Oracle® Audit Vault

Release Notes

Release 10.3

E23572-03

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These *Release Notes* contain important information that was not included in the Oracle Audit Vault Release 10.3 documentation.

This document contains these topics:

1 Downloading the Latest Version of This Document

You can download the most current version of this document from the following Web site:

`http://www.oracle.com/technetwork/database/audit-vault/documentation/index.html`

2 Upgrading from Oracle Audit Vault 10.2.3.2.*x* to 10.3

This section contains the following topics:

2.1 Before You Begin the Upgrade Process

Before you begin the upgrade process, apply the latest bundle patch (BP6) on the Oracle Audit Vault Server installation or Agent installation of Release 10.2.3.2.*x* to upgrade it to Release 10.2.3.2.6. The upgrade checks for the specified Release 10.2.3.2.6 and will not proceed if the installation is not updated to this bundle patch. You can find BP6 from My Oracle Support by searching for Patch ID 12703193.

The Web site for My Oracle Support is:

https://support.oracle.com

2.2 Upgrading an Oracle Audit Vault Server Single Instance

After you have installed the bundle patch (BP6) on your Oracle Audit Vault Server installation as described in Section 2.1, you are ready to complete the procedures in this section.

> **Note:** You must complete each step in these processes successfully before proceeding to the next step. Inspect all output and log files for failures, and take necessary corrective action to determine the recovery procedure if a failure occurs, referring to the appropriate Oracle documentation for the tool that has failed. If in doubt, contact Oracle Support.

- Required Steps in Oracle Audit Vault Server 10.2.3.2.6 Oracle Home
- Required Steps in Oracle Audit Vault Server 10.3 Oracle Home

2.2.1 Required Steps in Oracle Audit Vault Server 10.2.3.2.6 Oracle Home

1. Back up the Oracle Audit Vault database.

   To use Oracle Recovery Manager (RMAN) to back up the database:

   a. Start RMAN:

      ```
      $ rman target /
      ```

   b. Issue the following RMAN commands. In the following example, the tag is named `before_upgrade`.

      ```
      BACKUP DATABASE FORMAT 'backup_directory%U' TAG before_upgrade;
      BACKUP CURRENT CONTROLFILE FORMAT 'save_controlfile_location';
      ```

   See *Oracle Database Backup and Recovery Basics* for more information about backing up a database.

2. Back up the Audit Vault Server home directory.

   Back up or copy these files to another directory until after you have tested the upgrade.

3. Set the environment variables for the Oracle Audit Vault Server Release 10.2.3.2.6 installation.

   See *Oracle Audit Vault Administrator's Guide*, Chapter 2, "Registering Source Databases and Collectors."

4. Disable Oracle Database Vault in the Oracle Audit Vault Server 10.2.3.2.6 installation.

   See *Oracle Database Vault Administrator's Guide* for Release 10.2.0.5, Appendix B, "Disabling and Enabling Oracle Database Vault."

5. From the Audit Vault Server, log into SQL*Plus as user `SYS` with the `SYSDBA` privilege, and then disable the Oracle Database Vault triggers.

   ```
   sqlplus sys as sysdba
   ```

```
Enter password: password

SQL> ALTER TRIGGER DVSYS.DV_BEFORE_DDL_TRG DISABLE;
SQL> ALTER TRIGGER DVSYS.DV_AFTER_DDL_TRG DISABLE;
```

6. Ensure that `SYS/passwd@SID AS SYSDBA` is in a password file, by running the `orapwd` utility.

```
cd $ORACLE_HOME/dbs
orapwd file=orapw$ORACLE_SID
password=password nosysdba=n force=y
```

7. Drop the Oracle Enterprise Manager Database Control repository.

```
emca -deconfig dbcontrol db -repos drop
```

8. Stop the Audit Vault Server.

```
avctl stop_av
```

9. Shut down Oracle Database.

```
SQL> SHUTDOWN IMMEDIATE
```

10. Stop the listener.

```
lsnrctl stop
```

2.2.2 Required Steps in Oracle Audit Vault Server 10.3 Oracle Home

1. Unset the `TZ` environment variable.
   - In CSH:

     ```
     unsetenv TZ
     ```

   - In KSH:

     ```
     export TZ=
     ```

2. Install Oracle Audit Vault Server 10.3 in Software Only mode.

   During the installation, select an empty directory for the `$ORACLE_HOME` directory. Do not reuse the existing Audit Vault `$ORACLE_HOME` directory.

   Invoke the installer as follows:

   ```
   ./runInstaller oracle_install_db_SID=SID
   ```

   SID is the SID of the Audit Vault 10.2.3.2.6 Server database that you are upgrading from.

3. Disable Oracle Database Vault.

   See *Oracle Database Vault Administrator's Guide* for Release 11.2.0.3, Appendix B, "Disabling and Enabling Oracle Database Vault."

4. Set the environment variables for the Oracle Audit Vault Server Release 10.3 installation.

   See Chapter 2, Checking and Setting Environment Variables, in the *Oracle Audit Vault Administrator's Guide* for more information.

5. Set the `ORACLE_UNQNAME` environment variable to match the `ORACLE_SID` value.

For example, if your shell is CSH:

```
setenv ORACLE_UNQNAME oracle_sid
```

6. Run Net Configuration Assistant (NetCA) interactively.

   When the NetCA graphical interface appears, follow the instructions, and use the same listener name and listener port as in the release 10.2.3.2.6 installation. You can find these values in the Release 10.2.3.2.6 `$ORACLE_HOME/network/admin/listener.ora` file.

7. Start the listener.

   ```
   lsnrctl start
   ```

8. Run Database Upgrade Assistant (DBUA) manually by using the same SID as your 10.3.2.6 installation.

   ```
   dbua -silent -sid 10.2.3.2.6_SID -oracleHome 10.2.3.2.6_Oracle_home_directory
   -disableArchiveLogMode -recompile_invalid_objects true -degree_of_parallelism 2
   -upgradeTimezone -emConfiguration LOCAL -dbsnmpPassword password
   -sysmanPassword password
   ```

9. In SQL*Plus, log in as `SYS` with the `SYSDBA` privilege and then set the `COMPATIBLE` initialization parameter to reflect the Release 11.2.0.3 upgrade.

   ```
   sqlplus sys as sysdba
   Enter password: password

   SQL> ALTER SYSTEM SET COMPATIBLE='11.2.0.3.0' SCOPE=SPFILE;
   ```

10. Restart Oracle Database.

    ```
    SQL> SHUTDOWN IMMEDIATE
    SQL> STARTUP
    ```

11. Run the `AVCA` upgrade script to upgrade Audit Vault, as follows:

    ```
    avca upgrade -old_oh 10.2.3.2.6_Oracle_home
    ```

    When this script completes, the Audit Vault Server 10.3 upgrade is successful and Oracle Database Vault is automatically enabled.

12. After the upgrade script completes successfully, run the following `AVCTL` command and check that the result shows `10.3.0.0.0`:

    ```
    avctl show_av_status
    ```

2.3 Upgrading an Oracle Audit Vault Server Oracle RAC Instance

After you have installed the bundle patch (BP6) on your Oracle Audit Vault Server installation as described in Section 2.1, you are ready to complete the procedures in this section.

> **Note:** You must complete each step in these processes successfully before proceeding to the next step. Inspect all output and log files for failures, and take necessary corrective action to determine the recovery procedure if a failure occurs, referring to the appropriate Oracle documentation for the tool that has failed. If in doubt, contact Oracle Support.

- Required Steps in Oracle Audit Vault Server 10.2.3.2.6 Oracle Home for Oracle RAC
- Upgrade Steps In Oracle Audit Vault Server 10.3 Oracle Home for Oracle RAC

2.3.1 Required Steps in Oracle Audit Vault Server 10.2.3.2.6 Oracle Home for Oracle RAC

1. Check the Oracle RAC Cluster Ready Services (CRS) Version.

   Ensure that the CRS version is Release 11.2.0.3 or later. If the CRS version is not Release 11.2.0.3 or later, then you must first patch CRS to Release 11.2.0.3 before continuing with this upgrade.

2. Set the environment variables for the Oracle Audit Vault Server Release 10.2.3.2.6 installation.

   See *Oracle Audit Vault Administrator's Guide*, Chapter 2, "Registering Source Databases and Collectors."

3. Do the following on all nodes:

   a. Disable Oracle Database Vault in the Oracle Audit Vault Server 10.2.3.2.6 installation, as described in *Oracle Database Vault Administrator's Guide*, Appendix B, "Disabling and Enabling Oracle Database Vault."

   b. From the Audit Vault Server, log into SQL*Plus as user `SYS` with the `SYSDBA` privilege and then disable the Oracle Database Vault triggers.

   ```
   sqlplus sys as sysdba
   Enter password: password

   SQL> ALTER TRIGGER DVSYS.DV_BEFORE_DDL_TRG DISABLE;
   SQL> ALTER TRIGGER DVSYS.DV_AFTER_DDL_TRG DISABLE;
   ```

   c. Ensure that `SYS/passwd@SID AS SYSDBA` is in a password file, by running the `orapwd` utility.

   ```
   cd $ORACLE_HOME/dbs
   orapwd file=orapw$ORACLE_SID
   password=password nosysdba=n force=y
   ```

4. Drop the Oracle Enterprise Manager Database Control repository on the main node, as follows:

   ```
   emca -deconfig all db -cluster -repos drop
   ```

5. Stop the Audit Vault Server.

   ```
   avctl stop_av
   ```

6. Shut down Oracle Database.

   ```
   SQL> SHUTDOWN IMMEDIATE
   ```

7. Stop the listener.

   ```
   lsnrctl stop
   ```

2.3.2 Upgrade Steps In Oracle Audit Vault Server 10.3 Oracle Home for Oracle RAC

1. Check the Oracle RAC Cluster Ready Services (CRS) Version.

   Ensure that the CRS version is Release 11.2.0.3 or later. If the CRS version is not Release 11.2.0.3 or later, then you must first patch CRS to Release 11.2.0.3 before continuing with this upgrade.

2. Unset the `TZ` environment variable.

   - In CSH:

     ```
     unsetenv TZ
     ```

   - In KSH:

     ```
     export TZ=
     ```

3. Install Oracle Audit Vault Server 10.3 in Software Only mode on the main node.

   During the installation, select an empty directory for the `$ORACLE_HOME` directory. Do not reuse the existing Audit Vault `$ORACLE_HOME` directory.

   ```
   ./runInstaller oracle_install_db_SID=SID
   ```

   Set *`SID`* to the unique database name of the Audit Vault 10.2.3.2.6 Server you are upgrading from.

   NOTE: In a RAC environment, the database unique name differs from the database SID; the SID is node-specific, whereas the database unique name is not.

4. Disable Oracle Database Vault.

   See *Oracle Database Vault Administrator's Guide* for Release 11.2.0.3, Appendix B, "Disabling and Enabling Oracle Database Vault."

5. Set the environment variables for the Oracle Audit Vault Server Release 10.3 installation.

   See *Oracle Audit Vault Administrator's Guide*, Chapter 2, "Checking and Setting Environment Variables," in for more information.

6. Set the `ORACLE_UNQNAME` environment variable to match the `ORACLE_SID` value. For example, if your shell is CSH:

   ```
   setenv ORACLE_UNQNAME oracle_sid
   ```

7. On the main node, edit the `$ORACLE_HOME/install/netca_cust.rsp` file to match the listener port numbers of the Oracle Audit Vault Server 10.2.3.2.6 installation.

   For example, if the local listener in your Oracle Audit Vault Server 10.2.3.2.6 installation was configured to run at port 1522, then update the `$ORACLE_HOME/install/netca_cust.rsp` file in your Oracle Audit Vault Server 10.3 home directory to port 1522. To do this, update the `LISTENER_PROTOCOLS` and `NSN_PROTOCOLS` entries, which contain the port number.

8. On the main node, run NetCA:

   ```
   $ORACLE_HOME/bin/netca -silent -responsefile $ORACLE_HOME/install/netca_cust.rsp
   ```

   Ensure that it completes without errors.

9. Start the listener.

   ```
   lsnrctl start
   ```

10. Run DBUA in interactive mode and accept all the defaults.

    ```
    dbua
    ```

11. Choose the local listener, that is, LISTENER_*sid*, when DBUA prompts you to Register the database with All Listeners.

    You can choose to register with all the listeners, but Oracle recommends that you register the local listener.

12. In SQL*Plus, log in as SYS with the SYSDBA privilege and then set the COMPATIBLE initialization parameter to reflect the Release 11.2.0.3 upgrade.

    ```
    sqlplus sys as sysdba
    Enter password: password

    SQL> ALTER SYSTEM SET COMPATIBLE='11.2.0.3.0' SCOPE=SPFILE;
    ```

13. Restart Oracle Database.

    ```
    SQL> SHUTDOWN IMMEDIATE
    SQL> STARTUP
    ```

14. Run the AVCA upgrade script to upgrade Audit Vault, as follows:

    ```
    avca upgrade old_oh 10.2.3.2.6_Oracle_home_directory -rac Y -racnode
    node1,node2
    ```

15. Enable Oracle Database Vault manually on all the other nodes.

16. After the upgrade script completes successfully, run the following AVCTL command and check that the result shows 10.3.0.0.0:

    ```
    avctl show_av_status
    ```

2.4 Upgrading the Oracle Audit Vault Agent

This section contains:

- Before You Begin the Upgrade Process
- Information Required to Upgrade the Audit Vault Agent to 10.3
- Required Steps to Upgrade Audit Vault Agent to 10.3

2.4.1 Before You Begin the Upgrade Process

Before upgrading an Oracle Audit Vault Agent to Release 10.3, ensure that you have already upgraded the Oracle Audit Vault Server to Release 10.3. An Audit Vault Server can only manage agents with version numbers less than or equal to its own.

Before you begin the upgrade, apply the latest bundle patch (BP6) on the Oracle Audit Vault Agent installation of Release 10.2.3.2.*x* to upgrade it to Release 10.2.3.2.6.

2.4.2 Information Required to Upgrade the Audit Vault Agent to 10.3

You must have the agent user name and password that were provided during the initial installation of the Audit Vault Agent. For example, if the Release 10.2.3.2.6 agent name is myagent and it is configured to use the user name myagentuser, then you must use the same agent name/user name for the Release 10.3 agent as well, because it is an upgrade.

If you do not remember the agent user name, then you can find it by logging into the Audit Vault Console, and clicking on the **Agents** tab. You may need to view or edit the agent to obtain the user name.

If you cannot remember the agent password, follow the instructions in Chapter 5, Section 5.4.4, "Changing the AV_AGENT Password," in the *Oracle Audit Vault Administrator's Guide*.

2.4.3 Required Steps to Upgrade Audit Vault Agent to 10.3

1. Install Audit Vault Agent 10.3.

   See *Oracle Audit Vault Agent Installation Guide* and "Information Required to Upgrade the Audit Vault Agent to 10.3" on page 1-7.

2. After the installation completes successfully, set the environment variables to match your Audit Vault Agent Release 10.3 `$ORACLE_HOME` directory.

   See Oracle Database Vault Administrator's Guide, Release 10.3, Chapter 2, "Registering Source Databases and Collectors."

3. Run the `AVCA` upgrade script:

   ```
   avca upgrade -old_oh 10.2.3.2.6_Agent_Oracle_home
   ```

   When this script completes, the Audit Vault Agent 10.3 upgrade is successful.

3 Postinstallation Tasks

After you install Oracle Audit Vault, check if there is a patch set or critical patch update (CPU) available. Before applying any Oracle Audit Vault patch sets, back up your Oracle Audit Vault database, the Oracle Audit Vault Server home, and the Oracle Audit Vault collection agent home. See Section 3.1 for more information.

This section describes the following postinstallation tasks if you need to update this patch:

- Back Up and Recovery of Oracle Audit Vault
- Critical Patch Update (CPU)

3.1 Back Up and Recovery of Oracle Audit Vault

Back up the files before you begin a critical patch upgrade and keep these files until you have tested the upgrade.

3.2 Critical Patch Update (CPU)

A CPU is a collection of patches for security vulnerabilities. It also includes non-security fixes required (because of interdependencies) by those security patches. CPUs are cumulative, and they are provided quarterly on the Oracle Technology Network (OTN). As a best practice, apply the latest CPUs to the Oracle Audit Vault Server.

For general information about CPUs, visit the following Web site:

`http://www.oracle.com/security/critical-patch-update.html`

For specific information about critical patch updates and security alerts, see:

`http://www.oracle.com/technology/deploy/security/alerts.htm`

4 General Installation: All Platforms

This section describes known issues and workarounds for single instance and Oracle installations on all platforms.

This section contains:

4.1 Errors in avca.log After a Server Upgrade

When you upgrade the Audit Vault Server from a previous release, error messages appear in the `$ORACLE_HOME/av/log/avca.log` file. This problem does not affect the Audit Vault agent installation.

These error messages are as follows:

```
ORA-00001: unique constraint (DVSYS.*) violated
ORA-00955: name is already used by an existing object
ORA-02260: table can have only one primary key
ORA-02261: such unique or primary key already exists in the table
ORA-02275: such a referential constraint already exists in the table
ORA-02303: cannot drop or replace a type with type or table dependents
ORA-04042: procedure, function, package, or package body does not exist
ORA-01920: user name '*' conflicts with another user or role name
ORA-01921: role name '*' conflicts with another user or role name
ORA-01951: ROLE 'AV_*' not granted to 'SYS'
ORA-01952: system privileges not granted to 'DBA'
ORA-24145: evaluation context DVSYS.* already exists
```

Workaround: You can ignore these error messages.

Oracle Bug: 8489866

4.2 Invalid Objects Appear After Upgrade of Single Instance Database from Audit Vault 10.2.3.2.6 to 10.3

After you upgrade from Audit Vault Release 10.2.3.2.*x* to Release 10.3, invalid objects may appear.

For example:

```
SQL> SELECT OBJECT_NAME, OBJECT_ID, OWNER FROM ALL_OBJECTS WHERE STATUS='INVALID';

OBJECT_NAME                    OBJECT_ID OWNER
------------------------------ ---------- ------------------------------
DV$3                                71282 DVSYS
DV$4                                71283 DVSYS

2 rows selected.
```

Workaround: Run the `UTL_RECOMP.RECOMP_SERIAL` PL/SQL procedure to recompile the invalid objects.

```
exec utl_recomp.recomp_serial('DVSYS');
```

Oracle Bug: 13389960

4.3 Audit Vault Agent Deinstallation Error

When deinstalling Audit Vault Agent from home, you may see the following error.

```
AVAGENT DEINSTALL FROM HOME EXISTING WITH THE FOLLOWING ERROR
------------------------------------------------------------------------

## [START] Oracle install clean ##

ERROR: null
Exited from program.


############# ORACLE DEINSTALL & DECONFIG TOOL END #############
------------------------------------------------------------------------
```

Workaround: You can ignore this message. The prompt returns following the displayed message.

Oracle Bug: 13400226

4.4 Errors When Running DBUA During Upgrade for Oracle RAC

During the Audit Vault Server upgrade process from Audit Vault Release 10.2.3.6 to 10.3 for Oracle RAC installations, the following errors appear when the upgrade process reaches the Enterprise Manager repository stage while running Database Upgrade Assistant (DBUA):

- `ORA-01403: no data found`
- `ORA-01704: string literal too long`

Workaround: You can ignore these messages. The upgrade process will complete successfully.

Oracle Bug: 13458418

4.5 Oracle RAC Remote Databases Down on IBM AIX on Power Systems After Installation

On Oracle RAC systems on the IBM AIX on Power platform, after the Oracle Audit Vault Server RAC installation has completed, the remote database instances may be down.

Workaround: Use the following command to start each remote database instance from the primary node:

```
$ORACLE_HOME/bin/srvctl start instance -d database_SID -i instance_SID
```

Oracle Bug: 13387318

5 General Administration and Configuration Issues

This section contains:

5.1 Accessing Audit Vault Console on Oracle as Auditor Fails

After you install the Audit Vault Server on an Oracle cluster, accessing the Audit Vault console using the `AV_AUDITOR` role fails on some versions of Internet Explorer (IE). After you log in as `AV_AUDITOR`, there may be an error.

Workaround: If you log in as `AV_AUDITOR`, and see an error right after logging in, click on the **Diagnose Network Problem** button. You should then be able to log in.

Oracle Bug: 13369982

5.2 OSAUD Collector Crashing When Reading syslog.conf File

When used to collect syslog data, the OSAUD collector can crash continuously and without recovery if the `syslog.conf` file was not created with the proper syntax.

Workaround: Ensure that you created the `syslog.conf` file using the correct syntax. Refer to the operating system documentation for information about editing the `syslog.conf` file and the proper syntax to use. If an invalid `syslog.conf` syntax is causing the collector crash, then fix the `syslog.conf` file. After you restart the OSAUD collector, then the collector activities should resume. To restart the collector, run the `avctl stop_collector` and `avctl start_collector` commands using the following syntax:

```
avctl stop_collector -collname collector_name -srcname source_name
```

```
avctl start_collector -collname collector_name -srcname source_name
```

Oracle Bug: 13498703

5.3 Agent OC4J Agent Core Dumps When the JAVA_COMPILER Environment Variable Is Set

On the IBM AIX on POWER Systems (64-Bit) system, if the `JAVA_COMPILER` environment variable is set, then the agent OC4J may dump core when you try to run the `avctl start_collector` command.

Workaround: Follow these steps:

1. Unset the `JAVA_COMPILER` environment variable.

   For example:

   ```
   unset JAVA_COMPILER
   ```

2. Restart the agent.

   ```
   avctl stop_agent
   avctl start_agent
   ```

Oracle Bug: 13567520

6 Source Database Configuration Issues

There are no known source database configuration issues for Oracle Audit Vault.

7 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 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.

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