Oracle® Database Vault

Release Notes

10g Release 2 (10.2.0.5) for IBM: Linux on POWER Systems

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These Release Notes describe issues you may encounter with Oracle Database Vault 10g Release 2 (10.2.0.5). The Oracle Database Vault installation is covered in detail in *Oracle Database Vault Installation Guide for IBM: Linux on POWER Systems*.

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 on 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.

1.1 Prerequisite Check for Kernel Version Fails

Bug 11837867

If you do not use the ignoreSysPrereqs flag when you install the 10.2.0.5 patch set, then the prerequisite check to validate the kernel version might fail.

If your system has any one of the following kernel versions (or later), the workaround is to ignore the error message and proceed with the installation.

```
Red Hat Enterprise Linux 4.0:
2.6.9-11.EL

Red Hat Enterprise Linux 5.0:
2.6.18

SUSE Linux Enterprise Server 9:
2.6.5-7.191-pseries64

SUSE Linux Enterprise Server 10:
2.6.16
```



```
SUSE Linux Enterprise Server 11: 2.6.27
```

1.2 OPatch Fails with Error Code 104

Bug 7297336

When you apply an OPatch on Oracle Database Vault 10.2.0.3 Oracle home, it displays the following code 104 error:

```
bash-3.1$ opatch apply
Invoking OPatch 10.2.0.4.2

Oracle Interim Patch Installer version 10.2.0.4.2

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Oracle home: /scratch/aime/home/A01

Central Inventory: n/a

from:

OPatch version: 10.2.0.4.2

OUI version: 10.2.0.4.0

OUI location: /scratch/aime/home/A01/oui

Log file location: n/a

OPatch cannot find a valid oraInst.loc file to locate Central Inventory.

OPatch failed with error code 104
```

The workaround is to start OPatch with the -invPtrLoc /etc/oraInst.loc option.

1.3 Node List Update Error

Bug 7275169

If you install the 11.1.0.7 patch set in an Oracle Clusterware or Oracle RAC home, LOCAL_NODE information is updated incorrectly on remote nodes.

The workaround is to run the following commands after installing the patch set:

```
$ORACLE_HOME/oui/bin/attachHome.sh -local
    "CLUSTER_NODES={comma_seperated_complete_node_list}"
    LOCAL_NODE=remote_node_name
```

For instance, if Oracle RAC 11.1.0.7 is installed on node1, node2, and node3 and Oracle RAC home is patched to 11.1.0.6 from node1, you must run the following command from node2:

```
$ORACLE_HOME/oui/bin/attachHome.sh -local
    "CLUSTER_NODES={node1,node2,node3}" LOCAL_NODE=node2
```

And you must run the following command from node3:

```
$ORACLE_HOME/oui/bin/attachHome.sh -local
    "CLUSTER_NODES={node1,node2,node3}" LOCAL_NODE=node3
```

For Oracle Clusterware, run the same commands but add CRS=true:

1.4 Database Fails to Start From Remote Node

Bug 6964802

When you run Oracle Database Vault installer from a remote node, the database does not start automatically.

The workaround is to run the following command on each of the remote nodes after installing the 11.1.0.7 patch set:

```
$ORACLE_HOME/oui/bin/attachHome.sh -local
"CLUSTER_NODES={comma_seperated_complete_node_list}"
LOCAL NODE=remote node name
```

For instance, if Oracle Real Application Clusters (Oracle RAC) 11.1.0.6 is installed on node1, node2, and node3 and if you apply the 11.1.0.7 patch to the Oracle RAC home from node1, you must run the following command from node2:

```
$ORACLE_HOME/oui/bin/attachHome.sh -local
"CLUSTER_NODES={node1,node2,node3}" LOCAL_NODE=node2
```

And you must run the following command from node3:

```
$ORACLE_HOME/oui/bin/attachHome.sh -local
"CLUSTER_NODES={node1,node2,node3}" LOCAL_NODE=node3
```

For Oracle Clusterware, run the same commands and also ensure that you set CRS=true:

```
$ORACLE_HOME/oui/bin/attachHome.sh -local
"CLUSTER_NODES={comma_seperated_complete_node_list}"
LOCAL_NODE=remote_node_name CRS=true
```

1.5 Error in Oracle Database Vault Clone Logs

Bug 7584743

During cloning of a 10.2.0.4 database home, containing Oracle Database Vault, the following error is seen in the clone logs:

```
Error Dialog: OUI-10150:Error: You must provide the existing SYS password for the 10.2.0.4.0 database into which Oracle Database Vault will be installed. in component Oracle Database Vault Scripts 10.2.0.4.0. Installation cannot continue for this component.
```

User Selected: S&top installation of this component only.

The workaround is to safely ignore the error.

1.6 DVA is Not Properly Configured When Oracle Database Vault Is Installed From Remote Node

Bug 7604977

This issue is encountered during the following conditions:

- 1. If you install an Oracle Real Application Clusters (Oracle RAC) 10.2.0.4 database where Oracle Enterprise Manager is configured from the first node (node1).
- **2.** If you install Oracle Database Vault on this Oracle RAC database from a remote node and then run Oracle Database Vault Configuration Assistant (DVCA) on each node to complete Oracle Database Vault configuration.
- **3.** Oracle Database Vault Administrator (DVA) gets configured on the remote node which results in failure to access the DVA URL.

The workaround is to manually configure DVA on node1.

1.7 Cannot Install Oracle Database Vault in a Data Guard Environment

Bug 5577503

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

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

- 1. Install Oracle 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 Oracle Database Vault in a Data Guard Environment" on My Oracle Support (formerly Oracle MetaLink):

```
https://support.oracle.com
```

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

1.8 Oracle Enterprise Manager Does Not Start Automatically

Bug 5613521

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

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

The workaround is to manually restart the dbconsole process using the following commands:

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

1.9 Unable to Log In to Oracle Enterprise Manager As the SYS User After Oracle Database Vault Installation

Bug 6630108

The SYS user cannot log in to Oracle Enterprise Manager after installing Oracle Database Vault on an Oracle database. The following error is encountered:

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

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 IBM: Linux on POWER Systems for more information about using the orapwd utility

1.10 Database Instance and Listener Do Not Start Automatically on the Remote Node After Oracle Database Vault Installation

Bug 6630191

After you install Oracle 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. You must start these processes manually on each of the remote nodes.

1.11 Cloned Oracle Database Vault Home Contains Invalid Objects

Bug 6658315

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

- 1. Install Oracle Database Vault 10g Release 2 (10.2.0.5) in the first Oracle home.
- **2.** 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 Oracle 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 Oracle Database Vault instance contains invalid objects:

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

The workaround is to run the utlrp.sql script. This script recompiles all PL/SQL modules that might be in an invalid state, including packages, procedures, and types. Use the following commands to run the utlrp.sql script:

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

1.12 Error Log Created After Oracle Database Vault Installation

Bug 6691977

After you install Oracle Database Vault for an Oracle database that has Oracle Enterprise Manager configured, an error file containing the following error is 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)
```

You can safely ignore this error.

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

Bug 6140164

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 Oracle Database Vault security for the second node:

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

The following steps reproduce the bug:

- Install Oracle Clusterware 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;
```

The workaround is to 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 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
```

1.14 Swap Space Requirement Prerequisite Test Fails

Bug 7506215

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

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

1.15 Errors Generated by catmac.sql When Upgrading Oracle Database Vault

Bug 9888841

The *Oracle Database Vault Installation Guide* includes instructions to upgrade a previous version of Oracle Database Vault to Oracle Database Vault 10.2.0.5. One of the upgrade steps requires the user to run the <code>catmac.sql</code> script. Oracle Database Vault installation guide advises the user to spool the output of this script into a file to look for errors.

The spooled output file may include the following errors:

```
ORA-01920: user name 'DVSYS' conflicts with another user or role name ORA-01920: user name 'DVF' conflicts with another user or role name SP2-0310: unable to open file catmaca.sql ORA-01952: system privileges not granted to 'DBA' ORA-00955: name is already used by an existing object ORA-02260: table can have only one primary key
```

You can safely ignore these error messages.

1.16 DVCA Error During Oracle Database Vault Installation

Bug 10033496

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

The workaround is to 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;
```

1.17 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 \$ORACLE_HOME/rdbms/admin 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 Oracle Database Vault. It also provides the workarounds for these issues.

2.1 Accounts with DV_OWNER, DV_ADMIN, or DV_SECANALYST Role Cannot Use the ALTER USER Command

Bug 5161953

Accounts with the DV_OWNER, DV_ADMIN, or DV_SECANALYST role cannot run the following command:

ALTER USER user QUOTA UNLIMITED ON tablespace

The workaround is to 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, you must use the following steps:

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

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 on Installation

This section covers some frequently asked questions related to Oracle Database Vault installation. Oracle Database Vault installation is covered in detail in *Oracle Database Vault Installation Guide for IBM: Linux on POWER Systems*.

The installer does not detect my existing Oracle Database Enterprise Edition 10*g* 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, ensure that Oracle Clusterware is running on all nodes.
- For an Oracle Real Application Clusters (Oracle RAC) database, ensure that the srvctl utility can be run from Oracle Clusterware 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 oraInventory location is set in the /etc/oraInst.loc file.
- The oralnventory location set in /etc/oralnst.loc matches 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 Oracle Automatic Storage Management (Oracle 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 must run Oracle Database Vault Configuration Assistant (DVCA) manually on the other databases. Refer to *Oracle Database Vault Installation Guide for IBM: Linux on POWER Systems* for detailed instructions.

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

You must DVCA manually on the other Oracle RAC nodes. Refer to the *Oracle Database Vault Installation Guide for IBM: Linux on POWER Systems* for detailed instructions.

4 Miscellaneous Notes

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

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 JOB_QUEUE_PROCESSES 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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