

Wind River®
Product Installation and
Licensing

DEVELOPER'S GUIDE

2.4

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*Wind River Product Installation and Licensing
Developer's Guide
2.4*

24 Oct 11

Contents

1	Overview	1
2	Licensing and Installation Workflow	3
2.1	How Licensing Works	3
2.1.1	Types of Workstation License	3
	Node-locked License	3
	Floating License	3
	Named-User License	4
2.2	Overview of Licensing and Installation Tasks for Workstations	4
3	Obtaining Workstation Licenses	7
3.1	Obtaining a Node-Locked License File	7
3.2	Editing License Files	10
4	Installing Wind River Products	11
4.1	Before You Begin	11
4.1.1	Prepare the Computer	12
4.2	Using the Installer Program	12
4.3	Post-Installation Tasks	17
	Convert Temporary Activations to Permanent.	17
	Failed Installation	17
	Adding to Your Installation	17
	Uninstallation	17
	Moving an Installation	18
4.4	Atypical Installations	18
4.4.1	Installing Workbench into an Existing Eclipse Environment	18
4.4.2	Cross-Host Installation	18

4.4.3	Incremental Installation	19
4.4.4	Revision-Controlled Installation	19
4.4.5	Installing Multiple Products	19
4.4.6	Keyboard-Only Installation	21
5	Maintaining Your Wind River Product Installation	23
5.1	The Product Maintenance Tool	23
5.1.1	Launching the Maintenance Tool	23
5.2	Installing Product Updates	25
	About Legacy Products	26
5.3	Applying Software Patches	26
	Examining the Contents of a Patch	28
5.4	Adding Board Support Packages	28
5.4.1	Installation through ESD	29
5.4.2	Installation by Download	29
5.5	Removing Wind River Products	31
5.5.1	Removing Products Through the Maintenance Tool	31
5.5.2	Removing a Service Pack	32
5.5.3	Removing Patches	32
5.5.4	Removing a Development Workstation License File	32
5.6	Reviewing the Contents and History of Your Installation	33
6	Permanently Activating a Temporary License	35
6.1	Introduction	35
6.2	Activating Temporary Licenses	35
6.2.1	Permanent Activation with a License File	36
6.2.2	Setting an Environment Variable to Access a License Server	36
6.2.3	Reinstalling the Product	36
7	Configuring Borrowing of Wind River Product Licenses	37
7.1	Understanding Borrowing	37
7.2	Do You Need to Configure Borrowing?	37
7.3	Initiating Borrowing	38
7.3.1	Borrowing by Running the Application	38

7.3.2	Disconnect from the Network	38
8	Troubleshooting	39
8.1	Introduction	39
8.2	Troubleshooting the Installation and Maintenance Processes	40
	“Bad Interpreter” Error on Linux Hosts	40
	Older Versions of the Installer Crash During Entitlement Process	40
	The Maintenance Tool Starts Slowly or Hangs	41
	The setup.log File Shows “Dependency Issues”	41
	The Installer Reverts to Text Mode (Solaris Hosts)	42
	Expected Software Was Not Installed	42
A	Command-Line Installation	45
	48
B	Glossary	49

1

Overview

This document guides you through the process of installing Wind River products and managing your licenses for those products.

This guide is designed for developers — end users of Wind River software. For instructions on advanced tasks for license or system administrators, see the *Wind River Product Installation and Licensing Administrator's Guide*.

The tasks described in this guide include:

- Obtaining a license file for a developer workstation.
- Installing Wind River products on a single developer's workstation.
- Installing patches, service packs, and BSPs.
- Removing Wind River products.
- Setting up license borrowing.

Additional Documentation

In addition to in this guide, see the *Developer Install Guide* for more information on product installation and licensing. This at-a-glance guide is included in hard copy in your product shipment.

Once you have installed your Wind River products, consult the getting started guide, release notes, and other documentation for your product. These are available on the software DVD and on the Web at

www.windriver.com/support

2

Licensing and Installation Workflow

[2.1 How Licensing Works 3](#)

[2.2 Overview of Licensing and Installation Tasks for Workstations 4](#)

2.1 How Licensing Works

Many Wind River products are license-managed. This means that your organization buys a *license* that allows your developers to run a certain number of copies (also known as *seats*) of a Wind River product simultaneously.

To run a license-managed product, each development host must have its own license file, obtained from the Wind River licensing Web site. Licensing tasks can be completed either before or after installation tasks.

2.1.1 Types of Workstation License

There are three different types of workstation license:

Node-locked License

Node-locked licenses are best for products installed on a single development workstation. The products are not shared over the network, but they can be used by anyone with physical access to the workstation. The products can function when the workstation is disconnected from the network.

Floating License

Floating licenses allow you to share a pool of license seats among a group of users. For example, suppose 30 developers use Wind River Workbench, but only ten copies of Workbench are running at any given time. In this scenario, you only require ten floating license seats of Workbench. When all ten seats are allocated, no other instances of Workbench can start.¹

Your organization buys a specific number of seats for each product, and when they are all in use, no other developers can use that product until someone else finishes. The development workstation must be connected to the network to request a license from the license server.

Named-User License

Named-user licenses are development seats that are licensed to a specific user. The software seat (including development tools, OS, and middleware) can be used only by the designated user from one computer at a time.

This kind of license cannot “float” among different users, and cannot “straddle” computers. That is, it does not allow a single user to run the software on different computers simultaneously.

For example, in the **foo_NU** workgroup there are two named-user license seats. The designated users of these seats are **userA** and **userB**. **userA** can run Wind River Workbench on an office PC, then move to a lab workstation and run Workbench again. However, in doing this, **userA** is occupying both named-user licenses. Therefore, when **userB** tries to run Wind River Workbench, requiring a third seat, his license request is denied, and he cannot use the product.¹

To avoid license conflicts such as this, the license administrator can configure the options file to restrict license usage by user, group, or product.

2.2 Overview of Licensing and Installation Tasks for Workstations

To run a license-managed product, each development host must have its own license file, obtained from the Wind River licensing Web site. Licensing tasks can be completed either before or after installation tasks. You must complete the following tasks before you can run license-managed Wind River products.

Step 1: Obtain a Product Activation file for your workstation.

Log in to the Wind River licensing Web site, add a development computer to your account, and generate a Product Activation file. For detailed information, see [3. Obtaining Workstation Licenses](#).

Step 2: Install Wind River products on your workstation.

For installation instructions, see [4. Installing Wind River Products](#).

1. Under certain conditions, Workbench can be used without consuming a license seat. For details, see the *Wind River Workbench User's Guide*.

Step 3: Activate your workstation license.

If you installed your license-managed products using a temporary license (also known as *temporary activation*), you or your license administrator must permanently activate those products. For more information, see [6. Permanently Activating a Temporary License](#).

3

Obtaining Workstation Licenses

[3.1 Obtaining a Node-Locked License File](#) 7

[3.2 Editing License Files](#) 10

3.1 Obtaining a Node-Locked License File

Node-locked licenses are for products that are installed on a single development workstation, and not shared over a network. (See [2.1.1 Types of Workstation License](#), p.3, for descriptions of all license types.)

Complete the following steps to obtain a node-locked license file for a development computer.

1. Log in to the Wind River licensing Web site and create your account.
2. Activate your license.
3. Add your development computer as a new host.
4. Activate your products and get a license file for the development computer.

These tasks are described in greater detail in the following sections.

Step 1: Log in to the Wind River licensing Web site and create your account.

1. Locate your *License Administrator Essentials* sheet, as in [Figure 3-1](#). You will need information from it to complete this task.

Figure 3-1 Sample License Administrator Essentials Sheet



2. Go to <http://www.windriver.com/licensing>.
3. Check the list of products that can be activated from this site to be sure your product appears here. If it appears in the list, click **Login**.



NOTE: Some older products cannot be activated from the licensing Web site; to activate those products, see the installation information that was included with the products. If you do not have access to installation instructions for an older product, contact Wind River Customer Support or e-mail to license@windriver.com.

4. Log in to the site:
 - If you already have a Wind River **User ID** and **Password** (for example because you previously logged in to this site or the Wind River support site), type them and click **Login**.or
 - If you are not yet a registered user on any Wind River site, click **Register for a User ID and Password**. Type your user profile information, including your license number from the *License Administrator Essentials* or the *Developer Essentials* sheet. Type a password, confirm it, then click **Submit**.



NOTE: If you do not have your *Essentials* sheets, but do have an existing Wind River Workbench installation of version 3.3 or higher, you can find your license number by launching Workbench and selecting **Help > About Wind River Workbench**.

Step 2: Activate your license.

1. Click **Activate your products** to open the **Add Licenses** screen. Type in your **License Number** and **License Administrator Token** from the *License Administrator Essentials* sheet.

If you expect to eventually manage several product licenses, also type in a label (for example, **VxWorks GPP 3.4** or **Alameda Campus**) to make it easier to identify this particular license in the future.

2. Click **Submit**. On the **Add Licenses Confirmation** screen, check to be sure all the information you typed in is correct.

Your license has now been added to your account. If you order additional Wind River products in the future, click **Manage Licenses** and then click **Add New License** to add the new products to your account.

Step 3: Add your development computer as a new host.

Once your license has been activated, use the **Manage Hosts** screen to add information about the development computer. If you have any hosts already defined, they appear on this screen.

1. To add a host, click **Add New Host**.
2. On the **Create Host** screen, enter the host computer's name, host ID, and other requested information.



NOTE: For descriptions of the fields, including instructions for finding your host ID, click **More information**.

3. When you have filled in all required fields, click **Create**. Your new host appears on the **Create Host Confirmation** screen.

Step 4: Activate your products and obtain a license file for the development computer.

1. After you have added the development computer to your account, click **Manage Licenses** to activate the products you have purchased.
2. From the drop-down list next to the license on the **Manage Licenses** screen, select **Activate Products**.
3. Select the product you want to allocate to this development computer (look for **NL** in the **License Type** column). Click **Next**.
4. From the **Host Label** drop-down list, select this development computer, then click **Next**.
5. Confirm that you selected the correct host, then click **Next**.
6. Click **Download** to download the license file immediately, or enter an e-mail address if you want the license file to be sent to the person responsible for this host computer. If you entered an e-mail address, click **Send**.



NOTE: You can both download the license file and receive it in e-mail.

If you download the file, you must be sure to preserve the **.lic** ending on the license file or the file will not work properly. On Windows systems, you can do this by selecting **All Files** rather than **Text Document** from the **Save as type** drop-down list.

7. If you chose to send licenses by e-mail, the **E-mail Licenses Confirmation** screen displays to whom they were sent.

Once you have the node-locked license file, see [4. Installing Wind River Products](#), for instructions on how to use it.

3.2 Editing License Files

Unless directed to do so by Wind River Customer Support, do not change any text in a license file. Doing so can invalidate the license file and cause it to stop working.

4

Installing Wind River Products

- 4.1 [Before You Begin](#) 11
- 4.2 [Using the Installer Program](#) 12
- 4.3 [Post-Installation Tasks](#) 17
- 4.4 [Atypical Installations](#) 18

4.1 Before You Begin

Before you install your Wind River products, make sure you have the following items available:

- Your product box, which includes:
 - installation media (discs or image files).
 - the *Developer Essentials* sheet
- Several gigabytes (GB) of disk space on your development workstation for standard installations.

The amount of disk space required varies for each product. The installer reports the product's disk space needs as well as how much space is available.
- Write permissions to your installation directory.
- Administrator or power user privileges (Windows hosts).
- For installation on Linux and Solaris hosts, it is recommended that you install from an account other than **root**.
- For typical installations, either:
 - A product activation file to permanently activate your products during installation (see 3. [Obtaining Workstation Licenses](#)).or
 - A license authorization code (LAC) and Internet access to temporarily activate your products.

- For atypical installations, installation keys (printed on your *Developer Essentials* sheet).

4.1.1 Prepare the Computer

Close Wind River Programs

Before installing new products, you must exit any Wind River programs or tools that may be running, including the Wind River registry. If the installer is blocked by a process, it displays an error, showing the process ID.

Locked and Modified Files

If the installer encounters a locked file (such as if an external editor has locked a source file that must be updated), it saves it as *fileName.new* in the same directory as the original.

If the installer encounters any user modifications to files it needs to update, it creates a *fileName.wrsav* file in the same directory as the original.

If any problems were found with the **.new** files, these issues are logged in the *installDir/setup.log* file; user modifications are listed in *installDir/modifiedfiles.log*.



NOTE: For best performance and to achieve uniformity across installations, make sure that all content you want to install is located locally.



CAUTION: If your workgroup members will install the product from a shared network directory, ensure that the directory name and path do not include any of the following characters:

[space character] ! # % < > ?

Note in particular that space characters (such as in the directory name **Documents and Settings**) are not permitted. If there is a space character anywhere in the absolute path, some elements of the installed products will not be available.

4.2 Using the Installer Program

To install a Wind River product on your development workstation, complete the following steps.

Step 1: Launch the installer.

Launch the installer in one of the following ways:

- Put the disc into your drive.

If your product includes more than one disc, begin with the disc labeled **Install First**.

- Navigate to the product image, and run
 - **setup.exe** on Windows
 - **setup_linux** on Linux
 - **setup_solaris** on a Solaris system



CAUTION: When you are prompted to choose an installation directory, ensure that the directory name and path you choose do not include any of the following characters:

[space character] ! # % < > ?

Note in particular that space characters (such as in the directory name **Documents and Settings**) are not permitted. If there is a space character anywhere in the absolute path, some elements of the installed products will not be available.



NOTE: If you are installing a product suite that includes more than one product (such as a Wind River Platform), be sure to choose the same installation directory for all products.

Read each installer screen and provide the requested information, then click **Next**.



NOTE: If you encounter problems during the installation process, click the **Help** button in the installer program. The installer's Help system offers screen-by-screen instructions in greater detail than what is described here.

Step 2: Configure online update settings.

On the **Online Update Settings** screen, you can choose whether to do the following:

- Look for updates to the installer program itself.
- Look for updates to your Wind River products.
- Test your Internet connection.
- Use a proxy server to connect to the Internet, in order to find installer updates and product updates.

Installer Updates

When Wind River makes changes to the installer program, it makes the latest version available to you on an update server. If you select the option to update the installer, and if there is an updated version available, the installer program installs it and restarts itself.

Wind River recommends you update the installer program when possible. If you wish to skip these updates, you can clear this option, but you may encounter installation problems that are resolved in an updated version.



NOTE: In order for the installer program to update itself, your computer must have access to the Internet. See [Internet Connection](#), p.14.

Product Updates

Just as with updates to the installer, Wind River makes product updates available on an update server. Updates to products are typically placed in an update repository.

If you select the product-update option, and if an updated version of your product is available, you can install it as part of the current installation process (a later screen in the installer will display product updates to install). Doing so can save you time: rather than installing the older version and then running the installer program again to update your products, you simply install the updated version the first time.

If you do not select this option, you can update your products later, in a separate installation process, using the Product Maintenance Tool. For information on the Maintenance Tool, see [5. Maintaining Your Wind River Product Installation](#).



NOTE: In order to install product updates, your computer must have access to the Internet. See [Internet Connection](#), p.14.

Internet Connection

Updating the installer and your Wind River products requires a connection to the Internet. You can click the **Test Internet Connection** button to ensure that the computer you're installing on can contact the Wind River cloud.

Proxy Server

If your computer connects to the Internet through a proxy server, select the **Connect to Internet using proxy server** option. When you select this option, additional fields appear on this screen. Use these fields to enter the type of proxy server (Web proxy or SOCKS proxy), IP address, and port.

If your proxy server is set up to require login information, select **Requires Authentication** and enter your username and password in the additional fields that appear.

If you do not have the requested proxy server information, see your administrator.

If you do not have Internet access, Wind River can make the installer updates and product updates available on physical media. Contact Wind River Customer Support for assistance.

Step 3: Choose your activation type.

On the **Choose Activation Type** screen, select the type of installation you want:

- **Use your existing product activation (install.txt) file**



NOTE: This option appears only if you have previously installed Wind River products.

If you have previously installed Wind River products, you may already have a product activation file (**install.txt**) that you used for those products. In some cases, you can use the same product activation file for your current installation.

If you received a new product activation file for the products you are currently installing, Wind River recommends you use the most recent file. To do so, select [Permanent activation](#).

- **Temporary activation**

Select this option if you wish to install and use the products right away, but for a limited time (usually 31 days).

To continue using them beyond that period, you must eventually perform a permanent activation. The permanent activation allows you to use the same installation; you will not need to re-install your Wind River products. For details on converting a temporary installation to a permanent one, see [6. Permanently Activating a Temporary License](#).

If you select the **Temporary activation** option, another screen appears where you will enter the license authorization code (LAC) and some other user information. The installer program will then retrieve your temporary license.

Because of this retrieval process, you must have Internet access in order to use this method.

- **Permanent activation**

Select this option if you have a product activation file for this installation.

To use this option, click **Browse** and navigate to the directory location of your product activation file.

You do not need Internet access to install and activate Wind River products using this option.

- **Manually enter all installation keys**

This method is used only in rare cases. If you need to use this option, contact Wind River Customer Support.

Step 4: Select the target architectures to install.

If the products you are installing have any architecture-specific content, the **Choose Installation Filters** screen appears. Use this screen to refine your installation by selecting the particular target architectures for which to install.

If you are not sure, you can accept the default setting, which is to install for all architectures. However, clearing unneeded architectures reduces the size of your installation, and can also avoid confusion over extraneous components or files.

If you do not select any target architectures, the installer warns you that only architecture-independent features will be installed.

Step 5: Select the products to install.

On the **Select Products** screen, you can

- Choose the specific products to install.
- Review the installation directory and disk space that the products will use.
- Set options for how to start your programs.

Selecting Products to Install

The list shows all products and features that your license entitles you to, and according any architecture-specific filters you may have specified.

Review the product list on this screen carefully. If it does not show the products you intend to install, this means that the installer has not detected the new product activation file. In this case, click **Back** to return to the **Choose Activation Type** screen.

You can expand the nested items in the list, and select just the products and features you want to install.



CAUTION: Use caution when clearing (de-selecting) features, as failing to install critical features can prevent the products from functioning properly.

The icons in the product list are differentiated according to the source and newness of the content:



Content from a Web (http) source.



Content from a local (file) source.



New content to be installed.



Content that is already installed.



Content that is an update to features you already have installed.

Installation Directory

The products you select on this screen will be installed into the directory named here. This directory path is the one you specified at the very beginning of the installation process.

If you want to change the installation directory, restart the installer and specify the new directory in the first Wind River Installer dialog.

Disk Space Information

This screen shows the total disk space required for the products and features listed, as well as the amount of disk space available.

In calculating available disk space, the installer also takes into account any quota restrictions in place.

If you do not have sufficient disk space for the installation, the installer shows an error message. In order to continue installing, you must free enough disk space for the installation.

Start Options

Use these options to set how you will launch your Wind River products once they are installed. You can create a desktop shortcut and specify a Start menu entry.

On UNIX systems, the installer creates Start menu entries and desktop shortcuts according to the free Desktop Entry specification. Desktop managers supporting this mechanism are available for all supported UNIX and Linux systems. If you have configured your system to use a different desktop manager, or only a window manager, these shortcuts and menu entries may not be accessible.

Step 6: Install.

After you have accepted the license agreement(s), check over the list of content once more. When you are ready to launch the installation, click **Install**. The last screens offer a summary of your installation and a link to product readme information.

Step 7: Follow up.

Now that you have finished the product installation process, take stock of any additional tasks, such as converting a temporary product activation to permanent, or installing a BSP. Some follow-up actions are described in [4.3 Post-Installation Tasks](#), p.17.

4.3 Post-Installation Tasks

Convert Temporary Activations to Permanent.

If you installed using a product activation file, your Wind River products are now installed, activated, and ready for you to begin working with them.

However, if you installed using a license authorization code or installation keys, you may use your products now, but eventually you must permanently activate them to continue working with them. For instructions on how to do this, see [6. Permanently Activating a Temporary License](#).

Failed Installation

If you were not able to install, see your license administrator.

Additionally, see [8. Troubleshooting](#) for help with some of the more common issues that can arise during installation.

Adding to Your Installation

For information on installing a service pack, patch, or BSP, see [5. Maintaining Your Wind River Product Installation](#).

Uninstallation

For instructions on removing Wind River products, see [5.5 Removing Wind River Products](#), p.31.

Moving an Installation

If you want to produce an identical installation in a different location, Wind River recommends that you simply re-install into the second location.

While it is possible to move, copy, or relocate a Wind River product installation, there are some caveats. Some products may not support moving the original installed location because of host-specific actions performed by post-installation scripts that link your computer to the product.

Specific cases in which moving the installation breaks products or functionality include registering the Wind River Probe to Windows; and copying DLLs into the System folder.

4.4 Atypical Installations

This section describes atypical installation scenarios. You may not need the instructions in this section, depending on the products you have already installed, and the specific constraints of your workgroup's environment.

4.4.1 Installing Workbench into an Existing Eclipse Environment

Wind River Workbench provides a complete Eclipse framework. You do not need to install Eclipse separately. However, if you have your own customized Eclipse installation, and you prefer to integrate Workbench into it, you must:

1. Install Wind River Workbench (as described in this chapter).
2. Follow the instructions in *Wind River Workbench User's Guide: Using Workbench in an Eclipse Environment* to integrate Wind River Workbench into your existing Eclipse installation.

4.4.2 Cross-Host Installation

The Wind River installer does not support installing products on one host type, to be run on a different host type.

4.4.3 Incremental Installation

An incremental installation adds to an existing product installation. An incremental installation can be performed in situations such as the following:

- You installed only certain features of a Wind River product (by selecting only certain architectures or features during installation) and now wish to add the excluded features.
- You are installing complementary Wind River products (for example, adding On-Chip Debugging to your existing installation of Wind River Workbench).

When you do an incremental installation, you can again choose target architectures and features. However, you cannot reinstall products and features that are already installed. The installer program offers only those products or features that are not yet present in your installation. If you wish to reinstall, you must first remove the product. For information on removing products, see [5.5 Removing Wind River Products](#), p.31.

4.4.4 Revision-Controlled Installation

You can use Wind River products in a source-controlled environment. However, you cannot install the products directly into a source control system or link the installer program to it. You must first perform the installation; *then* apply configuration management.

Typically, organizations that use a CM system with Wind River products first perform the installation, then contribute it to their system as version one. Any product updates subsequently installed then become version two.

There are some caveats to consider if you will use revision control:

- Because of the size of Wind River products, you must be prepared that a source-controlled Wind River software repository will necessarily be quite large.
- With most source control systems, you lose write permissions to the files being managed. In order to update Wind River products, the installation must be writable.

4.4.5 Installing Multiple Products

You can install multiple Wind River products on the same host computer. Keep in mind the following supported and unsupported variations:

- **Multi-Product Installation**

Multiple products can co-exist in the same directory, but must have different version numbers. For example, the same location can house a Workbench 3.1, Workbench 3.2, and Workbench 3.3 installation.

During the installation process, you can opt to create Start menu entries. In cases of multiple products and versions, you may want to create Start menu entries with customized names, in order to more easily identify them when you run the programs or perform maintenance on them.

- Windows Hosts

Without customized Start menu entry names, the installer program creates entries such as the following:

Start > Wind River > Workbench 3.1 > Workbench 3.1

Start > Wind River > Workbench 3.2 > Workbench 3.2

Start > Wind River > Workbench 3.3 > Workbench 3.3

Start > Wind River > Product Maintenance

Start > Wind River > Product Maintenance~0

Start > Wind River > Product Maintenance~1

- UNIX Hosts

On UNIX systems, if you do not customize the Start menu entry names, they appear identical:

Start > Wind River > Product Maintenance

(points to the Maintenance Tool for the Workbench 3.1 installation)

Start > Wind River > Product Maintenance

(points to the Maintenance Tool for the Workbench 3.2 installation)

Start > Wind River > Product Maintenance

(points to the Maintenance Tool for the Workbench 3.3 installation)

- **Multiple Installations of the Same Product and Version**

You can install multiple instances of the same product and version number, but you must choose separate installation directories for each instance. For example, if you have an existing installation of Wind River Workbench 3.3 at **C:\WindRiver** and want to install another instance of Workbench 3.3 for a particular task, you would install the second instance into, say, **C:\WindRiver_task**.

In this case, if you opt during installation to create a Start menu entry, take care to give a descriptive name (such as **Wind River task**) so that when you run products or the Maintenance Tool from the Start menu, you can choose the correct instance.

- **Parallel Installation**

You can run two or more installation processes simultaneously. Each process must be performed by a separate instance of the installer program, and must install into a separate directory.

However, note that because you are likely to face disk I/O and network performance issues with this kind of simultaneous parallel installation, there is little or no benefit to it. The installer performs best when it is allowed to create a single installation at a time.

- **Merging Split Installations**

If you have installed products into separate locations—for example, Wind River Workbench in one location and VxWorks in another—you cannot later combine them. The installer does not support merging installations in this way.

4.4.6 Keyboard-Only Installation

You can use the GUI mode of the installer without a mouse. Simply press the **TAB** key to move through the options on a screen; then press **ENTER** to register your selections for that screen.

5

Maintaining Your Wind River Product Installation

- 5.1 [The Product Maintenance Tool](#) 23
- 5.2 [Installing Product Updates](#) 25
- 5.3 [Applying Software Patches](#) 26
- 5.4 [Adding Board Support Packages](#) 28
- 5.5 [Removing Wind River Products](#) 31
- 5.6 [Reviewing the Contents and History of Your Installation](#) 33

5.1 The Product Maintenance Tool

The Wind River Product Maintenance Tool is provided with products from Wind River Workbench 3.1 forward. It is a special mode of the same installer program you used to install your products in [4. *Installing Wind River Products*](#). You can use the Maintenance Tool to do the following:

- Update your installed products.
- Verify and apply patches.
- Install board support packages (BSPs).
- Remove products.
- View your installation history and the current contents of your installation.

5.1.1 Launching the Maintenance Tool

Close Wind River Programs

Before using the Maintenance Tool, it is recommended that you exit any Wind River programs or tools that may be running, including the Wind River registry. If the Maintenance Tool is blocked by a process, it displays an error, showing the process ID.

Locked and Modified Files

If the installer encounters a locked file (such as if an external editor has locked a source file that must be updated), it saves it as *fileName.new* in the same directory as the original.

If the installer encounters any user modifications to files it needs to update, it creates a *fileName.wrsav* file in the same directory as the original.

If any problems were found with the **.new** files, these issues are logged in the *installDir/setup.log* file; user modifications are listed in *installDir/modifiedfiles.log*.

Start the Maintenance Tool

To start the Maintenance Tool, do the following:

Windows

- **From the Windows GUI**

Select **Start > All Programs > startMenuEntry > Product Maintenance**.

The *startMenuEntry* name is either **Wind River** or the custom string you gave when you created a Start menu entry during product installation.

Alternatively, navigate to *installDir\maintenance\wrInstaller\hostType* and double-click **wrInstaller.exe**.

- **From the Windows command line**

On Windows, execute the following commands from a command prompt:

```
% cd installDir\maintenance\wrInstaller\hostType
% wrInstaller.exe
```

Linux and Solaris

- **From the Linux and Solaris GUI**

Select **Applications** (the main menu on the panel) > *startMenuEntry* > **Product Maintenance**.

The *startMenuEntry* name is either **Wind River** or the custom string you gave when you created a menu entry during product installation.

- **From the Linux and Solaris command line**

On Linux and Solaris, execute the following commands from the command shell:

```
% cd installDir/maintenance/wrInstaller/hostType
% wrInstaller
```

Wind River Workbench

You can start the Maintenance Tool from inside Workbench by selecting **Help > Update Wind River Products**. You must close Workbench and any other Wind River applications before installing product updates.

5.2 Installing Product Updates

A product update (such as a service pack) adds new features or functionality to a Wind River product that you have already installed. If an update is available for your installed products, you can install it with one of the methods below.

DVD

If you have received the product update on a disc, launch the installer by putting the disc into your drive, or by navigating to the product image, and running the **setup** program appropriate to your host OS. This is the same installation program you used to install your products in [4. Installing Wind River Products](#).

With this method, you can install an update without Internet access.

Download

Download the update from the Wind River Online Support site at <http://www.windriver.com/support>. Unzip the zip file into your installation directory (usually **WindRiver**) and run the **setup** program appropriate to your host type.



NOTE: If your computer does not have access to the Internet, Wind River can make the update available to you on physical media. Contact Wind River Customer Support for assistance.

ESD

Updates to Wind River products are available through electronic software delivery (ESD).



NOTE: If your computer does not have access to the Internet, Wind River can make the update available to you on physical media. Contact Wind River Customer Support for assistance.

To install a product update in this way, do the following:

1. Launch the Maintenance Tool as described in [5.1.1 Launching the Maintenance Tool](#), p.23.
2. On the **Choose Maintenance Task** screen, select **Online Content**.

When Wind River makes updates, such as service packs, for its products, it makes the latest version available to you on an update server. When you select **Online Content**, the installer program searches the specified server for any available updates to the products you have installed.

3. [Optional] Click **Configure** to set how the Maintenance Tool contacts the Internet, and where it looks for updates.

This is appropriate in cases such as these, for example:

- Your organization uses a proxy server to connect to the Internet.
- Your site administrator has configured a local server for product updates.
- Wind River has directed you to use an alternate location.

For detailed instructions on configuring the Maintenance Tool, see the Help system within the installer program.

4. On the **Choose Maintenance Task** screen, click **Next**. If updates are available, a subsequent screen lets you select the ones you want to install.

You can expand the nested items in the list, and select just the products and features you want to install. The icons in the product list are differentiated according to the source and newness of the content:



Content from a Web (http) source.



Content from a local (file) source.



New content to be installed.



Content that is already installed.



Content that is an update to features you already have installed.

About Legacy Products

As a general guideline, you should install and maintain a product using the installation tool included with it. Details are listed below.



NOTE: For these guidelines, a *newer installer* is one of release number 2.0 or higher (Wind River Workbench releases 3.1 and higher). An *older product* is one that is built with a pre-2.0 installer.

- **Service Packs**

Newer versions of the installer program *cannot* be used to install service packs for older products.

- **Patches**

Newer versions of the installer program *can* be used to install patches for older products, but you must have the 1.4.2 JRE in place.

- **Removing Older Products**

Newer versions of the installer program *can* be used to remove older products.

5.3 Applying Software Patches

A software patch typically fixes one feature or adds or replaces a small number of files in your existing installation. To install a patch, first download it, then run the Maintenance Tool to install it.



CAUTION: Take care in applying patches. Because patches are likely to overwrite files in your existing product installation, they are not separately removable, and because combinations of different patches are not necessarily verified together, applying patches can break your installation.

Wind River strongly recommends you consider carefully before installing patches. Read the installation instructions for each patch thoroughly. Contact Wind River Customer Support if you are unsure of the stability of a particular combination of patches.

To install a patch, do the following:

1. Log in to the Wind River online support Web site:
<http://www.windriver.com/support>
2. Select the **Downloads** tab, then use the filter fields to find available patches for your product.
3. Unzip the patch's zip file into your *installDir/updates* directory.
4. Launch the Maintenance Tool as described in *5.1.1 Launching the Maintenance Tool*, p.23.

Alternatively, you can install a patch in command-line mode. For details, see *A. Command-Line Installation*.

5. On the **Choose Maintenance Task** screen, select **Patch** and click **Next**.

On a subsequent screen, the installer program displays any patches present in the *installDir/updates* directory. If the *installDir/updates* directory contains patches that you have already installed, these patches are listed, but by default are not selected.

In the patch list, you can perform the following actions:

- Select a patch to install.
- Repair a patch, if it is already installed.

Repairing a patch undoes any changes that might have been made to the patched files.

If there are no patches in the *installDir/updates* directory, you can click **Back** to perform another task in the Maintenance Tool, or **Finish** to close the installer program.



NOTE: If you have multiple, parallel Wind River product installations (independent products in separate installation directories), take note of the **Installation Directory** displayed on the **Apply Patches** screen. If it does not show the desired directory, close the Maintenance Tool and restart it. When you start the Maintenance Tool the second time, take care to select the correct installation directory. You may also need to move your patch files if they are not in the **updates** directory of the correct installation.

6. Select the patches you want to install or repair, and click **Install**.

When the installation is complete, click **Finish**.

Examining the Contents of a Patch

If you want to verify the contents of a patch before applying it—because, say, you are close to the end of development and must be particularly cautious about changing your installation—you can view a list of its contents; or you can extract its contents to a temporary directory. You can then compare the list or the contents with your current installation, to see which files will change if you apply the patch.

To do either of these things, do the following:

1. Launch the Maintenance Tool as described in [5.1.1 Launching the Maintenance Tool](#), p.23.
2. On the **Choose Maintenance Task** screen, select **Patch** and click **Next**.
3. Select the patch or patches that you would like to examine. Right-click and choose one of the options from the context menu:
 - **Export content list to file...**
When you select this option, the installer writes a list of the contents of the patch to the file you specify.
 - **Extract patch contents to...**
With this option, the contents of the patch are extracted into the directory you specify.
4. Review the results.

Alternatively, you can examine a patch in command-line mode. For details, see [A. Command-Line Installation](#).

5.4 Adding Board Support Packages

Most Wind River product shipments provide board support packages (BSPs) directly on the product installation media. You select and install those BSPs as part of the overall product installation.

However, to support customers' development needs, Wind River continually releases new BSPs for additional boards and processor families.

If the BSP you need is not included on your installation media, you may wish to add a BSP after you have installed your products. This section covers that process.

Compatibility

The Wind River installation program does not verify version compatibility between your Wind River products and BSPs. For compatibility information, see the documentation that accompanies the individual BSP.

Installation Methods

There are two main methods for adding a BSP:

- Electronic software delivery (ESD)
In this method, you run the installer program to find and install available BSPs. See [5.4.1 Installation through ESD](#), p.29.
- Download
In this method, you find the BSP on Wind River's Online Support site, download it, and install it as a patch. See [5.4.2 Installation by Download](#), p.29.



NOTE: For both of these methods, your computer must have access to the Internet. If you do not have Internet access, Wind River can make BSPs available to you on physical media. Contact Wind River Customer Support for assistance.

5.4.1 Installation through ESD

Some Wind River BSPs are made available through electronic software delivery (ESD). To install a BSP through ESD, you simply run the installer program and allow it to fetch product updates.

1. Launch the installer program in maintenance mode, as described in [5.1.1 Launching the Maintenance Tool](#), p.23.
2. On the **Choose Maintenance Task** screen, select **Online Content**.
The Maintenance Tool assembles a list of available content from online repositories, and checks your license entitlement.
3. On the **Select Products** screen, scan the list for your desired BSP.
Using the nested checkboxes, you can install all available updates, or just the BSP content you want.
4. Complete the rest of the Maintenance Tool screens to finish your BSP installation.

5.4.2 Installation by Download



NOTE: This section provides detailed instructions for downloading and installing BSPs for products from Wind River Workbench 3.1 forward.



The process described in this section does not apply to Wind River Linux 4.x BSPs. For Wind River Linux 4.x BSP installation instructions, see the release notes for your product.

1. Go to Wind River's Online Support site.
2. Find your BSP.
3. Download it and unzip it into your *installDir/updates* directory.
4. Run the Maintenance Tool, treating the BSP as a patch.

Step 1: Go to the BSP Web site.

The Wind River public Web site provides you with access to a listing of all available Wind River BSPs. The BSP main page is:

http://www.windriver.com/products/bsp_web/

You can also navigate to this page from the Wind River Web site home page by selecting **Products > Board Support Packages**.



NOTE: This Web page is publicly accessible, but you must have an Online Support login and a valid maintenance contract in order to download a BSP.

Step 2: Find Your BSP.

From the BSP main page, you can choose to locate a specific BSP by any of the following criteria:

Architecture

This is the generic processor family to which the desired CPU belongs. For example, ARM or PowerPC. If you know the architecture family for your development processor, use this category.

Hardware Vendor

This is a list of hardware vendors for the development boards that are supported by the Wind River BSPs. If you know the manufacturer of the development board for the BSP you wish to use, use this category.



NOTE: This category is organized by hardware development board vendors, not by processor manufacturer. In many cases, the CPU manufacturer is not the board vendor.

Market

This is the general market targeted by the development board or processor. For example, processors that are targeted for use in medical equipment are grouped into one category while processors targeted for the automotive market are grouped into that category.

Platform

This is a list of available Wind River products that include BSP support. You can use this category to see a list of all BSPs available for your specific Wind River product and version.

Step 3: Download the BSP.

Once you have located your desired BSP, you must download and install the associated **.zip** file.

Find the correct entry in the BSP list and click **More**. (This button appears at the far right end of the specific BSP entry line.) This link brings you to the BSP technical details page.

If a version of the BSP is available for download, a link to a downloadable **.zip** file appears at the top of the page under the **BSP Sales Contact** field. Certain BSPs are only available as part of a product distribution. If this is the case, the **Product Availability** field indicates that the BSP is available on CD-ROM (or DVD-ROM). If you do not have the product CD (or DVD) for the BSP, contact Wind River Customer Support for assistance.

To download the BSP **.zip** file, click on its filename near the top of the technical details page. This link brings you to the BSP's download instructions page. Follow the instructions appropriate to your host type and base Wind River product version.

Step 4: Install a BSP with the Maintenance Tool

Many Wind River BSPs are generated as patches to an installed product. Therefore, the installation process for a BSP is the same as for a patch. For installation instructions, see [5.3 Applying Software Patches](#), p.26.

Furthermore, like patches, BSPs are not separately uninstallable. To remove or repair a BSP, see [5.5.3 Removing Patches](#), p.32.

5.5 Removing Wind River Products

This section describes the process for removing Wind River products from a system.

5.5.1 Removing Products Through the Maintenance Tool

To remove Wind River products, it is recommended that you use the Maintenance Tool provided with your product. The Maintenance Tool can uninstall many products at the same time.

To remove a product, follow the steps below.

1. Launch the Maintenance Tool as described in [5.1.1 Launching the Maintenance Tool](#), p.23.
2. Select **Remove** and click **Next**.

The **Choose Products to Remove** screen shows a nested list of products and features that can be removed. You can click on an item in the list to see its component features.



NOTE: This list shows the current contents of your installation. To see how your installation has changed over time, use the Maintenance Tool's **About This Installation** option. See [5.6 Reviewing the Contents and History of Your Installation](#), p.33.

3. Select the products or features you want to remove, and click **Remove**.
4. Complete the uninstallation manually.

Some files are not removed in the uninstallation process. The following types of files are not removed automatically:

- object files
- the product activation file
- any file, workspace, or project that you have added to the installation
- the installation directory itself
- downloaded third-party plug-ins

If you want to remove these files, you must do so manually.

5.5.2 Removing a Service Pack

Service packs are uninstalled the same way a standard release is uninstalled. Follow the instructions in [5.5.1 Removing Products Through the Maintenance Tool](#), p.31, to uninstall the product(s) you no longer want to use.



NOTE: Keep in mind that service packs are not separately removable from their underlying base product. That is, when you remove a service pack, you are also removing the parent product.

For example, if you had installed VxWorks 6.9, then installed a service pack to upgrade to VxWorks 6.9.1, you cannot remove just the service pack to return to VxWorks 6.9. Uninstallation removes the product outright.

5.5.3 Removing Patches

When you install a patch, it overwrites existing files in your product installation. Therefore, if you were to remove the patch, it would leave behind an incomplete installation.

For this reason, patches are not separately uninstallable. If you have a damaged installation, you must do one of the following:

- Repair the patch.

To do this, follow the instructions in [5.3 Applying Software Patches](#), p.26, and either repair or update the patch in question. When you *repair* a patch, all its files are restored to their original content. To *update* a patch means that the patch was reissued, and its files will be updated.

or

- Remove the product as a whole and reinstall.

To do this, follow the steps in [5.5.1 Removing Products Through the Maintenance Tool](#), p.31, to remove the product, and then reinstall it as described in [4. Installing Wind River Products](#).

5.5.4 Removing a Development Workstation License File

If you are removing a Wind River product from a development workstation, the uninstallation process described in [5.5 Removing Wind River Products](#), p.31, does not remove the license file.

You must manually remove it by navigating to the `installDir/license` directory and deleting the file, usually named `WRSLicense.lic`.

5.6 Reviewing the Contents and History of Your Installation

You can use the Maintenance Tool to view the current contents of your Wind River product installation, as well as how it has changed over time.

Current Contents

To see the current contents of your installation, do the following:

1. Launch the Maintenance Tool as described in [5.1.1 Launching the Maintenance Tool](#), p.23.
2. Select **About This Installation** and click **Next**.
3. The **Installed Content** screen shows a nested list of products and features.

On this screen, the icons and text displayed are differentiated by the source and newness of the content:



Content from a Web (http) source.



Content from a local (file) source.



Content that was recently added or changed.



Content that was already installed.

bold

text Content that was recently installed.

Installation History

You can also see how your Wind River product installation has changed over time. This can be particularly helpful if you want to know when, say, a particular service pack was installed, or in what order a set of patches were applied.

To explore your installation history, launch the Maintenance Tool and select the **About This Installation** option as described above. Use the **Show installation snapshot by date** field at the top left of the screen to see changes in the installation.

Click **Finish** to close the Maintenance Tool.

6

Permanently Activating a Temporary License

[6.1 Introduction 35](#)

[6.2 Activating Temporary Licenses 35](#)

6.1 Introduction

If you used a product activation file (**install.txt**) when installing Wind River products, those products are permanently activated and require no further action.

If you used a license authorization code (LAC) or installation key to temporarily activate your products, you can use those products for a limited time, but you must obtain a license file to permanently activate your products.



NOTE: The length of a temporary activation varies by product, but is typically no less than 30 days. Wind River license-managed tools display a warning as they approach expiration.

Permanent activation means that a product may be used to the fullest extent of its license.

6.2 Activating Temporary Licenses

There are two ways to permanently activate Wind River products that were issued temporary licenses:

- You can create and install a license file for your development workstation.
- or
- On the development workstation, you can set an environment variable to access a license server.

6.2.1 Permanent Activation with a License File

The easiest (and recommended) way to activate temporary licenses is to obtain a license file.

1. Follow the instructions in [3. Obtaining Workstation Licenses](#) to create the appropriate license file(s).
2. Name the new file **WRSLicense.lic**.
3. Copy the file into the *installDir/license* directory of the development workstation.



NOTE: Each node-locked development workstation requires a separate license file, generated using that workstation's host ID.

6.2.2 Setting an Environment Variable to Access a License Server

The second way to permanently activate temporary licenses is to set an environment variable to point to a license server.



NOTE: In order to use this method, your license administrator must first obtain a server license file and install a license server.

1. Create an environment variable on the workstation called **WRSD_LICENSE_FILE**.
2. Set the value of this variable to the *port@servername* indicated in the **SERVER** line of the product activation file you downloaded from the licensing Web site.

For example, the **SERVER** line may look like the following:

```
SERVER jupiter hostID 27000
```

In this example, the server name is **jupiter** and the port number is **27000**, so you would set the variable to **27000@jupiter**.

Once the variable is set, this permanently activates the temporary licenses.

6.2.3 Reinstalling the Product

When you go from temporary to permanent activation, you do *not* typically need to remove and then reinstall the product. However, if you do reinstall, note that the uninstallation process does not remove the license file. You must remove the old license file manually, by navigating to the *installDir/license* directory and deleting the file, usually named **WRSLicense.lic**.

7

Configuring Borrowing of Wind River Product Licenses

- 7.1 [Understanding Borrowing](#) 37
- 7.2 [Do You Need to Configure Borrowing?](#) 37
- 7.3 [Initiating Borrowing](#) 38

7.1 Understanding Borrowing

Many Wind River products are license-managed, which means that they check for a valid license on startup. If a product installation is configured to use a license from a pool of *floating* or *named-user* licenses, the development workstation must be connected to the network in order to retrieve a license from the license server.

Borrowing is a feature that allows you to retrieve a license and continue to use it after disconnecting from the network, essentially turning a floating or named-user license into a node-locked license for a defined period of time (for more information on types of licenses, see [2.1.1 Types of Workstation License](#), p.3.).

For example, if you are planning to travel with a laptop and want to use a license-managed product while in-flight or after you arrive at your destination, you must borrow a license before you leave. However, if you plan to use the product only from a computer that is always connected to the network, then you do not need to use this feature.

7.2 Do You Need to Configure Borrowing?

If your system includes floating or named-user licenses for Wind River products, and you intend to use those products while disconnected from the network, you must configure your development workstation to borrow the appropriate license.

If your system includes only node-locked licenses, then you can freely use Wind River products as soon as your installations are permanently activated. For

information on permanent and temporary activation, see [6. Permanently Activating a Temporary License](#).

7.3 Initiating Borrowing

To borrow a license for a Wind River product, you must do the following:

1. Ensure that your administrator has set up your development workstation for borrowing.
2. Ensure that all products and features that will be borrowed have been checked out at least once.
3. Keep the workstation connected to the network (with access to the license server) while initiating borrowing.

7.3.1 Borrowing by Running the Application

Once the workstation has been configured for borrowing, work with your administrator to determine a new borrow period; then run the license-managed product.

The license will be borrowed, and will remain allocated until the return date you specified, even if you reconnect to the network before the borrow return date.

7.3.2 Disconnect from the Network

The steps in [7.3 Initiating Borrowing](#), p.38, can be repeated for any number of borrow periods and features. Once this is complete, you can disconnect the development workstation from the network.

8

Troubleshooting

“Bad Interpreter” Error on Linux Hosts	40
Older Versions of the Installer Crash During Entitlement Process	40
The Maintenance Tool Starts Slowly or Hangs	41
The setup.log File Shows “Dependency Issues”	41
The Installer Reverts to Text Mode (Solaris Hosts)	42
Expected Software Was Not Installed	42

8.1 Introduction

This chapter describes some common problems seen in installing, licensing, and maintaining Wind River products.

If you are facing an issue that is not listed here, use the following resources:

- Documentation on installation and licensing, including:
 - this guide
 - the installer program’s Help system
To open the installer Help, launch the installer or Product Maintenance Tool and click **Help**. The Help system offers screen-by-screen instructions.
 - the getting started guide and release notes for your product
- Wind River Customer Support at www.windriver.com/support
When you contact Customer Support, be ready to provide the following files:
 - *installDir/setup.log*
 - *installDir/maintenance/wrInstaller/hostType/configuration/*.log*

8.2 Troubleshooting the Installation and Maintenance Processes

“Bad Interpreter” Error on Linux Hosts

Problem

On certain Linux hosts, when you run the installer (the `setup_linux` application), the following error message may appear:

```
/bin/sh: bad interpreter: Permission denied
```

Explanation

The source of this problem is in the GNOME desktop environment on Red Hat hosts (specifically, Red Hat Enterprise Linux versions 5: 2.6.18-128.e15). In the DVD mount process, GNOME uses default attributes that make the DVD mount non-executable. Then, because the DVD is mounted without execution permissions, this error is triggered.

Solution

There are two ways to solve this issue:

1. Change the default settings for **gnome-mount** so that the mounted DVD is executable.
2. Edit `/etc/fstab` to override the **gnome-mount** process entirely.

Older Versions of the Installer Crash During Entitlement Process

Problem

If you run an older (<2.0) version of the installer program, it can fail either after you have specified a product activation file (`install.txt` file) or after you have entered a valid license authorization code (LAC).

Explanation

The reason for this failure is that some entitlement information is too long for the older installer program to accommodate. If the entitlement takes the form of a string longer than 50 characters, the pre-2.0 installer crashes.

Solution

As a workaround for this issue, simply remove the overlong lines from your `install.txt` file or LAC, and restart the installer program.

```
(WIND00161540)
```

The Maintenance Tool Starts Slowly or Hangs

Problem

After launching the Product Maintenance Tool, the tool can be slow to start up, or may appear to run in an endless loop.

Explanation

In some cases if your organization uses a firewall, the firewall can drop the connections that the Maintenance Tool uses to, for example, find updates to your installed products.

Solution

Check the **setup.log** file, located at the root of your installation directory, for errors indicating that the connection has timed out. To avoid this kind of disruption, configure the Maintenance Tool to use a proxy server. For details on how to specify proxy settings, see [Proxy Server](#), p.14.

The setup.log File Shows “Dependency Issues”

Problem

The installer program creates a log file of the installation process, called **setup.log**, at the root of your installation directory. After launching the installer, you may see the following message in **setup.log**:

```
Pre-installation checks found products that cannot yet be installed due to
dependency issues.
```

Explanation

In the installation process, the installer program checks for inter-product dependencies. If it finds that a particular product is available but cannot be installed because a product that it depends on is absent or lacks entitlement, it logs the failure and disables the product. The **setup.log** file records the name of the online repository that contains the product at issue. Note that in this case, not all products in that repository are disabled, but only the ones that would fail.

In the course of installation, you can see which products have been disabled: At the **Confirm and Install** screen, expand the hierarchical list of products; disabled products are grayed out.

Solution

The following are the most common solutions to dependency issues:

- You may have installed an update before that update's base product was installed. To avoid this, ensure that you install the base product before installing additions to it. For example, install a Platform product first; then install a service pack that updates the Platform. Use the same installation keys for both pieces.
- If you copied the product media, the copy operation may have failed and left you with an incomplete DVD. To check the integrity of the media, use the **-validate** option described in [Table A-1](#).

The Installer Reverts to Text Mode (Solaris Hosts)

Problem

When you run the installer in its default GUI mode on Solaris hosts, it may switch to text mode and the following error message may appear:

```
The installer program cannot run in GUI mode on this host type. Switching to
text-based mode...
```

Explanation and Solution

Possible reasons for this event:

- a. You do not have the GTK 2.0 library installed on this host.

In this case, you can either

- Install the necessary GTK library.

or

- Continue to run the installer in silent (command-line) mode. For information on using the installer in silent mode, see [A. Command-Line Installation](#).

- b. The **DISPLAY** environment variable is not set. This is particularly likely if you are using telnet, putty, or another tool to log in to the host system remotely, or if for some other reason the X Window System has not been started on this host.

You can use xterm to see whether **DISPLAY** is set.

Expected Software Was Not Installed

Problem

You have completed installation of Wind River products, but a particular software product, component, or feature that you were expecting to find in the installation is not present.

For example, you are expecting to use Wind River On-Chip Debugging, but it is not available in your installation.

Explanation and Solution

Most likely, the missing software was not installed because the installation keys (in the **install.txt** file) that you used during installation do not include entitlement for that piece.

Confirm that the missing software was not installed. To do so, examine your installation keys as follows:

1. Navigate to the **images** directory of your installation DVD (or other installation media).
2. Within that directory, find the **mediaID** file in each **CDR-*** directory.
3. Check each **mediaID** file for its description of what software is included in that CDR grouping.

If there is no CDR directory for the missing software, this confirms that it was not installed.

You may need to retrieve an updated product activation file; or you may need to contact Wind River to discuss your entitlement.

A

Command-Line Installation

In addition to the installer's GUI, you can also install products in non-GUI mode. To do so, run the version of the **setup** program appropriate to your host, with the **-silent** option.¹

This appendix lists the options for the **setup** command.

Table A-1 Options for the **setup** Command

Option	Description
-add	Install all products that your license entitles you to.
-applyUpdates	Update your installation to the latest available version permitted by the terms of your license.
-archs <i>archsToInstall</i>	<p>The computer architectures for which to install. The allowed values for <i>archsToInstall</i> are</p> <ul style="list-style-type: none">▪ all▪ 68K▪ ARM▪ ColdFire▪ Intel▪ M32R▪ M-CORE▪ MIPS▪ PowerPC▪ SPARC▪ SuperH▪ TriCore▪ XScale <p>If you do not specify an architecture or architectures with the -archs option, your installation will include everything that the installation key enables, including all BSPs present on the product media.</p> <p>To specify multiple architectures, separate the values by a comma.</p>

1. On Windows, Wind River recommends you use **cmd.exe**. On Linux and Solaris, you can use any shell variant.

Table A-1 Options for the setup Command (cont'd)

Option	Description
-download [<i>path</i>]	Download the products you are entitled to, for later installation. If <i>path</i> is not specified, the products are downloaded into your existing installation directory. The download operation creates a new directory named WindRiver . To install the products after downloading them, run setup in the new WindRiver directory.
-extract <i>dir</i>	Extract into the specified directory the contents of all patches located in <i>installDir/updates</i> . This is useful when you want to examine the contents of a patch before applying it.
-help	Print the command-line help.
-hosts <i>hostType</i>	The host type or types you are installing for. The allowed values for <i>hostType</i> are <ul style="list-style-type: none">▪ all▪ solaris▪ x86-linux2▪ x86-win32 To specify multiple host OSes, separate the values by a comma.
-installerUpdateURLS <i>url</i>	A comma-separated list of URLs pointing to the installer update server (the server that provides updates of the installer program). If you explicitly do <i>not</i> want to retrieve updates to the installer, specify none for the <i>url</i> parameter.
-installKeys <i>path</i>	The full path to the installation keys file.
-installPath <i>path</i>	The full path to the target installation directory. ^a
-nosplash	Do not show the splash screen.
-patch	Install all patches found in the <i>installDir/updates</i> directory.
-print_toc [<i>dirPath/filename</i>]	Print the file list of a patch to the console, or save it to a file if a filename is specified. Applies to all patches found in the <i>installDir/updates</i> directory. This is useful when you want to see which files a patch will alter before applying it.
-productUpdateURLS <i>url</i>	A comma-separated list of URLs pointing to the product update server (the server that provides updates of installed products). If you explicitly do <i>not</i> want to retrieve product updates, specify none for the <i>url</i> parameter.

Table A-1 Options for the setup Command (cont'd)

Option	Description
-proxy <i>serverIpAddress:portNumber:proxyType</i> <i>username:password</i>	Use a proxy server to connect to the Internet. The allowed values for <i>proxyType</i> are web and SOCKS . For example: -proxy 127.0.0.1:8080:http -proxy 127.0.0.1:8081:socks
-remove	Remove all Wind River products.
-silent	Do a full installation without the installer GUI.
-skipQuota	Skip the disk space quota check.
-validate [<i>validationLevel</i>]	Validate the product media and report potential problems. The allowed values for <i>validationLevel</i> are as follows: <ul style="list-style-type: none"> ▪ 5 (Validates suite definition files [SDFs].) ▪ 10 (Validates SDFs and file repositories.) ▪ 15 (validates SDFs, file repositories, and online content. Requires an Internet connection.) If no validation level is specified, by default the option uses level 5 (SDF validation).

a. Ensure that the installation path does not include any of the following characters:

[space character] ! # % < > ?

Note in particular that space characters (such as in the directory name **Documents and Settings**) are not permitted. If there is a space character anywhere in the absolute path, some elements of the installed products will not be available.



NOTE: If you are installing architecture- or host-specific media, the installer may not accept all of the values listed in [Table A-1](#) for the **-archs** and **-hosts** options.

For example, if your Wind River product is PowerPC-specific, entering **-archs MIPS** produces an error. The error message then lists the values allowed for that DVD.

Example A-1 Sample Command-Line Sequence: Windows Host

In this example for a Windows host, the installer is run without displaying the GUI or the splash screen, and the path to the installation keys is specified.

```
setup.exe -silent -nosplash -installPath C:\WindRiver\install -installKeys
C:\WindRiver\install.txt
```

Example A-2 Sample Command-Line Sequence: UNIX Host

In this example for a Linux or Solaris host, the paths to the target installation directory and to the installation keys are specified. The product is installed for all hosts and for the PowerPC target architecture.

```
setup -silent -nosplash -installPath /wind/river/workbench -installKeys
/tmp/install.txt -hosts all -archs PowerPC
```


B

Glossary

customer license number

A four- to six-digit number assigned to a Wind River customer. Also called *customer license, license number, or customer ID*.

You can find your customer license number in any of the following ways:

- It is printed on your *Developer Essentials* sheet.
- If you have an existing Wind River Workbench installation of version 3.3 or higher, you can find your customer license number by launching Workbench and selecting **Help > About Wind River Workbench**.
- It is recorded (as *customer ID*) in the file `installDir/setup.log`. The `setup.log` file is created when you install Wind River products.

enterprise licensing model (ELM)

A subscription approach to Wind River Platform products and supported architectures. The right to use the product expires after the contract end date, and must be renewed.

entitlement

See [installation key](#), p.50.

floating license (FL)

A license type that allows you to share a pool of license seats among users. Any user can take a license, up to the number of seats purchased. When all license seats are in use, no other developers can use that product until someone else finishes.

With the floating license type, you must set up a license server, and the development workstations must be connected to it over the network. You do not have to report license usage to Wind River.

install.txt

See [product activation file](#), p.52.

installation key

An encrypted code that controls which software components can be installed. For Wind River products, the installation key is embedded in the **install.txt** file.

To find your installation keys, look in your **install.txt** file for lines beginning with *CDR-*. To learn what software pieces are installable from that CDR, go to the **images/CDR-*** directory of your installation DVD (or other installation media). Once there, open the **mediaID** file and find a description of the software component.

Installation keys can also be referred to as *entitlement*.

LAC

See [license authorization code \(LAC\)](#), p.50.

license authorization code (LAC)

A code for the temporary licensing of the products you have purchased. The installer program uses the LAC to request an **install.txt** file over the Internet. With this **install.txt** file, you can install Wind River products and perform a [temporary activation](#) of them.

The LAC is typically found in one of the following ways:

- If you have ordered and received your product on physical media, your LAC is listed on the *License Administrator Essentials* or *Developer Essentials* sheet included with your shipment.
- If you have downloaded an evaluation version, the LAC is e-mailed to you.
- If you are installing from an evaluation CD or DVD, the LAC is printed on the disk sleeve or was e-mailed to you.

It is an alphanumeric, case-sensitive string of the format *XXXXX-XXXX-XXXX*. The first segment of the string also corresponds to the [customer license number](#).

license file

A text file that lists how many seats of each product can be used simultaneously. The license file is specific to a license server computer or a node-locked host and contains a list of licensed features. For license server computers, the license file also contains information on license server nodes and vendor daemons.

The license file is located in the *installDir/license* directory.

license number

See [customer license number](#), p.49.

license seat

A token that the license server issues to allow a user to run a software package. License seats are the unit by which software is sold and counted.

Also called *seat*.

licensed feature

Controls run-time access to the software. Licensed features are defined in the *license file*, and can be identified by the lines in that file beginning with **FEATURE**, **INCREMENT**, or **PACKAGE**. Software packages are made up of licensed features.

licensing portal

The Web site at <http://www.windriver.com/licensing/> where you obtain long-term *product activation files* for the products you have purchased. To get access to the portal, you need your license administrator token.

In addition to obtaining product activation files, you can use the portal to perform other license-management tasks, such as rehosting.

Also called the *product activation portal* or *product activation site*.

maintenance contract

The terms and conditions under which Wind River provides software support and maintenance to customers who pay an annual support fee. You must have a valid maintenance contract in order to install software maintenance products, such as patches and service packs.

named-user license (NU)

A license type in which the license is assigned to a specific user. The license administrator controls license access by configuring an options file.

With named-user licenses, you must set up a license server, and the development workstations must be connected to it over the network. You must report named-user license usage to Wind River on a quarterly basis.

node-locked license (NL)

A license type in which the software products are used on a single development workstation. The products are not shared over the network, but they can be used by anyone with physical access to the workstation. The products can function when the workstation is disconnected from the network.

With the node-locked license type, you do not have to report license usage to Wind River.

OEM licenses

See *perpetual licenses*, p.52.

PAF

See *product activation file*, p.52.

patch

A set of files that Wind River provides to fix a specific problem. Applying a software patch typically adds or replaces a small number of files in your existing installation.

Take care in applying patches. Because patches are likely to overwrite files in your existing product installation, they are not separately removable, and because combinations of different patches and products are not necessarily verified

together, applying patches can break your installation. Furthermore, consider that common patches are typically included in a forthcoming service pack—at which point, the combined pieces *have been* verified.

permanent activation

A method of installation in which you obtain a *product activation file* from Wind River so that you can use the software products without any time limit other than those laid out in your license agreement.

For comparison, see also *temporary activation*, p.52.

perpetual licenses

Perpetual licenses, also known as *OEM licenses*, do not expire. The customer has the right to use the product for its lifetime, as long as the customer abides by the terms of the agreement.

product activation file

A plain-text file that lists the products and features your license entitles you to, along with installation keys. The product activation file (or PAF) is usually named **install.txt**.

A product activation file is required in order to permanently activate your products.

temporary activation

A method of installation in which you use a temporary license so that you can work with the Wind River products right away.

With temporary activation, you can use the Wind River products for a limited time (usually 31 days). To continue using them beyond that period, you must eventually perform a *permanent activation*. The permanent activation allows you to use the same installation; you will not need to re-install your Wind River products.

WRSLicense.lic

A host's *license file* for the purchased contract period. You obtain this file from Wind River when you perform *permanent activation*.

This file is located in the *installDir/license* directory.

See also *product activation file*, p.52.