HCL VersionVault

Version 3.0.0

# *Product Release Notes*

# Contents

# Release notes for HCL VersionVault

These release notes contain the information that you need to get started with HCL VersionVault.

A reminder that as of HCL VersionVault 2.0.0, the product is a full 64-bit release that includes the 64-bit userspace for all VersionVault executables. VersionVault and multiversion file system (MVFS) have always supported 64-bit hardware. As of version 2.0.1, VersionVault can be installed on Windows, Linux and Solaris platforms on x86_64 hardware. See the System Requirements document for a list of the operating systems supported by VersionVault.

## Products

- HCL VersionVault

## Documentation

The online help for HCL VersionVault 3.0.0 is published on https://help.hcltechsw.com/versionvault/3.0.0/index.html.

The help is also available from within the installed product.

**Note:** As of 2.0.1, HCL VersionVault supports Microsoft Visual Studio 2017 and Microsoft Visual Studio 2019. It always uses the VersionVault Explorer-based user interface. Any references in the help documentation to the integration of VersionVault and Visual Studio through any other VersionVault clients or GUIs are not supported.

## Prerequisites

See the System Requirements document for a list of what is supported by HCL VersionVault.

- For Atria Licensing, you should have received Atria license strings from the HCL License Fulfillment team.

- For HCL Licensing, you should have received a software order acknowledgment letter along with the product software. This letter contains instructions on how to access the HCL Software License & Download Portal and to activate your entitlements. Additionally, the letter describes how to create a license server and to add entitlements to it when you use HCL Licensing.

- IBM Installation Manager, version 1.8.6 or later fix packs, or version 1.9.1 or later fix packs.

- For a local HCL License Server on Linux, RHEL version 7.3 or later is required.

- If you are migrating to HCL VersionVault from IBM Rational ClearCase, see the *HCL VersionVault Migration Guide*.

  **Important:** If you are migrating to HCL VersionVault from IBM Rational ClearCase, see the migration guide provided with the download of the HCL VersionVault product before you try to install the product. You must uninstall the ClearCase products before installing VersionVault. The VersionVault and ClearCase products cannot be installed on the same system. Additionally, VersionVault WAN server cannot share a load balancer across brands.

- Java version 8. Ensure that the path to your java bin or jre bin directory (containing the Java executable and other Java tools) has been added to the PATH environment variable. For the HCL VersionVault installation, you must have a 64-bit Java Runtime Environment (JRE) compatible with Java 8 installed before you install VersionVault. During the installation of VersionVault, you must set the path to the java executable in your JRE installation if you plan to use any of the Java-based components for the product. See the list of Java-based components on the installation panel. VersionVault does not ship with its own JRE, but instead uses a JRE that is already installed on your system. If you do not have a JRE already, you can obtain one from Adoptium at https://adoptium.net.

  **Tip:** For the initial installation of a JRE, install it in a folder of your choice with a folder name that does not identify the version number for the Java. As an example, use a folder name like "jre" instead of "jre_v8.0." Later, when you want to install a new updated Java (as an example, jre_v8.5), install the updated Java into the same file system location as the initial Java. Then no reconfiguration of VersionVault will be needed because of a new JRE.

  **Important:** For HCL VersionVault on Windows, you must unpack the JRE locally. Running the JRE from a network location is not supported. During the installation process for HCL VersionVault, you must enter the path to your JRE.

## Getting started

**Note:** All downloads are available from the [HCL Software License & Download Portal](#) unless otherwise noted.

1. Download and review the System Requirements document.

2. Download IBM Installation Manager, version 1.9.1 or later fix packs, and the IBM Packaging Utility.  IBM Installation Manager is required to install each HCL product.
   **Note:** You can continue to use Installation Manager version 1.8.6 or later fix packs if it is installed already.

3. Download your HCL product and extract the images on your computer.
   You must specify the location of each extracted product download to IBM Installation Manager.

4. If you plan to use a local license server for HCL Licensing, you need the following information:
   **Note:** If you plan to install an FNE local license server, see the instructions provided with that capability or contact HCL Customer Support for the latest instructions.
   a. Ask your local license server administrator for the protocol (http or https), local server name, and port number for your license server. Compose the local license server URL from these values, such as: `http://localservername:portnumber`
   b. If using https, and the server's certificate is signed by a private certificate authority (CA), get the certificate authority's root certificate in PEM (base-64) format.

5. Use IBM Installation Manager and the instructions in the help to install one or more HCL products. See the online help about using IBM Installation Manager to install the product.

    a. For the Java Installation Directory panel of the installation process: Enter the path to the java executable that is installed on your system. For more information about the Java requirement for HCL VersionVault, see Prerequisites.

    b. On the Common Configurations panel of the installation process, in the **HCL Licensing** section:

       **Note:** For more detailed instructions, see Configure HCL Licensing.

       - **Cloud**: This option is selected by default. If you plan to use a **cloud** license server, enter your license server URL in the **License Server URL** field, and your license server ID in the **License Server ID** field. See also the instructions that you received on the software order acknowledgment letter.

       - **Local**: If you plan to use a **local** license server, select the **Local** option, and enter your local license server URL in the **License Server URL** field in the format:
         `http://localservername:portnumber`
         Also, see step 6.

    c. On the Common Configurations panel, for the **Atria Licensing for VersionVault** section, be aware that when Atria Licensing is enabled then HCL Licensing is disabled for HCL VersionVault. HCL VersionVault and HCL Compass can share the same HCL Licensing server, therefore you would still enter HCL Licensing information for your HCL Compass installation, if appropriate.

       **Note:** For more detailed instructions, see Configure Atria Licensing for VersionVault.

       - On a **remote** host: Enter the name for the remote host in the **Enter remote host name (required)** text box.

       - On my **local** host: Enter the license key for the local host in the **Enter license keys (required)** text box.

    d. For the Asynchronous License Acquisition component in the features list:

       - With asynchronous license acquisition, VersionVault does not wait for a response from the license server. When a response arrives, the result is processed by a background process. If the result is a failure, then the next license request from VersionVault displays an error message. Asynchronous licensing is faster for the end-user in the normal case where a license is available. For more information about this licensing method, see the online help.

       - With synchronous license acquisition, VersionVault waits for a response from the configured license server. Any license error messages (license expired, all licenses in use, or similar) displays directly to the user.

6. Only when using a local license server for HCL Licensing and private CA: After installing HCL VersionVault, modify the license configuration if you use a CA root certificate for the license server:

    a. Stop the VersionVault service:
- On Linux: `/opt/hcl/ccm/versionvault/etc/versionvault stop`
- On Windows: Windows Control Panel, select **VersionVault > Services Startup > Stop VersionVault**

    b. Install the CA root certificate for the license server: Append the PEM-encoded CA root to:
- On Linux: `/var/adm/hcl/versionvault/config/cacert.pem`.
- On Windows: `vvault-home\var\config\cacert.pem`

    c. Start the VersionVault service:
- On Linux: `/opt/hcl/ccm/versionvault/etc/versionvault start`
- On Windows: Windows Control Panel, select **VersionVault > Services Startup > Start VersionVault**

When you use VersionVault, it periodically connects to the HCL License Portal to check out or renew a license. If a license is not available, an error message is displayed.

For additional information about HCL Licensing, see the licensing topics in the help.

## About references

Note that technotes and other documents might mention file paths and environment variables that are not correct for HCL VersionVault. The following tables show equivalent file path names and environment variables for VersionVault.

The following table shows equivalent file path names for HCL VersionVault.

| File path name | HCL VersionVault equivalent |
| --- | --- |
| C:\Program Files\IBM\RationalSDLC\ClearCase | C:\Program Files\HCL\CCM\VersionVault |
| C:\Program Files\IBM\IMShared | C:\Program Files\HCL\IMShared, or C:\Program Files\IBM\IMShared |
| /opt/IBM/RationalSDLC | /opt/hcl/ccm |
| /opt/IBM/IMShared | /opt/hcl/IMShared, or /opt/ibm/IMShared |
| /opt/rational/clearcase | /opt/hcl/ccm/versionvault |
| /var/adm/rational/clearcase | /var/adm/hcl/versionvault |
| /var/adm/atria | /var/adm/hcl/versionvault |

**Note:** For the path to IMShared, whether it is to "HCL" or "IBM" depends on if you have ever used IBM Installation Manager before you install VersionVault. If you are using Installation Manager for the first time when you install VersionVault, then the path is to "HCL." If you have used Installation Manager before, then the path is to "IBM."

The following table shows equivalent environment variables for HCL VersionVault.

| Environment variable | HCL VersionVault equivalent |
| --- | --- |
| ATRIAHOME | CLEARCASEHOME |
| ATRIA_FORCE_GUI | CCASE_FORCE_GUI |

**Note:** While ATRIAHOME and CLEARCASEHOME both work for IBM releases, only CLEARCASEHOME works for HCL releases. Similarly, ATRIA_FORCE_GUI and CCASE_FORCE_GUI both work for IBM releases, but only CCASE_FORCE_GUI works for HCL releases. Therefore, customers should change to use CLEARCASEHOME and CCASE_FORCE_GUI while still running IBM releases, before migrating to HCL releases.

## Known problems

The following known problems exist in this release:

- The forwarding of requests by IBM HTTP Server (IHS) to the HCL Compass web server stops working after the installation of the HCL VersionVault WAN servers on the same system. For more information, see article KB0097199.
- When installing HCL VersionVault and HCL Compass on the same Linux system, the permissions inside the HCL VersionVault `/var/adm/hcl/versionvault` directory are corrupted. For more information, see article KB0097467.
- The uninstallation of HCL Compass incorrectly removes the HCL VersionVault `/var/adm/hcl/versionvault` directory on UNIX. For more information, see article KB0097468.
- With User Account Control (UAC) enabled on a Microsoft Windows 10 or Windows Server 2016 machine and later, changes performed on the HCL VersionVault Control Panel are not reflected on the host. For more information and possible workarounds, see technote 536805.
- When you uninstall the VersionVault Remote Client Standalone offering, it leaves behind *install_dir*`/ccm/VersionVault/RemoteClient/configuration/config.ini` on Linux/Solaris and *install_dir*`\HCL\CCM\VersionVault\RemoteClient\configuration\config.ini` on Windows. To avoid a problem with the next installation of the offering, delete the applicable ccm or CCM directory.


## What's new

The following items are what's new for HCL VersionVault 3.0.0:

**Technology Preview of HCL OneDB on Linux**

For more information about the Technology Preview of using HCL OneDB on Linux (x86_64 hardware only) as the underlying database for storing the VOB metadata in HCL VersionVault, see article KB0097390.

**Technology Preview of semi-live reformatVOB**

Semi-live reformatVOB (SLRV) allows customers to upgrade the VOB database to the newer schema versions without all the required downtime required by the standard HCL VersionVault reformatvob functionality. This feature provides the ability to upgrade VOB schemas with a much shorter lock time and then the reformat dump and load process occurs in the background allowing normal day-to-day activities to continue until the team is ready to lock the VOB(s) and perform the cutover process of moving to the newer VOB Schema. For more information about the Technology Preview of semi-live reformatVOB, see Information on reformatting using the semilive option.

**Cadence Virtuoso integration enhancements**

- Added new environment variable CCASE_CDS_SIMPLIFIED_MSG. If the environment variable is set to **TRUE**, the check-in and check-out messages will be logged into the Command Interpreter Window (CIW) in a simplified form.
- Now, a warning message is displayed in the **Cannot CheckIn/Cannot Cancel Checkout** dialog box when you accidentally do a check-in or do a check-out of an edited view in the Library Manager. This helps to avoid an override of the changes.
- While checking in files from the Library Manager or Work Area Manager (WAM) or cellview editors, now you have the option to do the check-in and label simultaneously. To do this, select the **Apply Label Post Checkin** checkbox on the **Check In** dialog box and enter the appropriate values in the **Label Operations** and the **Label Options** fields.
- In the **Check In** dialog box, there is now a **Comment** field for you to add a comment after you have selected the **Apply Label Post Checkin** checkbox for checking in and labeling the files simultaneously.

For more information about this integration, see The HCL VersionVault integration with Cadence Virtuoso.

**Microsoft Visual Studio integration enhancements**

- After the integration of VersionVault 3.0.0 with Visual Studio 2019 and Visual Studio 2017, when you navigate to **Visual Studio 2019/2017** > **Tools** > **Options**, it now correctly displays the source control bindings as **HCL VersionVault**.
- Now, for the VersionVault integration with Microsoft Visual Studio 2019 and Visual Studio 2017, the following menus are enabled in Visual Studio:
  - **Reserve and Unreserve**
  - **Mount VOB and Unmount VOB**

For more information about this integration, see The HCL VersionVault integration with Visual Studio.

**Changes to the CM API**

The following properties and methods have been added to the CM API in VersionVault 3.0.0. For more information about each item, see the Javadoc that is included with the VersionVault CM API.

- CcActivity.CONTRIBUTING_ACTIVITIES
- CcActivity.PREDECESSOR_VERSION_LIST
- CcBaseline.ACTIVITY_LIST
- CcDirectory.doFindFilesByContent()
- CcDirectory.doFindFilesByName()
- CcEventInfo
- CcProvider.ccEventInfo()
- CcStorageLocation.doCreateCcStorageLocation()
- CcStorageLocation.GLOBAL_PATH
- CcStorageLocation.HOST_PATH
- CcStorageLocation.STORAGE_LOCATION_PATH
- CcStorageLocation.STORAGE_LOCATION_TAG
- CcStream.DELIVER_ACTIVITY_LIST
- CcStream.REBASE_OPERATION
- CcStream.RECOMMENDED_BASELINE_LIST
- CcVob.doCreateCcVob()
- CcVob.doFindDeliverStartEvent()
- CcVob.doFindEventInfo()
- CcVob.EVIL_TWIN_PREVENTION
- CcVob.FAMILY_FEATURE_LEVEL
- CcVob.REMOTE_ADMIN
- CcVob.VOB_MOUNT_DIR
- CcVob.VOB_TAG_COMMENT
- CcVob.VOB_STORAGE_PATH
- CcVob.VOB_STORAGE_LOCATION

For more information about the VersionVault CM API in general, see [Programming with VersionVault CM API](#).

**Changes to Commands**

- Now, the composite and recommended baselines from the public and private VOBs cannot be removed by default when using the `rmbl` command. When the `rmbl` command is executed with the `[ –public ]` argument, only the composite and recommended baselines from the public VOB cannot be removed. For more information, see [rmbl](#).
- By default, the `checkvob` command skips an element that is already locked and indicates the element was skipped. Now, the `checkvob` command can analyze the locked element for a problem if invoked with the `–process_locked` argument. Additionally, the `checkvob [-process_loc/ked]` command indicates for any issue found in the locked element, though the issue cannot be fixed. For more information, see [checkvob](#).

**Automatic views**

Full support for automatic views on Linux is now available. For more information about automatic views in general, see Using VersionVault web and automatic views.

**Installation**

- While installing the VersionVault product package using the Installation Manager GUI, you can now select the versions of Microsoft Visual Studio that you want to integrate with VersionVault. This feature is only enabled when Microsoft Visual Studio is already installed on your computer.
- The name of the Automatic View Client feature is changed to Automatic Views in the VersionVault product package.

For more information, see Installing the product package using the Installation Manager GUI.

**HCL VersionVault Explorer**

- HCL VersionVault Explorer now supports derived objects.
- For HCL VersionVault Explorer, the VersionVault Search feature is enabled for Dynamic views. On the **VersionVault Search** dialog box, use the **Checked out resources** option to do a search for the checked-out files at the **View** level only.

For more information about using VersionVault Search in general, see VersionVault Search.

**VersionVault WAN servers on Apache Tomcat**

You can now use the Tomcat server to host an automatic view WAN server. For more information, see Deploying VersionVault WAN servers on Apache Tomcat.

**VersionVault Remote Client Repair Discordance**

As of VersionVault 3.0.0, the NullPointerException error is no longer displayed when a repair discordance action is run on a VOB root element inside a web view in the VersionVault Remote Client even when the client and server state are in sync and there is no actual discordance. For more information, see technote 205891.

**IBM Global Security Kit (GSKit)**

VersionVault 3.0.0 now contains GSKit 8.0.55.26.

## Problems (APARs) fixed

C115441, CS0192698, CS0111980, CS0151797, CS0173847, CS0185882, CS0254692/CS026606, PH09114, PH23325, PH25873, PH27755, PH27989, PH29677, PH30160, PH30161, PH30403, PH30423, PH31061, PH31419, PH33111, PH33132, PH33465, PH33498, PH33653, PH33891, PH33893, PH34446, PH34453, PH34674, PH34758, PH35812, PH35828, PH36404, PH37165, PH37186, PH37613, PH38407, PH38410, PH38541, PH38564, PH38713, PH39740, PH39815, PH41792, PH43904, PI06930, PI14642, PI48845, PI49247, PI52370, PI52455, PI54489, PI60118, PI64433, PI72597, PI79611, PI79613, PI89155, PI97705, TS00563724

## Fix and RFE implementation

All APAR fixes and RFEs are client side only, except as listed in the following table.

| Fix (APAR) number | Description | Installation requirements |
|---|---|---|
| CS0111980 | `db_server` error message needs to be more specific | Install on VOB server hosts. |
| CS0185882 | The ClearCase `albd_server`, when running with multiple registry worker threads, sometimes gets into an infinite loop. | Install on any server configured as a VersionVault registry server. |
| PH34674 | reformat or dump of a PVOB database may fail | Install on any server hosting UCM Project VOBs. |
| PI06930 | When reformatvob or `db_dumper` is invoked and if the root component of the VOB is not available, CRDE validation fails and triggers `db__err_abort_call().` | Install on VOB server hosts. |

## Support

For technical support, contact HCL Customer Support at https://support.hcltechsw.com/csm, and in addition to providing details for your issue, also provide the following information:

- Your name, company name, telephone number, and email address
- Your operating system, version number, and any service packs or patches that you have applied
- Product name and release number
- Your Support Ticket Number (if you are following up on a previously reported problem)

For blogs, forums, and more for VersionVault, go to the HCL Software website at https://www.hcltechsw.com/wps/portal.

To report a problem or provide feedback about the online help, send email to HCLVersionVault_Feedback@hcl.com.