# **Oracle® Database Vault**

Release Notes

10g Release 1 (10.2.0.5) for Linux X86

B28934-07

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These Release Notes describe issues you may encounter with Oracle Database Vault 10g Release 1 (10.2.0.5). The Oracle Database Vault installation is covered in detail in *Oracle Database Vault Installation Guide*.

This document may be updated after it is released. To check for updates to this document and to view other Oracle documentation, see the Documentation section on the Oracle Technology Network (OTN) Web site:

http://www.oracle.com/technetwork/indexes/documentation/index.html

This document contains the following sections:

- Installation Issues and Recommendations
- Usage Issues and Recommendations
- Frequently Asked Questions About Installation
- Miscellaneous Notes
- Documentation Accessibility

### 1 Installation Issues and Recommendations

This section describes the known issues pertaining to installation. It also provides the workarounds that you can use.

This section contains:

- Database Vault Installation Fails with "Installer Cannot Start the Selected Database" Error
- DVCA Fails if the SID Is Longer Than 8 Characters
- Cannot Install Oracle Database Vault in a Data Guard Environment
- Enterprise Manager Does Not Start Automatically
- Unable to Log In to Enterprise Manager As the SYS User After Database Vault Installation
- Database Instance and Listener Do Not Start Automatically on Oracle RAC Remote Nodes After Installation
- Error When Installing Database Vault for a Database That Does Not Have Enterprise Manager Configured
- Cloned Database Vault Home Contains Invalid Objects
- Error Log Created After Database Vault Installation



- Error Occurs When Oracle Database Vault Security Is Configured on a Remote Node
- Swap Space Requirement Prerequisite Test Fails
- DVCA Error During Database Vault Installation
- Invalid Objects After Installing Oracle Database Vault

# 1.1 Database Vault Installation Fails with "Installer Cannot Start the Selected Database" Error

When you install Oracle Database Vault in an Oracle Enterprise Edition Oracle home directory, the following error may appear:

Error1: The Installer cannot start the selected database. Start the database manually before installing Oracle Database Vault

This error can occur if the host string defined for the tnsnames.ora file is unresolved.

Workaround: Use one of the following workaround solutions:

- Copy the tnsnames.ora file to the default location, which is the \$ORACLE\_ HOME/network/admin directory.
- Comment out or remove the LOCAL\_LISTENER setting in the initialization parameter file. By default, this file is located in the \$ORACLE\_HOME/dbs directory.

**Oracle Bug: 9871839** 

## 1.2 DVCA Fails if the SID Is Longer Than 8 Characters

Running Database Vault Configuration Assistant (DVCA) manually, after creating a new database in the Database Vault home, fails if the Oracle System Identifier (SID) for the database is longer than 8 characters.

The following steps reproduce the bug:

- 1. Use Database Configuration Assistant (DBCA) to create a new database in an existing Database Vault home.
- **2.** Run DVCA on the newly created database:

```
$ORACLE_HOME/bin/dvca -action option -oh oracle_home -jdbc_str
jdbc_connection_string -sys_passwd SYS_password -owner_account
DV_owner_account_name -owner_passwd DV_owner_account_password
[-acctmgr_account DV_account_manager_account_name] [-acctmgr_passwd
DV_account_manager_password] [-logfile ./dvca.log] [-silent]
[-nodecrypt][-lockout] [-languages
{["en"],["de"],["es"],["fr"],["it"],["ja"],["ko"],["pt_BR"],["zh_CN"],
["zh_TW"]}]
```

**See Also:** Oracle Database Vault Installation Guide for more information about the DVCA utility

The reason for the bug is that the Oracle Net service name in the tnsnames.ora (\$ORACLE\_HOME/network/admin/tnsnames.ora) file is truncated to 8 characters.

Workaround: Change the truncated Net service name in the tnsnames.ora file to it's correct value. For example, say the SID for the database is <code>ORACLEDB90</code>, and the entry in tnsnames.ora appears as:

```
ORACLEDB = (DESCRIPTION = (ADDRESS = (PROTOCOL = TCP) (HOST ....
```

Replace the truncated entry in the tnsnames.ora file with the correct entry:

```
ORACLEDB90 = (DESCRIPTION = (ADDRESS = (PROTOCOL = TCP) (HOST ....
```

**Oracle Bug: 5258820** 

#### 1.3 Cannot Install Oracle Database Vault in a Data Guard Environment

The Database Vault installer fails to install Database Vault in an existing physical standby database.

**Workaround:** You can create a new physical standby database by using the following steps:

- 1. Install Database Vault on the primary database.
- **2.** Create a physical standby database using a hot backup of the primary database. This backup should include the Oracle home.
- 3. Set up communications between the primary and the physical standby database. Redo logs communicate changes from the primary database to the standby database.

#### See Also:

 Article ID 754065.1, titled "Installing Database Vault in a Data Guard Environment" on My Oracle Support (formerly Oracle MetaLink):

```
http://support.oracle.com
```

 Data Guard Concepts and Administration Guide for more information about creating a physical standby database

**Oracle Bug:** 5577503

# 1.4 Enterprise Manager Does Not Start Automatically

After installing Database Vault on a database, and running the postinstallation steps on the nodes, you get an error when trying to access Enterprise Manager.

Also, when you try to check the status of dbconsole using the emctl status dbconsole command, you get a message saying that the EM daemon is not running even though the process is running.

Workaround: Manually restart the dbconsole process using the following commands:

```
$ORACLE_HOME/bin/emctl stop dbconsole
$ORACLE HOME/bin/emctl start dbconsole
```

**Oracle Bug:** 5613521

# 1.5 Unable to Log In to Enterprise Manager As the SYS User After Database Vault Installation

The SYS user is unable to log in to Enterprise Manager after installing Database Vault on an Oracle database. The following error is encountered:

```
ORA-01031: insufficient privileges
```

Workaround: You must regenerate the password file, using the orapwd utility, to reenable the SYS user to connect as SYSDBA. Use the following syntax to enable SYSDBA logins:

orapwd file=password\_filename password=password [entries=users] force=y nosysdba=n

**See Also:** Oracle Database Vault Installation Guide for more information on using the orapwd utility

**Oracle Bug: 6630108** 

# 1.6 Database Instance and Listener Do Not Start Automatically on Oracle RAC Remote Nodes After Installation

In an Oracle Real Application Clusters (Oracle RAC) environment, after you install Database Vault, the database instances and listeners on the remote nodes do not start automatically. You must start these manually.

This is expected behavior. The DVCA utility configures the local node, and starts the database instance and listener processes on the local node.

**Workaround:** Manually start the database instance and listener processes on each remote node.

**Oracle Bug:** 6630191

# 1.7 Error When Installing Database Vault for a Database That Does Not Have Enterprise Manager Configured

When you install Database Vault for a database that does not have Enterprise Manager configured, you may notice error messages in the DVCA install log. The DVCA install log may contain the following error messages:

```
DVCA_ERROR:java.io.IOException: java.io.IOException: /scratch/aime/10.2DV/071120/dvr2/db/bin/dvca_getipc.sh: cannot execute Error executing task DEPLOY_DVA:java.io.IOException: java.io.IOException: /scratch/aime/10.2DV/071120/dvr2/db/bin/dvca_getipc.sh: cannot execute
```

#### You may also see error files containing the following errors:

```
java.lang.NullPointerException
    at javax.swing.LayoutComparator.compare(Unknown Source)
    at java.util.Collections.indexedBinarySearch(Unknown Source)
    at java.util.Collections.binarySearch(Unknown Source)
    at javax.swing.SortingFocusTraversalPolicy.getComponentAfter(Unknown Source)
    at javax.swing.LayoutFocusTraversalPolicy.getComponentAfter(Unknown Source)
    at java.awt.Component.nextFocusHelper(Unknown Source)
    at java.awt.Container.nextFocusHelper(Unknown Source)
```

```
at java.awt.Component.nextFocus(Unknown Source)
at java.awt.Component.transferFocus(Unknown Source)
at oracle.ewt.lwAWT.LWComponent.processFocusEvent(Unknown Source)
at oracle.ewt.lwAWT.AbstractButton.processFocusEvent(Unknown Source)
at oracle.ewt.button.PushButton.processFocusEvent(Unknown Source)
at java.awt.Component.processEvent(Unknown Source)
at java.awt.Container.processEvent(Unknown Source)
at oracle.ewt.lwAWT.LWComponent.processEventImpl(Unknown Source)
at oracle.ewt.button.PushButton.processEventImpl(Unknown Source)
at oracle.ewt.lwAWT.LWComponent.redispatchEvent(Unknown Source)
at java.awt.Component.dispatchEventImpl(Unknown Source)
at java.awt.Container.dispatchEventImpl(Unknown Source)
```

**Workaround:** You can safely ignore these errors if you do not wish to deploy Enterprise Manager and Database Vault Administrator (DVA) for your Database Vault instance.

Oracle Bugs: 6640232 and 6640203

## 1.8 Cloned Database Vault Home Contains Invalid Objects

The following steps are used to create a cloned Database Vault instance:

- 1. Install Oracle Database Vault 10g Release 1 (10.2.0.5) in the first Oracle home.
- Clone the first instance to create a second Oracle home.
- **3.** Run Net Configuration Assistant (NetCA) and Database Configuration Assistant (DBCA) to configure a listener and database for the cloned instance.
- 4. Run DBCA again to configure Oracle Label Security (OLS) for the cloned instance.
- 5. Run Database Vault Configuration Assistant (DVCA) as follows:

```
$ORACLE_HOME/bin/dvca -action option -oh oracle_home
-jdbc_str jdbc_connection_string -sys_passwd SYS_password -owner_account
DV_owner_account_name -owner_passwd DV_owner_account_password
-acctmgr_account DV_account_manager_account_name -acctmgr_passwd
DV_account_manager_password -logfile ./dvca.log -nodecrypt
```

The following SQL statement shows that the cloned Database Vault instance contains invalid objects:

```
SQL> select count(*) from all_objects where status = 'INVALID';
COUNT(*)
------
45
```

Workaround: Run the  $\mathtt{utlrp.sql}$  script. This script recompiles all  $\mathtt{PL/SQL}$  modules that might be in an invalid state, including packages, procedures, and types. Use the following commands to run the  $\mathtt{utlrp.sql}$  script:

```
cd $ORACLE_HOME/rdbms/admin
sqlplus SYS "AS SYSDBA"
Enter password:
SQL> @utlrp.sql
```

**Oracle Bug:** 6658315

## 1.9 Error Log Created After Database Vault Installation

After you install Database Vault for an Oracle database that has Enterprise Manager configured, an error file containing the following error gets generated:

```
java.lang.NullPointerException
 at javax.swing.LayoutComparator.compare(Unknown Source)
 at java.util.Collections.indexedBinarySearch(Unknown Source)
 at java.util.Collections.binarySearch(Unknown Source)
 at javax.swing.SortingFocusTraversalPolicy.getComponentAfter(Unknown Source)
 at javax.swing.LayoutFocusTraversalPolicy.getComponentAfter(Unknown Source)
 at java.awt.Component.nextFocusHelper(Unknown Source)
 at java.awt.Container.nextFocusHelper(Unknown Source)
 at java.awt.Component.nextFocus(Unknown Source)
 at java.awt.Component.transferFocus(Unknown Source)
 at oracle.ewt.lwAWT.LWComponent.processFocusEvent(Unknown Source)
 at oracle.ewt.lwAWT.AbstractButton.processFocusEvent(Unknown Source)
 at oracle.ewt.button.PushButton.processFocusEvent(Unknown Source)
 at java.awt.Component.processEvent(Unknown Source)
 at java.awt.Container.processEvent(Unknown Source)
 at oracle.ewt.lwAWT.LWComponent.processEventImpl(Unknown Source)
 at oracle.ewt.button.PushButton.processEventImpl(Unknown Source)
 at oracle.ewt.lwAWT.LWComponent.redispatchEvent(Unknown Source)
 at oracle.ewt.lwAWT.LWComponent.processEvent(Unknown Source)
 at java.awt.Component.dispatchEventImpl(Unknown Source)
 at java.awt.Container.dispatchEventImpl(Unknown Source)
 at java.awt.Component.dispatchEvent(Unknown Source)
 at java.awt.KeyboardFocusManager.redispatchEvent(Unknown Source)
```

**Workaround:** You can safely ignore this error.

**Oracle Bug:** 6691977

# 1.10 Error Occurs When Oracle Database Vault Security Is Configured on a Remote Node

After you add a second node to a single-node Oracle Real Application Clusters (Oracle RAC) installation, the following error occurs when you try to configure Database Vault security for the second node:

```
ORA-32001: write SPFILE requested but no SPFILE specified at startup
```

The following steps reproduce the bug:

- 1. Install Oracle Cluster Ready Services (CRS) on a 2-node cluster.
- 2. Install Oracle Database Vault on the first node.
- 3. Run the addnode. sh script on the first node to add the second node.
- **4.** Configure the database listener and database instance for the second node.
- **5.** Run the following ALTER SYSTEM statements on the second node:

```
ALTER SYSTEM SET AUDIT_SYS_OPERATIONS=TRUE SCOPE=SPFILE;

ALTER SYSTEM SET OS_ROLES=FALSE SCOPE=SPFILE;

ALTER SYSTEM SET RECYCLEBIN='OFF' SCOPE=SPFILE;

ALTER SYSTEM SET REMOTE_LOGIN_PASSWORDFILE='EXCLUSIVE' SCOPE=SPFILE;

ALTER SYSTEM SET SQL92_SECURITY=TRUE SCOPE=SPFILE;

ALTER SYSTEM SET OS_AUTHENT_PREFIX='' SCOPE=SPFILE;
```

Workaround: Run the following steps before running the addnode. sh script in Step 3:

**Note:** These steps must be run from the first node.

1. Shut down the database.

```
$ORACLE_HOME/bin/srvctl stop database -d db_name
```

**2.** Start the database with the nomount option.

```
$ORACLE_HOME/bin/srvctl start database -d db_name -o nomount
```

3. Connect to the database AS SYSDBA.

```
sqlplus SYS "AS SYSDBA" Enter password:
```

**4.** Create a server parameter file (SPFILE) using the traditional initialization parameter file (PFILE). The initialization parameter file is usually located at \$ORACLE\_HOME/admin/db\_name/pfile for Optimal Flexible Architecture compliant databases.

#### For example:

```
SQL> CREATE SPFILE='SHARED_LOCATION/spfileORACLE_SID.ora'
FROM 'PFILE=ORACLE_HOME/admin/db_name/pfile/initORACLE_SID.ora'
```

This statement reads the text initialization parameter file to create a server parameter file. You must have the SYSDBA or SYSOPER system privilege to run the CREATE SPFILE statement.

5. Shut down the database.

```
$ORACLE_HOME/bin/srvctl stop database -d db_name
```

**6.** Clear the current contents of the initialization parameter file. Add the server parameter file location in the initialization parameter file:

```
SPFILE = 'SHARED_LOCATION/spfileORACLE_SID.ora'
```

7. Restart the database.

#### For example:

```
$ORACLE_HOME/bin/srvctl start database -d db_name
```

#### **Oracle Bug:** 6140164

# 1.11 Swap Space Requirement Prerequisite Test Fails

The Database Vault installer swap space requirement test may fail in some cases even when enough swap space is available.

**Workaround:** The swap space required for installation should not exceed 16GB. In case the required swap space is shown as more than 16 GB, this warning can be safely ignored.

**Oracle Bug:** 7506215

### 1.12 DVCA Error During Database Vault Installation

An ORA-01031: insufficient privileges error may be generated during the Lock DVSYS phase of the Database Vault installation process. This may be caused by a low shared pool size.

**Workaround:** Increase the shared pool size to a larger value. To set the shared pool size, use the following SQL statement:

```
ALTER SYSTEM SET SHARED_POOL_SIZE=VALUE;
```

**Oracle Bug:** 10033496

## 1.13 Invalid Objects After Installing Oracle Database Vault

There may be invalid objects in the database after you install Oracle Database Vault.

#### Workaround:

1. Log into SQL\*Plus as a user who has been granted the SYSDBA administrative privilege. For example:

```
sqlplus sys as sysdba
Enter password: password
```

**2.** In SQL\*Plus, perform the following query to find invalid objects.

```
SELECT COUNT(*) FROM ALL_OBJECTS WHERE STATUS = 'INVALID';
```

3. If there are invalid objects, then run the utlrp.sql script, which by default is located in the <code>\$ORACLE\_HOME/rdbms/admin</code> directory, to recompile the invalid objects.

```
@?/rdbms/admin/utlrp.sql
```

4. If the utlrp.sql script provides any instructions, follow them, and then run the script again. If the script terminates abnormally without giving any instructions, then run it again.

**Oracle Bug:** 7631281

# 2 Usage Issues and Recommendations

This section discusses usage issues that you may encounter with Database Vault. It also provides the workarounds for these issues.

This section contains:

- Accounts with DV\_OWNER, DV\_ADMIN, or DV\_SECANALYST Role Cannot Use the ALTER USER Command
- CREATE SESSION Privilege Is Controlled by the Data Dictionary Realm

# 2.1 Accounts with DV\_OWNER, DV\_ADMIN, or DV\_SECANALYST Role Cannot Use the ALTER USER Command

Accounts with the  ${\tt DV\_OWNER}, {\tt DV\_ADMIN},$  or  ${\tt DV\_SECANALYST}$  role cannot run the following command:

ALTER USER user QUOTA UNLIMITED ON tablespace

Workaround: Revoke the role from the account, run the ALTER USER command, and then GRANT back the role to the account. This works if the account is not the DV\_OWNER account that was created during installation. If the account is the DV\_OWNER account created during installation, then you would need to use the following steps:

- 1. Disable the Database Vault command rule for the ALTER USER command.
- 2. Run the ALTER USER command.
- 3. Re-enable the Database Vault command rule for the ALTER USER command.

**Oracle Bug:** 5161953

## 2.2 CREATE SESSION Privilege Is Controlled by the Data Dictionary Realm

Use the following steps to grant the CREATE SESSION privilege:

- 1. Temporarily disable the data dictionary realm.
- **2.** Log in as the SYSTEM user.
- 3. Grant the CREATE SESSION privilege.
- **4.** Enable the data dictionary realm.

# 3 Frequently Asked Questions About Installation

This section covers some of the frequently asked questions related to Database Vault installation. Oracle Database Vault installation is covered in detail in *Oracle Database Vault Installation Guide*.

The installer does not detect my existing Oracle Database Enterprise Edition 10g Release 2 (10.2.0.5) instance. What should I do?

To allow the installer to find the database instance information, you should check the following:

- The database home has Oracle Enterprise Manager Console DB 10.2.0.5.0 installed.
- For an Oracle Real Application Clusters (Oracle RAC) database, make sure that Cluster Ready Services (CRS) is running on all nodes.
- For an Oracle Real Application Clusters (Oracle RAC) database, make sure that the srvctl utility can be run from the Cluster Ready Services (CRS) home and the Oracle RAC database home.
- The file inventory.xml under oraInventory/ContentsXML correctly lists the Oracle home information including the node names (for Oracle RAC).
- /etc/oratab has an entry for the database. This entry is case-sensitive.
- All database names listed in /etc/oratab have unique system identifier (SID) names.
- The file, /etc/oraInst.loc exists.
- The oralnventory location is set in the /etc/oralnst.loc file.
- The oralnventory location set in /etc/oralnst.loc is the same as the 10.2.0.5 Enterprise Edition database's oralnventory location.
- The 10.2.0.5 database home does not have Oracle Database Vault in it.

■ The 10.2.0.5 database home does not contain an Automatic Storage Management (ASM) instance.

I have installed Oracle Database Vault into an Oracle home that has multiple databases. How do I secure the other databases in the Oracle home?

You would need to run Database Vault Configuration Assistant (DVCA) manually on the other databases. Refer to *Oracle Database Vault Installation Guide* for detailed instructions.

I have installed Oracle Database Vault on a Real Application Clusters (Oracle RAC) database instance. How do I secure the other nodes in the cluster?

You need to configure Database Vault security on the other Oracle RAC nodes. Refer to *Oracle Database Vault Installation Guide* for detailed instructions.

### 4 Miscellaneous Notes

This section contains miscellaneous notes not covered in the Oracle Database Vault documentation.

- Snapshots and Materialized Views
- JOB QUEUE PROCESSES Initialization Parameter

### 4.1 Snapshots and Materialized Views

The keyword SNAPSHOT is supported in place of MATERIALIZED VIEW for backward compatibility.

### 4.2 JOB\_QUEUE\_PROCESSES Initialization Parameter

The JOB\_QUEUE\_PROCESSES initialization parameter specifies the maximum number of processes that can be created for the execution of jobs. It specifies the number of job queue processes per instance.

This parameter must have a non-zero value. The default value for <code>JOB\_QUEUE\_PROCESSES</code> is 10.

# 5 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.

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