Oracle® Fusion Middleware

Oracle Unified Directory Bundle Patch Readme

12c (12.2.1.4.211008)

F46674-04

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Oracle Unified Directory Bundle Patch Readme

This document describes Bundle Patch 12.2.1.4.211008 for Oracle Unified Directory.

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

> ✎ **Note:**
>
> For issues documented after the release of OUD Bundle Patch 12.2.1.4.211008, 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.

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New Features and Enhancements in OUD Bundle Patch 12.2.1.4.211008

Oracle Unified Directory 12.2.1.4.211008 BP includes the following new features and enhancements:

Improving OUD Performance

To improve the OUD performance, some changes are made in the default OUD configuration parameters. Some log publishers are now disabled by default to increase OUD performance by reducing disk I/O. This will affect only new instances. The disabled log publishers can be enabled again using the `dsconfig` command after you set up the instances. To enable a log publisher, refer Enabling a Log Publisher.

Listen Address for Replication Server

In this release, a new configurable attribute is introduced to configure replication listen address. Currently only replication listen port is available for configuration. The default listen address is 0.0.0.0. Now the replication listen address is configurable to support multiple replication server with the same replication port in a single cluster node with multiple logical IPs. For more information, refer Enabling Replication Between Two Servers with dsreplication.

Maintain Same Timezone

In this release, a new configurable attribute namely, **last-login-time-zone** is introduced to maintain same timezone across all the OUD instances for attribute value **last-login-time**. For more information, refer Default Password Policy Properties.
Multi-Value Attribute

In RDBMS workflow element, when certain table structures contained multiple rows for the same entity (including joins in some cases), it returned duplicate records in the LDAP search results. This has now been fixed and all attribute values are merged together and returned as part of the LDAP entry. For more information, refer Accessing Remote Data Sources.

User-defined Password Storage Scheme
The user-defined password storage scheme in Oracle Unified Directory provides the ability to implement and deploy custom password hashing scheme into the server. This framework provides an ability to implement schemes which are not available out of the box in Oracle Unified Directory. For more information, refer Managing Password Policies.

AES-GCM based Attribute Encryption

Oracle Unified Directory now supports stronger AES GCM based attribute encryption algorithms. AES-256-GCM is the default attribute encryption algorithm starting this release. For re-encryption of existing data, OUD now supports data reencryption using scheduled task. For more information, refer Understanding Data Encryption in Oracle Unified Directory.

Customizing Self Signed Certificate Generation Options

Oracle Unified Directory now uses RSA key algorithm with 3072 bits key and SHA256 with RSA signing algorithm for any new self-signed certificates it generates. During OUD setup, you can now customize the key algorithm, key bit size and signature algorithm for the self-signed certificate. For more information, refer Configuring Security Between Clients and Servers

Support for Custom Password Storage Scheme

Oracle Unified Directory now supports User-defined password storage scheme. User-defined password storage scheme provides the ability to implement and deploy custom password hashing schemes into the server. For more information, refer Managing Password Policies. For more information, refer Managing Password Policies.

Understanding Bundle Patches

This section describes bundle patches and explains differences between 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 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 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.

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.

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 13.9.4.2.7 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 13.9.4.2.7.

- 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 than 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 errors out, 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 to 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 file of an OUD instance.

You must complete the following prerequisites for applying the bundle patch:

1. Set `ORACLE_HOME` environment variable to Oracle Middleware Home Location (under which OUD 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 `ORACLE_HOME` is set correctly by running the following command.

   Unix

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

   Windows

   ```
   dir %ORACLE_HOME%\OPatch\opatch.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 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/OUD/bin/stop-ds
      ```

      Windows

      ```
      ORACLE_HOME\INSTANCE_NAME\OUD\bat\stop-ds.bat
      ```

   b. **Stop 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 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
```

Windows

```
DOMAIN_HOME\bin\stopManagedWebLogic.cmd
```

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 13.9.4.2.7) 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 with OPatch

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

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.
```

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 p33448950_122140_Generic.zip
   ```

   Windows

   ```
   unzip -d PATCH_TOP p33448950_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
   > p33448950_122140_Generic.zip
   > ```

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

   Unix

   ```
   $ cd PATCH_TOP/33448950
   ```

Windows

```
cd PATCH_TOP\33448950
```

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:**
   >
   > OUD patch version can be determined from the output, based on the values for `Build ID, Platform Version` and `Label Identifier` fields.

2. Upgrade Oracle Unified Directory server instances that are associated with the `ORACLE_HOME` directory.

> **Note:**
>
> From October 21 BP (12.2.1.4.211008), this Step 2 of `--upgrade` is not required.

For example:

Unix

```
$ [ORACLE_HOME]/<OUD-Instance-Path>/OUD/bin/start-ds --upgrade
```

Windows

```
[ORACLE_HOME]/<OUD-Instance-Path>\OUD\bat\start-ds.bat --upgrade
```

The preceding step is executed to upgrade OUD instance according to the patched version of OUD in ORACLE_HOME. If start-ds is executed to start OUD instance without executing start-ds --upgrade, following message will be displayed: Instance needs to be upgraded. Please run the start-ds command with the option "--upgrade"

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

Start 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 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

4. 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.

5. 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 <wls_ods1>
<ADMIN_SERVER_URL>
```

Windows

```
DOMAIN_HOME\bin\startManagedWebLogic.cmd <wls_ods1>
<ADMIN_SERVER_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.

6. 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 upgraded instance for backward compatibility. You will see a warning during upgrade process stating that those attributes are still populated. Use `dsconfig` to remove the value of the attributes after upgrade has been done successfully.

   b. If a truststore configuration entry does not have its pin attribute populated then you will see a warning during upgrade and 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 trusstore 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 upgrade or server startup can be ignored.

Creating the File based Access Control Log Publisher

This step is optional. You can create a File Based Access Control Log publisher for diagnosing ACI evaluation. This 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.opends.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 NodeManager. 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 Home Location"
   ```

   Windows

   ```
   <prompt> set ORACLE_HOME="Oracle 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 33448950
```

Windows

```
[ORACLE_HOME]\OPatch\opatch.bat rollback -id 33448950
```

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

```
$ cat [ORACLE_HOME]/<dsInstanceName>/OUD/config/buildinfo
12.2.1.4.211008.2104060218
```

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
12.2.1.4.211008.2104060218
```

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-backup, restore configuration and schema from the backup 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 (12.2.1.4.211008)
- 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 (12.2.1.4.211008)

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

Table 1-1   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"

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

Bug Number	Description
32440224	LAST-LOGIN-TIME FOR REPLICATED SERVERS LOCATED IN DIFFERENT TIMEZONES
32477736	REPLICATION INITIALIZE FAILS ON BASE DN CONTAINING SLASH CHAR
32690984	CERTIFICATES GET CORRUPTED THROUGH THE REPLICATION GATEWAY:ODSEE-OUD 12.2.1.4
32441706	OUD12.2.1.4.0:PASSWORD POLICY ALLOWING TO RE-USE OLD PASSWORDS STORED IN PWDHIST
32968947	OUD KERBEROS PTA /TMP FILE JAASXXXXXXXXXXXXXXXXXXX.CONF
31852977	OUD SHOULD USE SHA256 ALGORITHM IN ALL CASES WHERE AUTO CERTIFICATES ARE GENERATED
32130922	OUD 12C FORKJOIN LDAPSEARCH FAILS WITH COMPLEX FILTER
32038977	OUD 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 1-2   Issues Resolved in 12c Release (12.2.1.4.210406)

Bug Number	Description
32562107	ODSEE-OUD 12.2.1.4 CERTIFICATES GET CORRUPTED THROUGH THE REPLICATION GATEWAY
25471403	FIX FOR 25471403
31851470	OUD 12C: ISMEMBER SEARCH RECEIVES STACKOVERFLOWERROR
29651080	REPLICATION SUMMARY SHOWS INCORRECT DATA WITH OEM13C AND OUD 12.2.1.3.0
31745920	OUD UNION PROXY SEARCHES RECEIVE A RESULT=4 WHEN PAGE-SIZE=0 FOR WFE
30513440	SUPPORT PASSWORD VALIDATORS AND GENERATORS IN SUBENTRY PASSWORD POLICY

Table 1-2   (Cont.) Issues Resolved in 12c Release (12.2.1.4.210406)

Bug Number	Description
29530047	PASSWORD VISIBLE IN ACCESS LOG FOR DB WORKFLOWS
32547317	FORWARD MERGE OF BUG 29376960 TO MAIN VIEW
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 MODIFIY OPERATION FAILS
31931564	OUD 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 1-3   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	OUDSM CRASHES WHEN ACCESSING CORE CONFIG, WITH LATEST BP 28569189
30386441	(JE 7.0.7) INTERRUPTEDEXCEPTION 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	OUD 12C VIRTUAL ATTRIBUTE SUB CONTAINER PASSWORD POLICY INCONSISTENTLY APPLIED

Table 1-3　(Cont.) Issues Resolved in 12c Release (12.2.1.4.200827)

Bug Number	Description
30871004	OUD 12.2.1.4 RETURN-BIND-ERROR-MESSAGES=TRUE NOT WORKING
30963266	OUD 12C PASSWORD INVALID WHEN USING BRACE SPECIAL CHARACTER
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 1-4　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

Table 1-4   (Cont.) Issues Resolved in 12c Release (12.2.1.4.200526)

Bug Number	Description
30440259	OUD INVALID PWDGRACEUSETIME ATTRIBUTE CREATED BY EUS.
30521914	AFTER INITIALIZATION THE RGW STATUS SHOWS AS "BAD DATA SET"
30534318	OUD 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 1-5   Issues Resolved in OUD Bundle Patch 12.2.1.4.200204:

Bug Number	Description
30645038	OUD 12.2.1.3 JAN'20 BP - COUPLE OF NEWLY ADDED CORE-ENTRYCACHE TESTS FAILING IN FARM EXECUTION
30265103	OUD11G - 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	OUD 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, 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.

> **Note:**
>
> Refer Admin REST APIs for Oracle Unified Directory.

OUDSM Auto Redeployment Instructions

The `oudsm.ear` file is shipped along with the OUD bundle patch.

```
(bppatchnumber/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 12.2.1.4.211008 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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