
VisualWorks FAQ

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Introduction

This FAQ provides answers to frequently asked questions pertaining to the use of VisualWorks, both commercial and non-commercial versions, and covering several releases. Where an answer is specific to a release or version, I have attempted to note it.

This is a living document, and will be updated on an occasional, irregular basis. Updates will be made available on the Cincom Web Site,

URL: <http://www.cincom.com/visualworks/documentation.html>.

This FAQ does not cover Smalltalk in general. For a general Smalltalk FAQ, refer to David N. Smith's FAQ at <http://www.dnsmith.com/SmallFAQ/>.

Additional Q&A for VisualWorks is also available from the VisualWorks Developer Wiki at:

URL: <http://www.cincomsmalltalk.com:8080/CincomSmalltalkWiki>

and on the UIUC wiki, at:

URL: <http://wiki.cs.uiuc.edu/VisualWorks/Questions+and+Answers>.

Getting VisualWorks

Where can I get VisualWorks Non-commercial?

The primary source for the non-commercial release is the Cincom Smalltalk download site.

URL: <http://www.cincom.com/smalltalk/vwthankyou.html>

Where can I get a free Database for use with Store?

Oracle

It may seem obvious, but the Oracle site does have free downloads for evaluation.

URL: <http://technet.oracle.com/software/index.htm>

A variety of products are available from this site. Note that for Store you must have at least Personal Oracle. Oracle Lite is not sufficient for Store.

Postgres

Postgres is a free, open-source database running on a variety of platforms, though it originated on Linux. Visit <http://www.postgresql.org>.

Where can I get additional locales?

“Locales” provide support for language character sets, numeric and monetary notations, and other items influencing the cultural fit of VisualWorks. A single locale is provided with English versions of VisualWorks, in the `messages/visualworks/C` directory (other locales may be provided by distributors). Refer to the VisualWorks *Internationalization User's Guide* for more information.

Additional locales are available on the web at:

URL: <http://www.cincomsmalltalk.com:8080/CincomSmalltalkWiki/VW+Locale+Database>

These are suitable for use in your application, as well as for examples in creating your own locale.

Installation Q&A

How do I view the files in the .iso file I downloaded?

You don't (usually). The `.iso` file is a disk image file meant only for burning your own installation CD.

When you download the CD installation file from our web site, it is compressed. Use a decompression program (e.g., WinZip, StuffIt, or gunzip) to extract the `.iso` file to your hard disk. Then launch your CD burning software, load the file, and burn the CD. On some systems your software will launch by clicking, or double-clicking on the file. Once you have the installation CD made, follow the instructions in the *Installation Guide* to install VisualWorks.

For the truly determined, however, there are utilities available on some systems that do allow you to view `.iso` files. Linux distributions often come with this software. See the documentation for that software package for instructions.

How do I install Store?

Instructions for installing Store are provided in the *Application Developer's Guide* (5i.x) or the *Source Code Management Guide* (7.x). These are installed in the `doc/` directory, and are available from the [VisualWorks documentation web page](#).

Usage Q&A

OK, it's installed. Where do I start?

Well, the first thing you'll want to do is launch VisualWorks. Depending on your platform, you might be able to just click or double-click on the `visual.im` file in a folder browser, or select VisualWorks in a menu pick (Windows). Unix and Linux platforms launch from the command-line. Full startup instructions are provided in the *Installation Guide* in the `doc/` directory (also available from the [VisualWorks documentation web page](#)).

Once launched, you have lots of options, but here are two places to start:

- *VisualWorks Walk Through* (`doc/walkthrough.pdf`) directory (and on the web site) gives a hands-on tour of the essential elements of building an application using VisualWorks.
- VisualWorks Smalltalk Tutorial, an online introduction to Smalltalk programming in Visualworks, at <http://www.cincom.com/smalltalk/tutorial/index.htm>.
- Read the manuals, which are all in the `doc/` directory and on the web site. The *Application Developer's Guide* (`doc/vwadg.pdf`) is the basic manual, and a good place to start.

How do I paint a window? Where's the GUI Painter?

Load the UIPainter parcel. It is pre-loaded in most non-commercial releases.

As part of parceling the base, a number of features were pulled out and made optionally loadable. The UIPainter is one of them. To load it:

1. In the Visual Launcher, select **Tools → Load Parcel Named....**
2. In the prompter, enter UIPainter, and click OK.
3. After the painter loads, click the new canvas icon, or select **Tools → New Canvas.**

How can I file-out 5i code to a pre-5i image?

Because VisualWorks introduced name spaces, 5i file-outs, even in chunk format, do not load properly into pre-5i images.

If you need to move code to a pre-5i image, load the FileOut30 parcel (**FileOut30.pcl**) from the goodies directory. This adds a **VW 3.0 compatible source code** option to the Settings tool File-out Type page. Select this option before doing your file-out.

Can I use the IntelliMouse (wheel mouse)?

Yes.

In VW 7, wheel-mouse support is included.

For earlier versions, Thomas Burns has provided Intellimouse support, which can be downloaded from the Freebies page at <http://smalltalk.iwarp.com>. There are versions for VW 2.5/3.0 and VW 5i. The VW 5i version is a complete reimplemention of the earlier Intellimouse Support software, and is released under the LGPL (Lesser General Public License). It uses a completely different approach to supporting mouse wheel events that is much friendlier and does not suffer from the performance issues of the earlier version.

Wheel-mouse support might not work for 3rd party widgets and add-ins, since it is the responsibility of those parties to provide the support.

Getting Help

How do I get support for VW?

Commercial licensees can get installation help from Cincom Technical Support. For other issues, there are various support plans available. Contact supportweb@cincom.com or visit the Support Web (<http://supportweb.cincom.com/>) for more information.

VisualWorks Non-commercial is offered without charge as an *unsupported* product. Support is provided by users, primarily via a vwnc mail list maintained by the computer science department of the University of Illinois at Urbana-Champaign.

Both commercial and non-commercial licensees can get help from various public services.

How do I subscribe/unsubscribe from the vwnc list?

To subscribe, send an email message to:

vwnc-request@cs.uiuc.edu

with "subscribe" as the subject line.

To unsubscribe, send an email message to:

vwnc-request@cs.uiuc.edu

with "unsubscribe" as the subject line.

Trouble-shooting Q&A

Why do I have to re-enter the value for the VisualWorks Home every time I start VisualWorks on Windows 2000?

The VisualWorks Home registry (VISUALWORKS environment variable value) is stored in the Windows directory. Normally this is set either during installation from CD, or when you select **File → Set VisualWorks Home** in the Launcher.

On Windows 2000, changing registry entries is restricted according to user permission level. You must have at least Standard User (Power User) permissions in order to be allowed to update the registry, even during installations. Make sure you have this permission level and try again.

The Windows Registry entry for 5i.2 is as follows, except that the path set for VISUALWORKS may be different on your system:

```
HKEY_LOCAL_MACHINE
  Software
    Cincom Systems, Inc.
      VisualWorks
        Non-Commercial 5i.2
          VISUALWORKS="C:\vw5i.2nc\"
```

How do I break out of an endless loop?

For a simple endless loop, you can usually break out by pressing Ctrl-Y. This opens a walkback which you can simply close.

In some situations, such as if the system isn't responding to Ctrl-Y, you may need to invoke the Emergency Evaluator. Press Shift-Ctrl-Y to invoke the Emergency Evaluator. Then enter:

```
ObjectMemory quit
```

and press Escape, as described in the Emergency Evaluator window, to shut down the system.

If you need to use the Emergency Evaluator, your memory policy settings may be wrong for your system. Before starting your application, go to the Settings Tool, Memory Policy page. Read the help provided (you may need to stretch the pane to get to the **Help** button), and set your values appropriately, as described.

Why do I get a walkback when I try to view source code in the browsers?

This is commonly caused by the VISUALWORKS system variable being improperly set or not set at all. Select **File → Set VisualWorks Home** in the Visual Launcher to set the variable.

Why do I only see uncompiled sources rather than real source code?

This is caused either by the source files (visual.sou or the parcel source .pst files) being absent or the pointers into the source files being wrong.

Check to make sure the source files are in the correct directories, as set in **File → Settings**.

If you recently downloaded these files in **tar.gz** format, your decompression software may have been incorrectly configured. As described on the download page:

- On a Windows system, launch WinZip 7.0 (or later), open **Options → Configuration → Miscellaneous**, and uncheck **TAR file smart CR/LF conversion**.
- On a PowerMac system, open Stuffit Expander's preferences dialog to **Cross Platform options**, and select **Never** for **Convert Text Files to Macintosh text format**.

Then, re-expand the files.

Why do I get an “Out of Memory” error on startup?

We have seen, and several customers have reported, this problem on Unix/Linux systems with large numbers (>6000) of installed fonts.

While a real fix has not been implemented yet, the workaround is to use the `-h` “headroom” command line option:

```
visual -h <size> ../image/myimage.im
```

where <size> is the number of bytes of extra heap headroom allocated by VisualWorks at startup.

An extra megabyte should be sufficient for several thousand fonts, so start with `-h 1m`, and increment as necessary:

```
visual -h 1m ../image/myimage.im
```

Refer to the *VisualWorks Application Developer's Guide* for additional description and command line options.

What does “<One of #(#primitive: #pragmas: #primitive:errorCode: #resource:) expected ->C: #define” mean?

When filing-in source code with a C pragma (< c: ... >), the attempt to compile the code fails. You must have DLLCC parcel loaded in order to compile code using the C pragma.

This is not a problem when loading a parcel with this definition, because the code is already compiled.

The above message has been changed in 5i.3, to be more descriptive.

Why don't the Alt keys work?

Often this is caused by OS configurable keyboard mappings, and a mapping that cause the Alt key not to send the <alt> key code. This happens, for example, under X Windows, and si is showing frequently on Linux and UNIX installations.

As a partial workaround, you can try this (RedHat Linux 6.2 example): Comment out the Altkey definitions in `/etc/X11/XF86Config` by adding the “#” symbols as below and restart your X server:

```
-----XF86Config file fragment
#To set the LeftAlt to Meta, RightAlt key to ModeShift,
#RightCtl key to Compose, and ScrollLock key to ModeLock:

# LeftAlt    Meta
# RightAlt   Meta
ScrollLock   Compose

-----end XF86Config file
```

Alternatively, for a temporary fix, execute:

```
xmodmap -e "keysym Alt_L = Alt_L"
```

in a Shell window.

Of course, there may also be bugs in our key mapping code.

Why do VisualWorks Solaris and HPUX clients crash or hang?

These clients can crash or hang if you are running Oracle 8.x, and you make a mistake entering your username or password. There may be other problem areas as well.

To fix the problem, update your `sqlnet.ora` file to include the following line:

```
bequeath_detach = YES
```

With 'YES', Oracle turns off its own signal handlers, so they don't interfere with VW. Here's a note taken from the `../samples/sqlnet.ora` file.

```
#####  
#bequeath_detach = YES  
#####  
#  
#Possible values: {YES,NO}  
#Default: NO  
#  
#Purpose: Turns off signal handling on UNIX systems. If signal handling  
# were not turned off and if client programs written by users make  
# use of signal handling they could interfere with Sqlnet/Net3.  
#  
#Supported since: v2.3.3
```