

VERITAS 3.5 Update 4 Patch Upgrade for VERITAS Database Edition™ for Oracle on HP-UX

Installing Database Edition for the First Time

If you are installing VERITAS Database Edition 3.5 for the first time, read the *VERITAS Database Edition Installation Guide* for installation instructions.

Also review the *VERITAS Database Edition Release Notes* and all documents in the `patches` and `release_notes` directories for important release information.

After installing VERITAS Database Edition 3.5, follow the instructions in this document to install VERITAS Database Edition, VERITAS File System, VERITAS Volume Manager, and VERITAS Enterprise Administrator patches.

3.5 Update 4 is a set of cumulative patches that supersede the 3.5 Update 1, 3.5 Update 2, and 3.5 Update 3 patch releases.

Patches for Upgrading

To upgrade VERITAS Database Edition 3.5 *for Oracle* to the Update 4 level, the following patches under the `patches` directory must be installed.

Note The HP-UX operating system patches PHKL_23337 and PHKL_31162 must be installed before or along with these patches. You may download these patches from:

ftp://ftp.itrc.hp.com/hp-ux_patches/s700_800/11.X

For VERITAS Database Edition:

- ◆ PVCO_03633, patch for Oracle 10g support for VRTSdbed
- ◆ PVCO_03634, patch for VRTSorgui
- ◆ PVKL_03692, patch for VRTSodm

For VERITAS File System:

- ◆ PHCO_34199, patch for VRTSvxfs
- ◆ PHKL_34122, patch for VRTSvxfs

For VERITAS Volume Manager:

- ◆ PHKL_35292, patch for VRTSvxvm
- ◆ PHCO_35291, patch for VRTSvxvm

For VERITAS Enterprise Administrator:

- ◆ PHCO_30730, patch for VRTSob
- ◆ PHCO_30731, patch for VRTSobgui
- ◆ PHCO_30700, patch for VRTSfspro
- ◆ PHCO_34348, patch for VRTSvmpro

For the HP-UX operating system:

- ◆ PHKL_23337
- ◆ PHKL_31162

Upgrading Database Edition/HA

To upgrade the High Availability (HA) version of VERITAS Database Edition, install the patches as described in “[Installing Update 4 Patches](#)” on page 6 on each node in the cluster. Then, see the README_VCS file in the patches directory for instructions on installing VERITAS Cluster Server patches.

Note The 3.5 Update 4 release does not support a rolling upgrade in a VERITAS clustered environment. You cannot upgrade a cluster to use the 3.5 Update 4 patches while the cluster is in operation.

Support for Oracle 10g

Patch PVCO_03633 included with this release provides support for Oracle 10g as well as fixes for VERITAS Database Edition 3.5 *for Oracle*. After you have upgraded to Oracle 10g, Oracle Disk Manager will initially be disabled. To enable it for Oracle 10g, the name of the Oracle Disk Manager library needs to be updated from the default Oracle Disk Manager library name to the VERITAS Oracle Disk Manager library name.

To update the name of the Oracle Disk Manager library, use the following commands:

```
# rm ${ORACLE_HOME}/lib/libodm10.s1
# ln -s /opt/VRTSodm/lib/libodm.s1 \
  ${ORACLE_HOME}/lib/libodm10.s1
```

For detailed information about VERITAS Extension for Oracle Disk Manager see the *VERITAS Database Edition for Oracle Database Administrator's Guide*.

Note Pages 102, 105, and 107 of the *VERITAS Database Edition for Oracle Database Administrator's Guide* contain references to libodm9. If you are using Oracle 10g, substitute libodm10 where libodm9 appears.

Fixed Issues

With VERITAS Database Edition 3.5 Update 4 for HP-UX, the following issues have been fixed. Because Update 4 includes Update 1, 2, 3, and 4 fixes, fixed issues for all four patch releases are listed below.

Incident	Description
33989 (i98953)	Previously, dbed_rep_lock would prevent other VERITAS Database Edition commands from accessing the repository after an error. This has been fixed.
34037 (i102678)	In the previous release, vxckpt_umount would fail if the database was on a single file system and the mount point name was the same as the file system name. This has been fixed.
34045 (i103370)	Previously, df -k was used in dbed_clonedb and dbed_vmclonedb and did not work on HP-UX. This has been fixed.
34054 (i104272)	Previously, the shortcut key t was used in the Create a Storage Checkpoint wizard in the GUI for both Retain this Storage Checkpoint and Create a Storage Checkpoint. Now n is used as the shortcut key for Retain This Storage Checkpoint.
34082 (i105771)	In the previous release, rolling back to a Storage Checkpoint other than the most recent one would result in an SCN mismatch error. This has been fixed.



Incident	Description
34092 (i105993)	The permissions for <code>/etc/vx</code> mode were set to 555, but needed to be set to 755. The permissions are now set correctly.
34118 (i106738)	Previously, <code>dbed_vmsnap -o resync</code> would remove the Oracle directory and Oracle binaries, requiring Oracle to be reinstalled. This has been fixed.
34129 (i107050)	In the previous release, <code>qio_getdbfiles</code> did not work on a database in standby mode. This has been fixed.
34149 (i107345)	Previously, the GUI did not update the Cached Quick I/O status. This has been fixed.
34266 (i111750)	Previously, <code>dbed_mon</code> would display error messages showing incorrect percentages for usage over the warning threshold. This has been fixed.
34321 (i116220)	In the previous release, if you were using the C shell, <code>dbed_mon</code> would fail with the following error: <pre>ERROR: Could not open monitoring spool file</pre> This has been fixed.
34345 (i118164)	Previously, when an invalid path was set in the LOGPATH variable using the VxDBA "Configure Monitoring Agent Options" submenu, the monitoring agent would exit unexpectedly without displaying an error. This has been fixed.
34445 (i122434)	Previously, if you attempted to view statistics for an ODM datafile from the GUI, they would not be displayed. This was because the GUI would attempt to execute the ODMSTAT command from <code>/opt/VRTSdbed/bin</code> rather than <code>/opt/VRTS/bin</code> . The path has been corrected.
34474 (i123531)	In the previous release, mapping a temp file would sometimes result in a core dump. This has been fixed.

Note For details about the VERITAS File System, VERITAS Volume Manager, and VERITAS Enterprise Administrator issues fixed in their respective Update 4 releases, see the README_FST file in the `patches` directory.

Known Issues

The following are known issues in this release. Because Update 4 includes Updates 1, 2, and 3, known issues for all four patch releases are listed below.

Verifying Oracle File Mapping Setup

Instructions for verifying Oracle file mapping setup are not included in the *VERITAS Database Edition 3.5 for Oracle Administrator's Guide*. If you want to use Oracle file mapping (ORAMAP) after installing 3.5 Update 4, follow these steps to verify that `$ORACLE_HOME` is set up correctly:

1. Enter:

```
# cd $ORACLE_HOME/rdbms/filemap/bin
# ls -l
-r-xr-x--- 1 root system 900616 Apr 08 19:16 fmpu1l
-r-sr-xr-x 1 root system 14614 Apr 08 19:16 fmpu1lh
```



2. Verify that:
 - ◆ `fmputlhp` is owned by `root` and that the `setuid` bit is set.
 - ◆ The permissions for `fmputlhp` are set to `-r-sr-xr-x`.
 - ◆ The permissions for `fmputl` are set to `-r-xr-x---`.
3. If any of these items is not set as specified, make the appropriate corrections.

The `vxsvctrl.sh` Command Has Changed to `vxsvctrl`

In this release, the VERITAS Enterprise Administrator (VEA) service command name was changed from `vxsvctrl.sh` to `vxsvctrl`. You can maintain backward compatibility by creating a symbolic link:

```
ln -s /opt/VRTSob/bin/vxsvctrl /opt/VRTSob/bin/vxsvctrl.sh
```

Incident	Description
34255 (i130415)	<p>The following issue is applicable only when using the VERITAS FlashSnap Option.</p> <p>The <code>fstyp</code>, <code>df</code>, and <code>bdf</code> commands (and possibly other commands that invoke these commands) may hang when run on a VxFS 3.5 file system on which 14 or more Storage Checkpoints were created. Independent applications using the <code>statvfsdev</code> libc interface are also exposed to this problem. This problem occurs when file system metadata grows beyond a certain limit, causing the commands (<code>fstyp</code>, <code>df</code>, or <code>bdf</code>) and applications using the <code>statvfsdev</code> libc interface to read a particular disk block indefinitely.</p> <p>Because the <code>dbed_vmsnap</code> command calls <code>fstyp</code>, it may therefore hang as a result of <code>fstyp</code> hanging. To determine whether <code>dbed_vmsnap</code> has hung as a result of <code>fstyp</code> hanging:</p> <ol style="list-style-type: none"> 1. Enter <code>ps</code> to list the processes that are running. 2. Enter <code>grep fstyp</code> to search for <code>fstyp</code>. <p>If the CPU time for <code>fstyp</code> is increasing, the command has hung as a result of <code>fstyp</code> hanging.</p> <p>To avoid this problem, you can either limit the number of Storage Checkpoints created on any VxFS file system to no more than 14, or install these HP OS patches after they are made available on the HP patch website:</p> <ul style="list-style-type: none"> • PHCO_29916 (<code>fstyp</code> patch) • PHCO_294495 (dynamic libc patch) <p>For updates on this issue and information on the proposed patches, see the following VERITAS TechNote:</p> <p>http://support.veritas.com/docs/260615</p>
34809	<p>In the <i>VERITAS Database Edition for Oracle Database Administrator's Guide</i>, references to the path <code>/opt/VRTS/bin/vxtunefs</code> are incorrect. The correct path is <code>/sbin/fs/vxfs3.5/vxtunefs</code>. These references appear on pages 84-86 and 290.</p>
258285	<p>In VERITAS Database Edition 3.5 <i>for Oracle</i>, the GUI does not support the conversion of VxFS files to or from Quick I/O files. To work around this issue, set <code>umask</code> to 0 before starting the VERITAS Enterprise Administrator service.</p>

Incident	Description
264572	Mounting snapshot volumes and starting a clone will fail on a secondary host using the <code>dbed_vmclonedb</code> command for Oracle9i and Oracle 10g if the parameter <code>SNAPSHOT_ORACLE_HOME</code> is set equal to <code>yes</code> in the <code>snapplan</code> . Do not set <code>SNAPSHOT_ORACLE_HOME=yes</code> in the <code>snapplan</code> . VERITAS Database Edition for Oracle does not support cloning <code>ORACLE_HOME</code> on a secondary host because it does not verify whether the secondary host has a valid Oracle license.
268161	The Enable/Disable/Modify Space Alarm Settings operation in the VxDBA utility causes VxDBA to fail with the following error message: <pre>Unable to find library.</pre> Do not use the VxDBA utility to enable, disable, or modify space alarm settings. Instead, use either the CLI or the GUI.
362001	Creating a snapshot with the Database FlashSnap feature may fail with the following error message: <pre>Cannot connect to local object bus.</pre> Contact technical support to obtain the PVCO_03641 patch, which will correct the problem.
857760	Database FlashSnap does not work properly if a <code>pfile</code> was created using <code>sfile</code> . Contact technical support to obtain the PVCO_03641 patch, which will correct the problem.
none	If you are using Oracle Disk Manager on Oracle 10g, attempts to recreate the controlfile will fail. The SQL statement <code>CREATE CONTROLFILE REUSE SET "DATABASE DBNAME" RESETLOGS</code> results in the following error message: <pre>CREATE CONTROLFILE REUSE SET DATABASE "DBNAME" RESETLOGS ARCHIVELOG * ERROR at line 1: ORA-01503: CREATE CONTROLFILE failed ORA-00200: controlfile could not be created ORA-00202: controlfile: '/tmp/tmp34/test/TEST/DBNAME' ORA-17505: ksfdrsz:1 Failed to resize file to size 150 blocks</pre> To address this issue, request the patch for Oracle bug #3512248 from Oracle support and apply it. Oracle bug #3512248 is a bug ID used internally at Oracle as a reference. It cannot be searched on to obtain bug information on Oracle's support website.



Incident	Description
none	<p>On page 202 of the <i>VERITAS Database Edition for Oracle Database Administrator's Guide</i>, the following information appears:</p> <ul style="list-style-type: none"> Using a text editor, add the following line to the <code>/etc/vfstab</code> file: <pre> /dev/vx/dsk/PRODDg/vxdbarep /dev/vx/rdisk/PRODDg/vxdbarep \ /etc/vx/vxdba vxfs 0 yes - </pre> <p>This information is incorrect. The correct information is:</p> <ul style="list-style-type: none"> Using a text editor, add the following line to the <code>/etc/fstab</code> file: <pre> /dev/vx/dsk/PRODDg/vxdbarep \ /etc/vx/vxdba vxfs defaults 0 2 </pre>

Verifying Software Versions

VERITAS Database Edition 3.5 must be installed on your system before you apply these patches.

To verify the VERITAS Database Edition, VERITAS File System, VERITAS Volume Manager, and VERITAS Enterprise Administrator, enter:

```

# swlist -l product | egrep -i 'VRTS'
VRTSdbed      3.5          VERITAS Database Edition Utilities
VRTSfspro     3.5-ga08     VERITAS File System Management Services
               Provider
VRTSob        3.0.2.261a   VERITAS Enterprise Administrator Service
VRTSobgui     3.0.2.261a   VERITAS Enterprise Administrator
VRTSorgui     3.5          VERITAS Database Edition Graphical User
               Interface for Oracle
VRTSvmpro     3.5m         VERITAS Volume Manager Management
               Services Provider
VRTSvxvm      3.5m         Base VERITAS Volume Manager 3.5 for HP-UX
VRTSvxfs      3.5-ga15     VERITAS File System with CFS Support

```

Installing Update 4 Patches

Note In Updates 1, 2, 3, and 4, the VEA service command name was changed from `vxsvcctl.sh` to `vxsvcctl`. Use `vxsvcctl` at the Updates 1, 2, 3, and 4 level and `vxsvcctl.sh` at the VERITAS Database Edition 3.5 level. Alternatively, you can create a symbolic link as described in [“The vxsvcctl.sh Command Has Changed to vxsvcctl”](#) on page 4 to maintain backward compatibility.

1. Log in as superuser (root).
2. Stop the VERITAS Enterprise Administrator (VEA) service:

- a. Verify the status of the VEA service:

```

# /opt/VRTSob/bin/vxsvcctl.sh status
Current state of server : RUNNING

```

- b. If it is running, stop the VEA service:

```

# /opt/VRTSob/bin/vxsvcctl.sh stop
DBED: Successfully unloaded the Database Edition Provider 3.5

```



-
- c. Verify the status of the VEA service again:

```
# /opt/VRTSob/bin/vxsvcctrl.sh status
Current state of server : NOT RUNNING
```

3. Remove the following file:

```
# rm -f /var/vx/isis/vxisis.lock
```

4. Determine whether any unofficial patches are installed:

```
# swlist | grep UNOF | awk '{print $1}'
```

5. If any unofficial patches are installed, uninstall them:

```
# swremove -x autoreboot=true PVCO_PATCHID1 PVKL_PATCHID2 ...
```

Where *PVCO_PATCHID1* and *PVKL_PATCHID2* are the names of the patch IDs.

6. Insert the VERITAS 3.5 Update 4 for HP-UX patch disc into a CD-ROM drive connected to your system.

7. If the software disc is not mounted, mount it by entering:

```
# /usr/sbin/pfs_mount -t rrip /dev/dsk/c#t#d# /cdrom
```

where */c#t#d#* is the location of the CD-ROM drive.

8. Install the VERITAS Database Edition, VERITAS File System, VERITAS Volume Manager, and VERITAS Enterprise Administrator patches:

```
# swinstall -x autoreboot=true -s /cdrom/patches \
PHCO_30730 PHCO_30731 PHCO_34199 PHCO_30700 PHKL_35292 \
PHCO_35291 PHCO_34348 PHKL_34122 PVCO_03633 PVCO_03634 \
PVKL_03692
```

9. The system reboots automatically after the patches are installed.

10. After installing the patches, restart the VEA service.

- a. Verify the status of the VEA service:

```
# /opt/VRTSob/bin/vxsvcctrl.sh status
Current state of server : NOT RUNNING
```

- b. If it is not running, start the VEA service:

```
# /opt/VRTSob/bin/vxsvcctrl.sh start
DBED: Initializing Database Edition Provider 3.5
DBED: Initialization successful. Interface:
{1a510152-1dd2-11b2-902c-080020cf51fc}
```

- c. Verify the status of the VEA service again:

```
# /opt/VRTSob/bin/vxsvcctrl.sh status
Current state of server : RUNNING
```



Removing Update 4 Patches

Note In Updates 1, 2, 3, and 4, the VEA service command name was changed from `vxsvcctrl.sh` to `vxsvcctrl`. Use `vxsvcctrl` at the Updates 1, 2, 3, and 4 level and `vxsvcctrl.sh` at the VERITAS Database Edition 3.5 level. Alternatively, you can create a symbolic link as described in “[The vxsvcctrl.sh Command Has Changed to vxsvcctrl](#)” on page 4 to maintain backward compatibility.

1. Log in as superuser (root).

2. Check to see if the VEA service is running:

```
# /opt/VRTSob/bin/vxsvcctrl.sh status
Current state of server : RUNNING
```

3. If it is running, stop the VEA service:

```
# /opt/VRTSob/bin/vxsvcctrl.sh stop
DBED: Successfully unloaded the Database Edition Provider 3.5
```

4. Remove the following file:

```
# rm -f /var/vx/isis/vxisis.lock
```

5. To remove Update 4 patches, enter:

```
# swremove -x autoreboot=true
PVKL_03692 PVCO_03634 PVCO_03633 PHKL_34122 PHCO_34348 \
PHCO_35291 PHKL_35292 PHCO_30700 PHCO_34199 PHCO_30731 \
PHCO_30730
```

6. After removing the patches, restart the VEA service:

a. Verify the status of the VEA service:

```
# /opt/VRTSob/bin/vxsvcctrl.sh status
Current state of server : NOT RUNNING
```

b. If it is not running, start the VEA service:

```
# /opt/VRTSob/bin/vxsvcctrl.sh start
DBED: Initializing Database Edition Provider 3.5
DBED: Initialization successful. Interface:
{1a510152-1dd2-11b2-902c-080020cf51fc}
```

c. Verify the status of the VEA service again:

```
# /opt/VRTSob/bin/vxsvcctrl.sh status
Current state of server : RUNNING
```

Getting Help

For technical assistance, visit <http://support.veritas.com> and select phone or email support. Use the Knowledge Base search feature to access resources such as TechNotes, product alerts, software downloads, hardware compatibility lists, and our customer email notification service.



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