	LOUD 12.2.1.4 RETURN-BIND-ERROR-MESSAGES=TRUE NOT WORKING
30963266	LOUD 12C PASSWORD INVALID WHEN USING BRACE SPECIAL CHARACTER

Table 1-10 (Cont.) Issues Resolved in 12c Release (12.2.1.4.200827)

Bug Number	Description
31013245	ER OUD - S_CONN VALUES IN PROXY ACCESS LOGS SHOULD SHOW HOSTNAME OF DS SERVER
31239817	UNION WF DOES NOT SHOW OUTPUT IN DATA BROWSER TAB OF OUDSM
31246776	OUD12CPS4: COMPLEX QUERIES USING NONEXISTING GROUP MEMBERSHIP RETURN ALL USERS
31336975	UNABLE TO ADD OR MODIFY OBJECT CLASSES AND ATTRIBUTES TO OUD 12C PS4
31377876	REBUILD-INDEX DISABLES BACKEND WHEN USING MIXED DEFINED/ NOTDEFINED ATTRIBUTES
31490532	OUD 12CPS4 JULY2020 BP - UPGRADE OF 12CPS3JULY'20 BP OUD DS INSTANCE TO 12CPS4JULY'20 BP IS FAILING

Resolved Issues in OUD Bundle Patch (12.2.1.4.200526)

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.200526:

Table 1-11 Issues Resolved in 12c Release (12.2.1.4.200526)

Bug Number	Description
29971908	OUD 12C - DSREPLICATION STATUS IGNORES -I ADMINUID WHEN SPECIFIED VIA CLI
30668734	UNABLE TO USE UNDERSCORES IN DNS
30012998	SETTING DEPRECATED PASSWORD STORAGE SCHEME AND ADMIN PWD RESET CLEARS PWDRESET
28467589	START-DS IN DMZ SLOW
30854158	CODE CORRECTION FOR BUG 29676093
29757041	OUD 12C: DIGEST-MD5 SASL AUTH FAILS WITH LDAP 80 IF SEARCHING JOIN VIEW CONTEXT
30651541	OUD 12C - CUSTOM PASSWORD POLICY AND VALIDATOR IGNORED ON ACCOUNT CREATION
30440259	OUD INVALID PWDGRACEUSETIME ATTRIBUTE CREATED BY EUS.
30521914	AFTER INITIALIZATION THE RGW STATUS SHOWS AS "BAD DATA SET"

Table 1-11 (Cont.) Issues Resolved in 12c Release (12.2.1.4.200526)

Bug Number	Description
30534318	OLD 11G: HIGH CPU AND CAUSING LOSS OF SERVICE
29026772	ISSUE WITH FORCE-CHANGE-ON-ADD AFTER APPLYING BUNDLE PATCH 11.1.2.3.181016

Resolved Issues in OUD Bundle Patch 12.2.1.4.200204

The following table lists the issues resolved in OUD Bundle Patch 12.2.1.4.200204:

Table 1-12 Issues Resolved in OUD Bundle Patch 12.2.1.4.200204:

Bug Number	Description
30645038	OLD 12.2.1.3 JAN'20 BP - COUPLE OF NEWLY ADDED CORE-ENTRYCACHE TESTS FAILING IN FARM EXECUTION
30265103	OLD11G - BEFORE BP DS-RLIM-IDLE-TIME-LIMIT ATT. WAS IN SECS AFTER BP IS MS
30367492	UNINSTALL FAILS DUE TO RESOLVING HOST TO 0.0.0.0
29885985	OLD ALLOWS ADDING USER INTO GROUP EVEN IF USER DOESN'T EXIST WHEN RI IS ENABLED
29661762	CUSTOM PASSWORD POLICIES REQUIRE A INDIVIDUAL "PASSWORDSTORAGESCHEME"
30074000	Fix for Bug 30074000
29682036	FORKJOIN WFE WITH LEFT-OUTER-JOIN DOES NOT WORK
28135591	UNABLE TO SPECIFY A DENIED-CLIENT HOSTNAME THAT BEGINS WITH A NUMERIC VALUE
29945677	ISMEMBEROF SUBSTRING SEARCH FILTER RETURNS NO ENTRIES
30094884	REGRESSION FOR BUG 29724794
29418242	(JE 7.0.7) ENVIRONMENT MUST BE CLOSED, CAUSED BY: COM.SLEEPYCAT.JE.THREADINTERRU

Known Issues and Workarounds

For known issues and workarounds, log in to [My Oracle Support](#), and then search for 2602696.1 or 2636943.1, which is the ID of the document, Oracle Fusion Middleware 12.2.1.4.0 Known Issues.

For Known Issues specific to Oracle Unified Directory Bundle Patches, search for Doc ID 2636943.1 in [My Oracle Support](#).

For information about OPatch issues, log in to [My Oracle Support](#) and use the OPatch version provided with the product.

Documentation Updates

This section describes documentation updates for this release.

OUDSM Auto Redeployment Instructions

The `oudsm.ear` file is shipped along with the OUD Bundle Patch.

```
(bpatchnumber/files/oracle.idm.oud.odsm/12.2.1.4.0/  
oracle.idm.oud.odsm.symbol/odsm/oudsm.ear)
```

A new `oudsm.ear` file is included with OUD Bundle Patch 12.2.1.4.241003 would be patched at the following location:

```
$ORACLE_HOME/oud/odsm/oudsm.ear
```

When you restart the Server for the first time after applying the patch, it will automatically redeploy the new `oudsm.ear` file. Therefore, you might experience a slower restart of the Server. You must look at the logs related to `oudsm.ear` file deployment.

If for any reason the `oudsm.ear` file deployment fails during the first restart of the Server, then you manually need to redeploy the file.

Related Documents

For more information, see the following resources:

- [Oracle Fusion Middleware Documentation](#)
This contains documentation for all Oracle Fusion Middleware 12c products.
- [Oracle Technology Network](#)
This site contains additional documentation that is not included as part of the documentation libraries.

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Oracle Fusion Middleware Oracle Unified Directory Bundle Patch Readme, 12c (12.2.1.4.241003)

G14512-01

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