# RealView® Development Suite v3.1
## Installation Guide for Windows and Red Hat Linux



### Release Information

The following changes have been made to this book.

**Change History**

| Date | Issue | Confidentiality | Change |
|---|---|---|---|
| September 2003 | A | Non-Confidential | RVDS v2.0 Release |
| January 2004 | B | Non-Confidential | RVDS v2.1 Release |
| December 2004 | C | Non-Confidential | RVDS v2.2 Release |
| May 2005 | D | Non-Confidential | RVDS v2.2 SP1 Release |
| March 2006 | E | Non-Confidential | RVDS v3.0 Release |
| March 2007 | F | Non-Confidential | RVDS v3.1 Release |
| February 2008 | G | Non-Confidential | Release for RVDS v3.1 Professional |

### Proprietary Notice



### Confidentiality Status

This document is Non-Confidential. The right to use, copy and disclose this document may be subject to license restrictions in accordance with the terms of the agreement entered into by ARM and the party that ARM delivered this document to.

### Product Status

The information in this document is final, that is for a developed product.

### Web Address

`http://www.arm.com`

### Contents

# 1 System requirements

The minimum specification of computer for use with ARM® RealView® Development Suite v3.1 must have a 1GHz Pentium III class processor with 512MB of system memory.

The recommended specification is a Pentium 4 class machine with 1GB of memory.

## 1.1 Supported platforms

RealView Development Suite v3.1 is supported on:

- Windows XP Professional, Service Pack 2
- Red Hat Enterprise Linux WS version 4 for Intel x86 using Gnome Window Manager and bash Shell.

**Note**

RealView Development Suite v3.1 uses FLEXnet license management software. To use floating licenses, TCP/IP software must be installed, configured, and running on every relevant computer. See the *ARM FLEXnet License Management Guide v4.1* for more information.

## 1.2 RealView ICE v3.2 host software (Professional only)

RealView ICE v3.2 host software is installed with the **Full** product selection. However for:

- hardware debugging you need a RealView ICE run control unit connected to the host using TCP/IP or USB
- capturing trace using an *Embedded Trace Buffer™* (ETB™), you need a RealView ICE run control unit connected to the host using TCP/IP or USB
- capturing trace directly from an *Embedded Trace Macrocell™* (ETM), you need a RealView Trace or RealView Trace 2 data capture unit connected to the host through a RealView ICE run control unit
- hardware profiling you need:
  - RealView ICE run control unit connected to the host using TCP/IP or USB
  - RealView Trace 2 data capture unit connected to the host using USB.

**Note**

RealView Trace and RealView Trace 2 are supported only on Windows platforms.

RealView ICE is supported by all variants of RealView Development Suite. You must purchase the RealView ICE and RealView Trace hardware separately, depending on your debug and trace requirements.

When you purchase the RealView ICE hardware, a version of the RealView ICE host software is included. However, RealView Development Suite v3.1 Professional includes the released version of the RealView ICE v3.2 host software that was available at the time of release.

See the *RealView ICE and RealView Trace v3.2 User Guide* for more information.

### Networking software

To make a remote connection to the run control unit and target hardware, your operating system must be installed with its supplied networking software.

  

# 2 Installing RealView Development Suite on Windows

To install RealView Development Suite v3.1, you can:

- use the ARM RealView Software Wizard, and follow the on-screen prompts
- run the command-line installer, which is useful for installing from a batch file for unattended installations (see *Installing RealView Development Suite from the command line* on page 7).

**Note**

The product must be installed from an account with administrator privileges.

## 2.1 Installing with the ARM RealView Software Wizard

To install RealView Development Suite v3.1:

1. Read the release notes for important information about this release.
2. Insert the CD into the CD-ROM drive.

   The ARM RealView Software Wizard starts automatically. If it does not start, run the program `setup.exe` in the top-level directory of the CD-ROM.
3. Follow the the on-screen prompts to install RealView Development Suite.

   The Customize panel of the ARM RealView Software Wizard lists all component software options. Select:

   - **Full** to install all component software. This is the default option.
   - **RVCT Only** to install only the RealView Compilation Tools.
   - **RVD Only** to install only RealView Debugger.
   - **No Documentation** to install the default component software without documentation.

   To choose your own set of installation options, then select or unselect the options as required. The installation type changes to `Custom`.

   **Note**

   You can set up or modify the environment variables after the installation is complete by using the `armenv` tool (see the *RealView Development Suite Getting Started Guide* for more details).
4. Continue with the installation.
5. When the software installation is complete, the ARM License Wizard is launched. If you already have a network FLEX*net* license server set up and running, or if you want to defer installing a license to a later time, click **Cancel**. Otherwise, follow the prompts to install your license file or go to the ARM licensing web site to obtain a license.
6. If you installed the RealView ICE v3.2 host software, then see *Completing the RealView ICE v3.2 installation (Professional only)* on page 9 for additional steps that are required to complete the installation of the RealView ICE run control unit.

**Note**

The support for CEVA-Oak, CEVA-TeakLite, CEVA-Teak, and StarCore SC1200 DSPs is installed with the **RealView Debugger, Executables** option.

You must obtain the appropriate DSP debug support license (see *Requesting a DSP debug support license* on page 10). DSP debug support is available only when connecting with RealView ICE, which you must purchase separately.

## 2.2 Modifying or uninstalling RealView Development Suite

To modify or uninstall RealView Development Suite:

1. Make sure that no RealView Development Suite component is running before you start.
2. Select **Start** → **Programs** → **ARM** → **RealView Development Suite v3.1** → **Modify or Uninstall Product** to launch the ARM RealView Software Wizard.

   **Note**

   To uninstall multiple ARM products, select **Start** → **Programs** → **ARM** → **Uninstallation Wizard** to launch the ARM RealView Software Wizard. Ignore step 4 in this case.

3. Follow the on-screen prompts.
4. On the Product Setup panel, select:
   - **Modify** to change the installed components
   - **Uninstall** to completely remove RealView Development Suite from your workstation.
5. If you are prompted to reboot, you must reboot your workstation to complete the uninstall.

  

# 3 Installing RealView Development Suite on Red Hat Linux

To install RealView Development Suite v3.1, you can:

- use the ARM RealView Software Wizard, and follow the on-screen prompts
- run the command-line installer, which is useful for installing from a batch file for unattended installations (see *Installing RealView Development Suite from the command line* on page 7).

## 3.1 Installing with the ARM RealView Software Wizard

To install RealView Development Suite v3.1:

1. Read the release notes for important information about this release.

   **Note**

   Do not install as root, or other privileged user. If you do, then configuration files that might have to be modified by other RealView components (such as RealView ICE) cannot be changed, and can cause configuration failures.

2. Insert the CD into the CD-ROM drive.
3. If the CD does not automount, log in as root and mount it by typing:

   `mount` *`device mount-dir`*

   where *`device`* is the path of your CD-ROM device, for example `/dev/cdrom`, and *`mount-dir`* is the path to an existing directory where the CD-ROM is to be mounted, for example, `/mnt/cdrom`
4. Move to the top-level CD-ROM directory. For example:

   ```
   cd /mnt/cdrom
   ```
5. Start the ARM RealView Software Wizard:

   ```
   setuplinux.bin
   ```
6. Follow the on-screen prompts to install RealView Development Suite.

   The Customize panel of the ARM RealView Software Wizard lists all component software options. Select:

   - **Full** to install all component software. This is the default option.
   - **RVCT Only** to install only the RealView Compilation Tools.
   - **RVD Only** to install only RealView Debugger.
   - **No Documentation** to install the default component software without documentation.

   To choose a different set of installation options, then select or unselect the options as required. The installation type changes to `Custom`.

   **Note**

   You can set up or modify the environment variables after the installation is complete by using the `armenv` tool (see the *RealView Development Suite Getting Started Guide* for more details).

7. The installer generates a script file that sets up the environment variables for RealView Development Suite v3.1, *`install_directory`*`/RVDS31env.posh`.

   Use the `source` command with the appropriate shell script to add the new environment to the current shell. You can also generate these shell script files using the `armenv` tool. See the *RealView Development Suite Getting Started Guide* for more details.

**Note**

The support for CEVA-Oak, CEVA-TeakLite, CEVA-Teak, and StarCore SC1200 DSPs is installed with the **RealView Debugger, Executables** option.

You must obtain the appropriate DSP debug support license (see *Requesting a DSP debug support license* on page 10). DSP debug support is available only when connecting with RealView ICE, which you must purchase separately.

## 3.2 Modifying or uninstalling RealView Development Suite

To modify or uninstall RealView Development Suite:

1. Make sure that no RealView Development Suite component is running before you start.
2. Start the ARM RealView Software Wizard:

   ```
   setuplinux.bin
   ```

   **Note**

   To uninstall multiple ARM products, launch the ARM RealView Software Wizard with th `-unistall` option:

   ```
   setuplinux.bin -uninstall
   ```

   Ignore step 4 in this case.

   If you specify the uninstall option without the `-` prefix, then you must also specify the ARM product to uninstall (see *Uninstalling from the command line* on page 8 for details).

3. Follow the on-screen prompts.
4. On the Product Setup panel, select:
   - **Modify** to change the installed components
   - **Uninstall** to completely remove RealView Development Suite from your workstation.
5. Follow the instructions to complete the required action.

# 4 Installing RealView Development Suite from the command line

You can install RealView Development Suite using a CLI command:

- On Windows, enter:

  `setupcli.exe`
- On Red Hat Linux, enter:

  `setupclilinux.bin`

**Note**

Also see *Completing the RealView ICE v3.2 installation (Professional only)* on page 9 for additional steps that are required to complete the installation of the RealView ICE run control unit.

## 4.1 Getting help on the command line installer

You can get help on the command line installer:

- On Windows, enter:

  `setupcli.exe help [command]`
- On Red Hat Linux, enter:

  `setupclilinux.bin help [command]`

## 4.2 Installing on Windows

If the media in drive `D:` and `C:\Program Files\ARM` is your chosen installation directory, enter the following command:

```
D:\setupcli.exe install --source D: --target "C:\Program Files\ARM" --env
SYSTEM
```

If you prefer to set up the user environment rather than the system environment, specify `--env USER` instead. You can also install RVDS to a network share, but each user must then setup their environment to run RVDS as follows:

```
cd "W:\ARM\bin\win_32-pentium"
armenv --system -p RVDS
```

During installation, the installer asks you to agree to the *End User License Agreement* (EULA). Enter **yes**.

**Note**

The product must be installed from an account with administrator privileges.

## 4.3 Installing on Red Hat Linux

If the media is mounted as `/mnt/cdrom` and `/opt/ARM/RVDS` is your chosen installation directory, enter the following command:

```
/mnt/cdrom/setupclilinux.bin install --source /mnt/cdrom \
--target "/opt/ARM/RVDS"
```

During installation, the installer asks you to agree to the EULA. Enter **yes**.

## 4.4 Installing both variants on a single platform

You can install both the Windows and Red Hat Linux variants of RVDS on a single platform, for example Red Hat Linux. To do this, use the `--var platform` argument to specify the non-native platform. For example, to install both variants on a Red Hat Linux platform:

1. Install the Red Hat Linux variant:

   ```
   /mnt/cdrom/setupclilinux.bin install --source /mnt/cdrom \
   --target "/opt/ARM/RVDS"
   ```
2. Install the Windows variant:

   ```
   /mnt/cdrom/setupclilinux.bin install --source /mnt/cdrom \
   --target "/opt/ARM/RVDS" --var platform win_32-pentium --shared
   ```

See *Variant syntax* on page 8 for details on the syntax of `--var`.

`--shared` prevents non-native elements of the installer from running. In this example, elements such as launching the ARM License Wizard and adding items to the Windows Start menu are not performed.

## 4.5 Uninstalling from the command line

You can uninstall RVDS from the command line:

- On Windows, enter:

  ```
  setupcli.exe uninstall --product product [--var variant] [--root root]
  [--shared]
  ```

- On Red Hat Linux, enter:

  ```
  setupclilinux.exe uninstall --product product [--var variant] [--root root]
  [--shared]
  ```

See *Product syntax* for details on the syntax for `product`.

See *Variant syntax* for details on the syntax for `variant`.

`--root root` is the root of your installation. The default is specified by the `ARMROOT` environment variable.

`--shared` prevents non-native elements of the uninstaller from running. For example, when uninstalling a Windows variant on Red Hat Linux, elements such as removing the ARM License Wizard and removing items from the Windows Start menu are not performed.

**Note**

To uninstall multiple ARM products, prefix the `uninstall` option with a hyphen `-`. Do not include any other option, for example:

```
setupclilinux.exe -uninstall
```

## 4.6 Product syntax

The syntax for specifying the product is:

`-p category [name [version [revision]]]`

where:

| | |
|---|---|
| *category* | The product identifier, for example, `RVDS`. |
| *name* | Do not use this argument (the default name is `Contents`). |
| *version* | The version number of the product, for example, `3.1`. If you do not specify a version, the most recent version of the installed product is used. |
| *revision* | A specific build number for the product. If you do not specify a build number, the most recent build of the installed product is used. |

For example, to uninstall RVDS v3.1 on Windows, enter:

```
setupcli.exe uninstall --product RVDS 3.1
```

## 4.7 Variant syntax

The syntax for specifying the variant is:

`--var name value [name value]...`

Identifies a variant of the same product.

| | |
|---|---|
| *name* | The type of the variant, for example, `platform`. It is suggested that you use only the `platform` variant. |
| *value* | The specific variant, such as `linux-pentium`. |

For example, to uninstall the Red Hat Linux variant of RVDS v3.1, enter:

```
setupclilinux.bin uninstall --product RVDS 3.1 --var product linux-pentium
```

  

# 5 Completing the RealView ICE v3.2 installation (Professional only)

If you have chosen to install the RealView ICE host software, then you must set up the RealView ICE hardware for use.

**Note**

You must purchase the RealView ICE hardware separately.

## 5.1 Using RealView ICE over a network

To use RealView ICE over a network, you must run the RVI Update application.

For information on using the RVI Update application to update the firmware on the RealView ICE run control unit, see the *RealView ICE and RealView Trace v3.2 User Guide*.

## 5.2 Installing the USB device driver (Windows only)

If you are connecting to the RealView ICE unit with the USB cable, then after plugging the cable into your workstation, and powering on the RealView ICE unit, the Found New Hardware Wizard is displayed. Follow the instructions, and choose to search for the driver at a specific location.

The RealView ICE USB device driver is located at:

*install_directory*`\RVI\Drivers\usb_driver\...\...\win_32-pentium`

# 6 Requesting a DSP debug support license

Debug support licenses for the following DSPs can be purchased separately:

- CEVA-Oak DSP
- CEVA-TeakLite DSP
- CEVA-Teak DSP
- StarCore SC1200 DSP.

Contact your supplier to order these debug support licenses.

See the *ARM FLEXnet License Management Guide v4.1* for details on the FLEXnet license management system as it is used by ARM products. Also, see the *Macrovision FLEXNET LICENSING END USER GUIDE* for full details about FLEXnet licensing.

  