# Embedix

**GPL Compliance Toolset** 



User Guide





# Embedix GPL Compliance Toolset User Guide

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Lineo, Inc. 390 South 400 West Lindon, UT 84042 USA

http://www.lineo.com

Embedix GPL Compliance Toolset User Guide Part Number: EMBD-SDK2.0GPLCOMP-UG-1001

October 2001

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# **About This Guide**

# **Conventions Used in This Document**

The style conventions used in the printed and PDF format of this document do not necessarily apply to other formats. During conversion to HTML, some of these conventions may be lost.

This document uses the following graphical and typographical conventions:

- Admonitions
- ▶ Key combinations
- ▶ Special fonts and capitalization

#### **Admonitions**

Note, Tip, and Warning paragraphs draw your attention to additional information which may help you avoid losing data or time.



**Note:** Notes contain additional information about the current topic.



**Tip:** Tips contain suggestions that may save you time or effort.



**Warning:** Warnings contain critical information that you need to understand before proceeding. Ignoring information in a warning may cause loss of data or time.

**Preface:** About This Guide

## **Key Combinations**

Key combinations (such as Ctrl+O) are presented throughout this document and should be used in the following way:

- 1. Press and hold the first key.
- 2. Press the second key.
- 3. Release both keys.

For two-step key combinations, repeat the pattern. For example, to execute the key combination Ctrl+Q Shift+Q, do this:

- 1. Press and hold the Ctrl key.
- 2. Press the **Q** key.
- 3. Release both keys.
- 4. Press and hold the **Shift** key.
- 5. Press the **Q** key.
- 6. Release both keys.

## **Special Fonts and Capitalization**

Two special fonts have been used to distinguish between user input and computer output:

#### **▶** Command

All commands or data to be entered on an on-screen data entry line appear in bolded **Courier** font. This may include commands used with options, paths to directories or files, or other simple input, such as filenames.

#### Code

Any code sample, including command output, is shown in Courier font.

The following capitalization rules apply to Linux filenames, Linux commands, and English names of on-screen buttons and keyboard keys.

November 5, 2001

- ▶ Linux filenames and commands are case-sensitive. In most instances, they are lowercase. When you enter a filename or command, use the same case that appears in your instructions or examples.
- When procedures refer to a particular on-screen button, the name of the button appears in uppercase (such as in SAVE), regardless of how it appears on the screen.
- When procedures refer to a particular key on a keyboard, only the initial key is capitalized (such as the Tab key), just as it appears on a U.S. standard keyboard. This also applies to key combinations.

# **Additional Resources**

The following resources are available to provide you with additional support.

- ▶ Embedix SDK Getting Started
- Embedix SDK Target Wizard User Guide
- ▶ Embedix SDK Reference Manual
- ▶ Embedix RealTime Programming Guide
- ▶ Lineo<sup>™</sup> Support Web site http://www.lineo.com/support



**Note:** Most printed manuals that ship with Lineo products are also available in PDF and HTML formats on the product CD-ROM and the Lineo Web site.

**Preface :** About This Guide

Embedix GPL Compliance Toolset

# CHAPTER 1 Getting Started

This document provides an introduction to the Embedix GPL Compliance Toolset. Topics covered in this document include:

"Host Requirements" on page 1

"Introduction to the Tools" on page 2

"Installing the Toolset" on page 3

# **Host Requirements**

This toolset is intended for use on your Linux development host machine that is already running Embedix SDK.

#### Hardware

- ▶ 64 MB RAM minimum (128 MB or greater recommended)
- ▶ Pentium processor minimum (Pentium II/K6, 400 MHz or greater recommended)
- ▶ In addition to the Embedix SDK disk space requirements (refer your Embedix SDK documentation), provide another 300 K disk space for this product.

#### Software

- A Linux operating system from a supported distribution (such as Caldera OpenLinux, Red Hat, or SuSE).
- ▶ Embedix SDK 2.0 or higher
- ▶ Embedix GPL Compliance Toolset (this product)

**Chapter 1:** Getting Started

# Introduction to the Tools

Embedix GPL Compliance Tools is a product designed to provide analysis and assistance that will help you identify risks of GPL contamination in your company's software. The tools will assist you in complying with the GPL and other licenses used with open source software.

This toolset is designed to be installed on top of Embedix SDK 2.0 or higher. After installation, these tools are easily accessed from the Target Wizard menu bar. The tools included are:

- ▶ Library Checking Wizard
- ▶ License Reporting Wizard
- ▶ License Compliance Interview



**Warning:** Use of this product cannot guarantee absolute GPL compliance because the accuracy of the tools in this product depends heavily on the accuracy of your answers.

## Library Checking Wizard

This tool scans target executables and finds out which software licenses may apply to them by looking at what libraries executables link to. It also scans makefiles of applications to try to determine the same information for libraries that are linked statically.

## **License Reporting Wizard**

This tool analyzes all of the software for a project and then prepares a detailed report of the software licenses that are included in the project.

## License Compliance Interview

This tool asks developers about their development practices, source code habits, library usage, and so forth, in order to determine if their software is legally GPL "clean."

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# **Installing the Toolset**

- 1. Log in to your Linux desktop as root.
- 2. Open a terminal emulation window.
- **3.** Insert the Embedix GPL Compliance Toolset CD-ROM in the CD-ROM drive.

If the CD auto-mounts, skip to Step 5.

**4.** Mount the CD-ROM by entering the following command:

```
mount /mnt/cdrom -o exec
```

**5.** Change to the directory for the CD-ROM mount point:

```
cd /mnt/cdrom
```

**6.** Run the installation script:

```
./install.sh
```

The following messages appear as the installation begins:

```
Wizard Installation Complete.
Starting the GUI Install.
```

Progress windows appear indicating installation activity.

- 7. At the Finish page, click FINISH.
- **8.** When you are returned to the terminal emulation window, log out of the desktop as root.

The next time you log in as a regular user, you can easily access the tools in this product from the Target Wizard menu bar (see the File > Run Wizard menu item).

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# 2 Library Checking Wizard

The Library Checking Wizard, like the other tools in this product, is accessed through the Embedix<sup>™</sup> Target Wizard File menu. This chapter includes the following sections:

"Introduction" on page 5

"Starting the Library Checking Wizard" on page 6

"Using the Library Checking Wizard" on page 7

"Using the Library Checking Wizard with Third Party or Inhouse Libraries" on page 13

# Introduction

The purpose of the Library Checking Wizard is to help software developers and Embedix SDK users understand how linking with libraries may affect licensing issues with regard to their software.

This tool performs two main functions:

- ▶ It can scan a filesystem and collect information from all of the shared libraries and executables and give a listing of which libraries are used by which executables and give the license for each library used.
- It has the ability to scan a source tree and examine makefiles to determine which libraries will be linked with the executable. This allows the tool to find all libraries linked to the executable even if the libraries are statically linked.

In both cases, the wizard can list the licenses associated with each library used and tell if the software will be subject to any restrictions. This can help software developers make sure that their intellectual property stays free of any licensing restrictions due to library usage.

# **Starting the Library Checking Wizard**

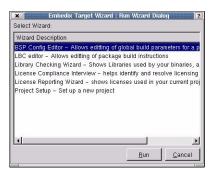
To start the Library Checking Wizard:

- Using Target Wizard, prepare your project for analysis.
   Use your Embedix SDK documentation set as needed to complete the following subtasks:
  - **1a.** Start Target Wizard and open the project you want to analyze.
  - **1b.** Modify the project if needed by enabling/disabling nodes in the tree view.
  - 1c. Build the project by choosing the Build > Build menu item. Target Wizard will build all of the files needed for your project. This may take a few minutes depending on your project settings.
  - **1d.** Build the filesystem by choosing the Build > Deploy menu item and proceeding through the next few wizard pages until the project filesystem has been built, then click OK and then CANCEL to exit the wizard.

You do not need to actually deploy the filesystem anywhere.

2. From the menu bar, choose File > Run Wizard.

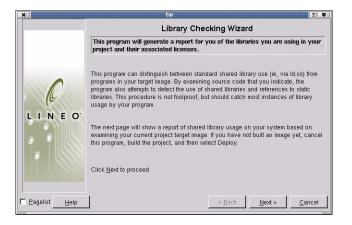
A dialog box similar to this one will pop up with a list of wizards.



Embedix GPL Compliance Toolset

**3.** Highlight Library Checking Wizard in the list and then click RUN.

The first page of the Library Checking Wizard appears.



# **Using the Library Checking Wizard**

# **Navigation**

You can navigate the Library Checking Wizard by clicking on the NEXT and BACK buttons. Each page will have instructions describing its purpose and what you need to do at the top. Most pages will also have an enabled HELP button that you can click to display more in-depth instructions and assistance. You can click CANCEL at any time to exit the wizard.

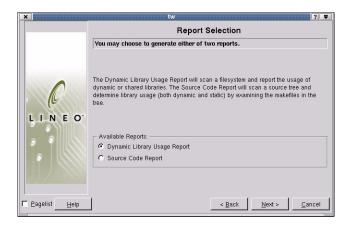
# Usage

When you first start the wizard, a page appears with instructions and an explanation of what the wizard will be doing. When you click NEXT, the wizard will build a database of file and license information. This process may take anywhere from a few seconds to a couple of minutes.

Chapter 2: Library Checking Wizard

#### **Reports**

The second page shown allows you to pick the type of report that you want to generate and view. Both reports contain some information about library usage and allow you to analyze licenses usage.



You can view either report in a text window and have the option to save it as a text file for use at a later time.

- Dynamic Library Usage Report This will scan the filesystem that has been built for your project and display information about which shared libraries are being used and what their licenses are.
- Source Code Report This will scan a source code tree and analyze makefiles to determine both dynamic and static library usage.

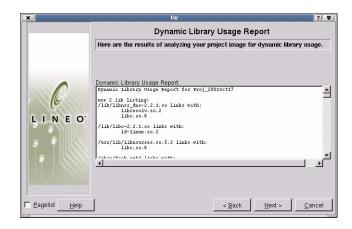
Select the report that you want to view and click Next.

# **Dynamic Library Usage Report**

Use this report to evaluate executable files to determine which dynamically shared libraries are in use.

If you chose to view the Dynamic Library Image Report, then the report displays in a text window on the next page.

Embedix GPL Compliance Toolset



This report is divided up into three main sections.

The first section contains a listing of all executables and shared libraries that the wizard found in the filesystem that was built for your project. Below each executable's name is a list of libraries that the executable links to dynamically at run time. This allows you to very easily determine if a given executable (or library) links to a certain library that may have licensing restrictions.

The second section contains a listing of all shared libraries found in the filesystem. For each library, a list of all executables and libraries that use it is given below its name. This can be useful if you know that a certain library has a restricted license (e.g. the GPL) and want to see which executables use that library and would be subject to the license. This may also help you to determine if some libraries are not being utilized or only being used by executables that are not essential to the project.

The third section of the report gives an exhaustive list of all shared libraries found, which license they use, and an indication as to what legal restrictions accompany their use. If a library is marked as being safe to link against, then anyone can link to it without worry that the resulting executable may legally fall under licensing restrictions. The wizard may not have information about every library that is found. If libraries are added to a project by virtue of the merge directory or if the project is using 3rd party or in-house packages that don't include

their license information then the wizard will not have license information and it will inform you of that.

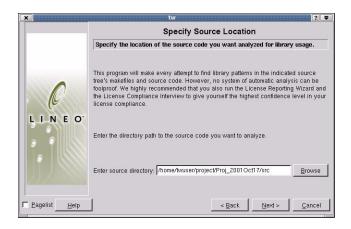
If you would like to save this report to disk for use at a later time, click on Next to view the Save Results page and refer to the guidelines listed in "Saving Reports" on page 12.

# **Source Code Report**

Although it's possible to determine the shared libraries that an executable uses by simply examining the executable, it's not possible to determine which libraries are statically linked in. The only way to determine which libraries are statically used is by looking at how an executable is created.

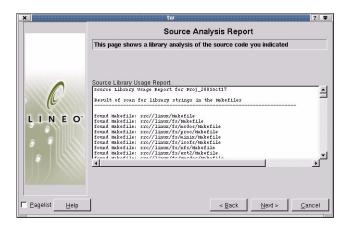
The Source Code Report is generated by scanning the makefiles in a source code tree and examining which libraries are used when building the executable. For this purpose, the source code for a given package must be available. For any SDK package, you can make the source code available by right clicking on the package's node and selecting Force Rebuild. This will untar the source and begin a build. You don't need to complete the build, just let it get far enough into the build process that the source has been untarred.

The following page appears when you choose the Source Code option.



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When you click Next, a source analysis is performed on the source location you indicated. Your Source Analysis Report may look something like this:



The Source Analysis Report will allow you to specify which directory to use as the root of the source tree.

The default is the project src directory. All Embedix packages are built off of this directory. For instance, when ash is built in user twuser's proj\_2001 project, it untars the source to:

/home/twuser/project/proj\_2001/src/ash

You will probably want to select a directory just under the src directory of your project, but you are not limited to scanning only SDK packages. This tool can actually be pointed at any source code tree that you would like an analysis of. Click on the Browse button to look through your filesystem for a source tree.

Once you have selected the desired directory, click on the Next button and the wizard will scan through the source tree looking for makefiles. This process is usually very fast, but depending on the size of the sourc code, it may take up to a minute or so.

The resulting page will display a report containing information about the libraries used in the build process for the executable.

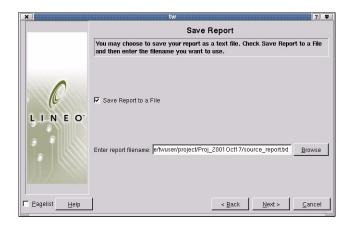
The report will contain a list of all of the makefiles that were found at the top. Below, for each makefile, a list of the libraries used in the makefile will be listed along with the name of the license and a phrase indicating how legally safe it is to use that library.

As with the Dynamic Library Report, it's possible that the wizard might not have information about every single library. If there are any unknown libraries, the wizard will mark these as unknown and will not display license information about them. It is best to look for information on your filesystem about these unknown libraries. (If a package uses a library then the header files for that library will most likely be somewhere on your system and they are likely candidates for license information.)

If you would like to save the report to a file for use at a later time, click NEXT to view the Save Report page and then refer to the guidelines in the next section, "Saving Reports."

# **Saving Reports**

When you are viewing either of the library reports, you can click the NEXT button to view the Save Results page. This page allows you to save the reports to disk. These reports can then be sent to legal counsel, included in documentation, etc.



By default, the filename to save the report under is the report name with a .txt suffix and the directory is the project directory. Therefore, if you wanted to save the source report for a source tree for a package in your proj\_2001 project, the default path would be:

/home/<username>/project/proj\_2001/source\_report.txt

You can change the path to specify where the file should be saved by typing that path into the text box. In addition, you can click the BROWSE button to look through your filesystem. The report will only be saved if the checkbox labeled Write Reports to a file is checked. When you click NEXT, the report will be saved to the file that you specify.

At this point you can click BACK repeatedly to access other parts of the wizard or click FINISH if you are done.

# Using the Library Checking Wizard with Third Party or In-house Libraries

The license information about libraries that the Library Checking Wizard uses is taken from the ECD files in the Embedix SDK.

If you would like to have the Library Checking Wizard recognize libraries from 3rd party or your own SDK packages, you will need to add license information to the corresponding ECD files. If you are not familiar with ECD files, refer to *Embedix SDK Target Wizard User Guide*, Chapter 3, "Adding a Custom Application to Your Project."

For detailed information on adding license information to ECD files, please read the License Reporting Wizard Documentation. It is strongly encouraged that you include license information for all SDK packages that are created because this will ensure that these packages take advantage of features in other current and planned Embedix SDK tools.



# 3 License Reporting Wizard

The License Reporting Wizard, like the other tools in this product, is accessed through the Embedix<sup>™</sup> Target Wizard File menu. This chapter includes the following sections:

"Introduction" on page 15

"Starting the License Reporting Wizard" on page 15

"Using the License Reporting Wizard" on page 17

"Using the License Reporting Wizard with Third Party or Inhouse Packages" on page 25

# Introduction

There are a number of software packages included in the Embedix SDK. These packages use a variety of licenses—some that use general licenses and some that use custom licenses and copyrights.

The purpose of the License Reporting Wizard is to help you understand the legal obligations that apply to the packages you use and to help you ensure that your product is compliant.

This tool explains the meaning of each license (in plain english), generates reports, and creates text files that can be included in documentation for a finished product.

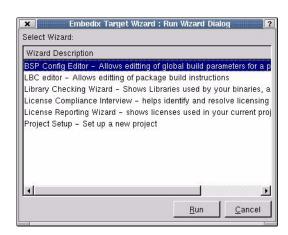
# Starting the License Reporting Wizard

To start the License Reporting Wizard for your project:

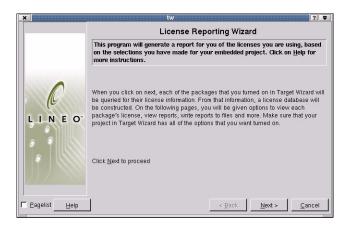
- 1. Start Target Wizard and open the project you want to analyze.
- **2.** Make sure that all of the desired software packages are enabled in the project.

**Chapter 3:** License Reporting Wizard

From the menu bar, choose File > Run Wizard.A dialog box appears with a list of wizards.



**4.** Highlight License Reporting in the list and then click RUN. The License Reporting Wizard Introduction page appears.



# **Using the License Reporting Wizard**

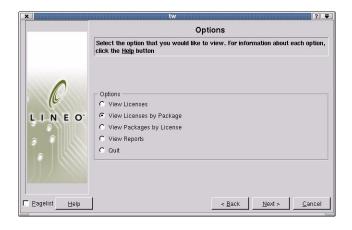
# **Navigation**

You can navigate the License Reporting Wizard by clicking on the Next and Back buttons. On each page, instructions will be shown at the top describing the purpose of the page and what you need to do. Most pages also have a Help button that will display more in-depth instructions if clicked. You can click the CANCEL button at any time to exit the wizard.

## Usage

When you first start the wizard, a page appears with instructions and an explanation of what the wizard will be doing. Read through the text and make sure that you understand it. When you click NEXT, the wizard queries the Target Wizard database to see what packages are selected. The wizard then reads the license information for each selected package and generates a database. This may take anywhere from a few seconds to a minute to complete. A progress bar appears to visually display the progress.

On the second page of the wizard you are presented with a list of options.



Each option allows you to view license information in a different way:

- ▶ View Licenses This option will display a comprehensive list of all of the licenses that apply to software packages in Target Wizard and allow you to view them.
- View Licenses by Package This option will display a list of all selected packages in your project. You can then select a package to view it's license.
- View Packages by License This option sorts each of the packages in your project by their license. This way you can easily see a breakdown of what licenses apply to which packages.
- View Reports Selecting this option will present you with a list of reports that you can view or save to disk.
- ▶ Quit This option jumps to the last page of the wizard to allow you to exit
- 1. Choose an option and then click NEXT.

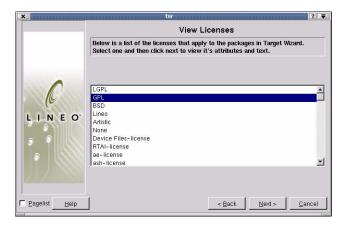
You can later click BACK to return to the Options menu.

**2.** For instructions on how to proceed, see the applicable instruction below.

If you chose	Then		
View Licenses	Refer to "View Licenses" on page 19.		
View Licenses by Package	Refer to "View Licenses by Package" on page 20.		
View Packages by Licenses	Refer to "View Packages by License" on page 22.		
View Reports	Refer to "View Reports" on page 23.		
Quit	At the Finish page, either click FINISH to exit the wizard or click BACK to return to the Options menu.		

#### **View Licenses**

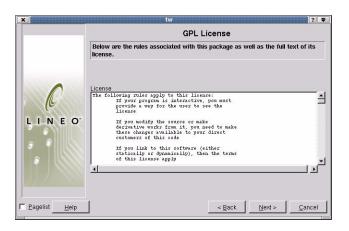
This view is a comprehensive list of all of the licenses that apply to software packages in Target Wizard. This allows you to view licenses for packages that may not be turned on in your project. For example:



At the top of the list are a number of common licenses: BSD, GPL, LGPL, Artistic, and Lineo. Following these common licenses is a list of other licenses sorted alphabetically. Note that this list is not exclusive to packages that are enabled in your project. This allows you to view the license of a package that you are considering for inclusion in your project without having to first enable it in your project.

1. Choose the license that you want to view and then click NEXT.

On the following page you will see the text of the selected license along with some "rules" that apply to this license. These rules basically describe the restrictions that need to be followed if you use a software package with this license. In essence, if you follow these rules, you should be legally covered.

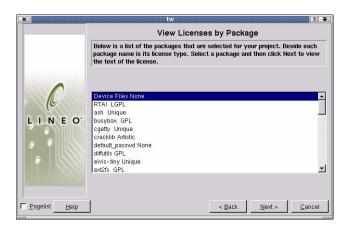


If you select a package that has no license then you will see the text "This package has no license." This means that the package you selected is free of any licensing restrictions.

**2.** After viewing the license text, click NEXT to finish or BACK to view other licenses. To return to the Options menu, click BACK twice.

# **View Licenses by Package**

This view shows the list of the packages that you enabled in your project. Next to each package name is a one or two word description of the package's license (such as GPL, LGPL, or Artistic).



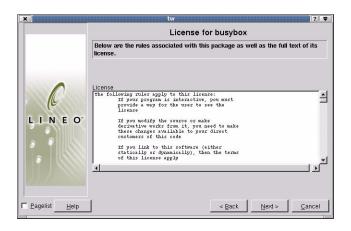
1. Review the package list with the license for each package identified.

If the word *Unique* is next to the package's name, that simply indicates that the package does not fall under one of the common well known licenses.

The word *None* indicates that the package is not subject to any licensing restrictions.

**2.** To view an applicable license, select a package and then click NEXT.

The text of the selected license appears along with some "rules" that apply to this license. For example, if you were choose a package with the license GPL (such as "busybox" in our sample), then you would see something similar to the following:



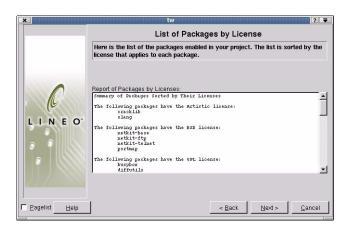
These rules basically describe the restrictions that need to be followed if you use a software package with this license. In essence, if you don't follow these rules, you subject yourself to potential legal risk.

**3.** After viewing the license text, click NEXT to go to the Finish page or click BACK to return to package list. Click BACK twice to return to the Options menu.

# **View Packages by License**

Choosing this option displays a compiled list of packages sorted by their licenses. This allows you to quickly analyze the licenses that apply to your project visually.

Each license that applies to your project is displayed with the packages that apply to each license listed under each one.



Two special exceptions apply to this grouping of licenses—"specific licences" and "no license."

Most likely there will be a group that reads:

"The following packages have custom, package-specific licenses."

Also, there may be a category at the bottom that reads:

"The following packages have no license. These packages are free of any rules or stipulations about their use."

You are free of legal obligations for any package found in this list.

# **View Reports**

Choosing this option displays a list of three reports that you can view and save to disk. The three available reports are:

- ▶ **Summary Report** Generate a summary of all the software packages in the project and their licenses. This is useful for a quick visual overview of the project.
- ▶ **Detailed Report** Generate the Summary Report, but include the text of all licenses in the report as well. This report can then be given to the legal department, etc.

**Chapter 3:** License Reporting Wizard

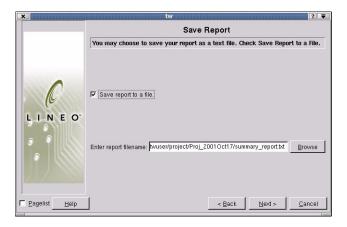
▶ **Documentation Report** - Generate a report that includes all of the attributions and licenses that are required to be included in the documentation of a project. This report can then be included in the appendix of your product manual, etc.

To view your report of choice:

- 1. Select the report that you want to view and then click NEXT. The selected report will appear in a text window.
- **2.** Use the scrollbars on the side of the text window to view the entire report.
- **3.** When you are finished viewing the report, click NEXT to have the option of saving this report to a file or click BACK to choose a different report for viewing. Clicking BACK twice will bring you to the Options menu again.

## **Saving Reports**

You will likely want to save different reports to a file for use at a later time. Clicking NEXT on the page showing the report will allow you to save the report to a file.



- 1. Check the Write Report to a File checkbox.
- **2.** In the Enter Report Filename box, enter a filename for your report.
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By default, the directory is your Target Wizard project directory and the filename is the name of the report with a .txt suffix.

For example, if your project was named "proj\_2001" and you had chosen to view the Documentation Report, the filename might be:

```
/home/<username>/project/proj_2001/
   documentation report.txt
```

If you want to change the location where the file will be saved, type the new path into the text box provided.

You can click the BROWSE button to browse through your filesystem to help you set a new location.

- **3.** Click NEXT to save the report to location you specified.
- **4.** Click BACK repeatedly to access other parts of the wizard or click FINISH if you are done.

# Using the License Reporting Wizard with Third Party or In-house Packages

The License Reporting Wizard is designed to work with third party Target Wizard packages as well as those shipped with Target Wizard. Getting your own packages to work with the License Reporting Wizard requires a few, simple steps.

Before continuing, you should be familiar with Target Wizard package components (such as ECD files and LBC files). If you are unfamiliar with how to create or modify ECD files, see the Target Wizard User Guide, Chapter 3 ("Adding a Custom Application to Your Project") in the Embedix SDK 2.0 documentation set.

The License Reporting Wizard gathers information from the ECD for each package. For this purpose, a new tag has been added to the ECD file specification, <LICENSE>. If present in a component node, this tag describes the license information associated with that component.

The license tag can be anywhere inside of the component tags for a given component.

**Chapter 3:** License Reporting Wizard

If the license for a particular package is one of the common well-known licenses then it is sufficient for the data to be the name of that license. The list of available common licenses is:

- ▶ GPL
- LGPL
- Artistic
- BSD
- Lineo
- None

Thus if you have some package, hello\_world that is licensed under the LGPL, the ECD could look something like this:

```
<GROUP bar>
<COMPONENT hello world>
       LICENSE=LGPL
       TYPE=bool
       DEFAULT VALUE=1
       PROMPT=include hello_world package
       This is hello world.
       </HELP>
       <REQUIRES>
               libc.so.6
               ld-linux.so.2
       </REQUIRES>
       <KEEPLIST>
               /usr/bin/hello_world
       </KEEPLIST>
</COMPONENT>
</GROUP>
```

If the software package that you are using is subject to a different and unique license, the license tag needs to include a bit more information to be useful. Suppose that the software package hello\_world has the following license in it's source somewhere:

```
Copyright 2001 Christian Bird

If hello_world is distributed in source or binary
form, it must include acknowledgement of the
author, Christian Bird somewhere visible to the
```

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user of your product.

In no way may you claim endorsement from the author for any product that includes hello\_world in it.

In order for the License Reporting Wizard to understand this license, we need to include the text of the license and some attributes of the license. There is currently a list of attributes that a license may have. The list is in a table below.

License Attribute	Text Displayed in Wizard
acknowledgement_requested	Acknowledgement of the authors is requested in your product documentation
cannot_link	If you link to this software (either statically or dynamically), then the terms of this license apply
give_source	If you modify the source or make derivative works from it, you need to make these changes available to your direct customers of this code
include_license	You must include the text of the license in your product documentation.
interactive	If your program is interactive, you must provide a way for the user to see the license.
lineo_license_agreement	You need a license agreement with lineo in order to use this package
mark_altered_source	If you alter the source code, you must plainly mark the alterations.
no_endorse	You may not claim that the authors of this product endorse your package

**Chapter 3:** License Reporting Wizard

License Attribute	Text Displayed in Wizard
share_money	If you make any money by selling this package in your product, the author should get some.
share_or_rename	You must make your modifications available publicly, or rename the software to avoid conflict with the standard version
show_acknowledgement_ads	You must include acknowledgements of the authors if you mention this package in any advertisements.
show_acknowledgement_man ual	You must include acknowledgements of the authors in your product documentation.
source_with_binary	If you distribute object code or a binary then you must include the source code as well.

These attributes are found in the text file: /opt/Embedix/embedix-2.0/wizards/licenses/license\_attributes

You can add any attributes that you would like to this file and then include those attributes in the license tag of an ECD.

For the above license, two attributes stand out.

- ▶ Any use of the package must acknowledge the author.
- Anyone using the software in their product may not claim that the author endorses it.

Thus the two license attributes would be:

```
no_endorse=1
show acknowledgement manual=<Author's Name>
```

Note that most licenses are much more complex than this simple example. It's best to have your legal department inspect the license before determining the attributes that apply to the license. If no

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attributes fulfill the needs that you have, feel free to modify the text file and add what you do need.

Usually you will want to just set an attribute equal to 1 (or some non-zero value), but in the acknowledgement case, you should set it to the name of the person or group to acknowledge. (the acknowledgement attributes are the only attributes that are handled specially. You should set all attributes that apply to the license equal to 1.)

Attributes are separated from the license text itself by at least 8 dashes. Thus the whole ECD for hello\_world would like something like this:

```
<GROUP bar>
<COMPONENT hello_world>
       <LICENSE>
no endorse=1
show acknowledgement manual=Christian Bird
Copyright 2001 Christian Bird
If hello world is distributed in source or binary
form, it must include acknowledgement of the
author, Christian Bird somewhere visible to the
user of your product.
In no way may you claim endorsement from the author
for any product that includes hello world in it.
 </LICENSE>
       TYPE=bool
       DEFAULT VALUE=1
        PROMPT=include hello_world package
        This is hello world.
        </HELP>
        <REQUIRES>
               libc.so.6
               ld-linux.so.2
        </REQUIRES>
        <KEEPLIST>
              /usr/bin/hello world
        </KEEPLIST>
</COMPONENT>
</GROUP>
```

Once you have modified the ECD file for a given package, it will work seamlessly with the License Reporting Wizard. In addition, this package will automatically take advantage of features planned to be included in later releases of the SDK. In the future it might be possible to view a package's license in a window pane directly inside of Target Wizard. In addition, by adding this license information, the software package becomes usable by the Library Checking Wizard, another tool in the Embedix GPL Compliance Toolset.

# CHAPTER 4

## **License Compliance Interview**

The License Compliance Interview, like the other tools in this product, is accessed through the Embedix™ Target Wizard File menu. This chapter includes the following sections:

```
"Introduction" on page 31
```

### Introduction

For every Linux product or project that you produce, we recommend that the following people complete the License Compliance Interview:

- ▶ At least one policy maker (like a manager or executive).
- Every development engineer who helped develop this product.

There are two main sections to the License Compliance Interview: (1) the Software Interview and (2) the Practices Interview.

#### Software Interview

The software interview begins by having you name pieces of software in your product or project and add the names to a list. Then, for every software name in the list, you are given the opportunity to answer a series of questions regarding:

- ▶ Software authorship.
- Whether or not it is a derivative of another piece and, if so, the authorship of the base work.

<sup>&</sup>quot;Starting a License Compliance Interview" on page 32

<sup>&</sup>quot;Interview: Part I—Software" on page 35

<sup>&</sup>quot;Interview: Part II—Practices" on page 39

- Linkage, if any.
- ▶ Intended license.

Each time you complete a question series for a piece of software, an asterisk is placed next to the software name in the list, helping you keep track of which portions of the interview you have completed.

When you choose to save your interview to the interview database (which is not the same as saving it to a report), you can return to the portion of the interview you last touched and either continue with your responses or edit previous responses.

#### **Practices Interview**

The Practices Interview focuses on general development activities in which your company engages to help identify practices that may create legal obligations for you.

### Saving Interview Results to a File or Database

Throughout the interview you are provided opportunities to:

### ▶ Save a report to a file:

Especially useful when you need to forward your report to another person or archive your report.

#### Save your answers to a database:

Especially useful when you want to complete your interview in stages. When you choose to save the database, a file named interview.dbm is saved in your current directory.

The next time you start the License Compliance Interview, you can click the LOAD button on the Introduction page (when available) to jump to your interview in progress.

## Starting a License Compliance Interview

The tool supports multiple interviews, but is limited to one interview database per directory (the database is named interview.dbm). In order to complete an interview for a particular project, change to your project directory prior to starting Target Wizard.

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To start the License Compliance Interview for your project:

- Change to your project directory. For example, you might enter:
   cd /<project\_directory>
- 2. Start Target Wizard.
- From the menu bar, choose File > Run Wizard.A dialog box appears with a list of wizards.
- **4.** Highlight License Compliance Interview and then click RUN. The first page of the License Interview Wizard appears.



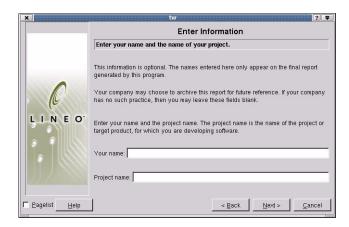
**5.** If you would like to resume an interview in progress, click LOAD and then skip ahead as needed.



**Warning:** You are allowed only one interview database per directory (the database is named interview.dbm). If you have started an interview in this directory and you don't click LOAD, you will overwrite the previous interview.

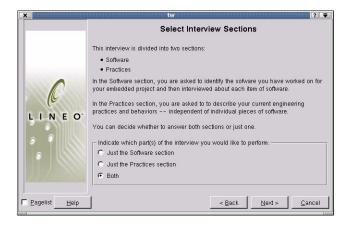
**6.** If this is your first interview, click NEXT. The Enter Information page appears.

**Chapter 4:** License Compliance Interview



7. Enter your name and the name of your project, then click NEXT.

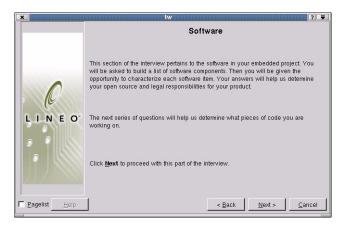
The Select Interview Sections page appears.



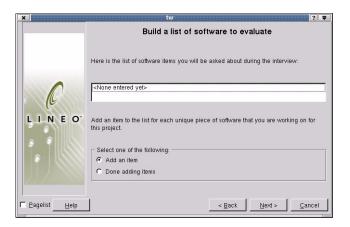
8. Select one or both of the interview sections and then click NEXT.

## Interview: Part I—Software

If you indicated that you would like to complete the software interview, the following page appears.

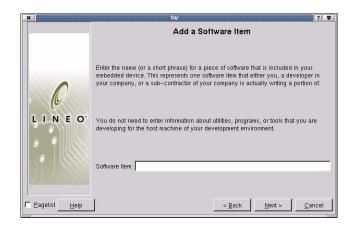


**1.** From the Identification of Software Pieces page, click NEXT. The following page appears.



- 2. Build a list of software to evaluate.
  - **2a**. Choose Add an Item and then click NEXT. The following page appears.

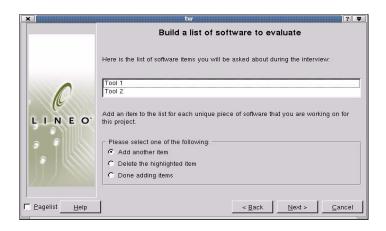
**Chapter 4:** License Compliance Interview



**2b.** On the Add a Software Item page, enter a software name for each distinct piece of software in your project and then click NEXT.

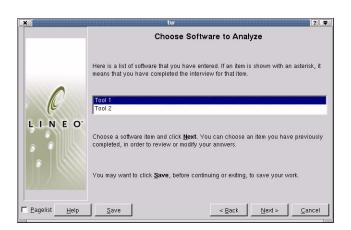
The name does not need to be a filename. It can be any working title that clearly identifies that software piece.

With each successful entry, your page refreshes to display the latest entry in the list.



**2c.** When you are finished building your list, choose Done Adding Items and then click NEXT.

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The following page appears.

**3.** To evaluate a piece of software in the list, highlight the list item and then click NEXT.

You can choose to evaluate the list items in any order. Once a list item has been evaluated, it is flagged in the list with an asterisk. At a glance which ones you have completed and which ones you still need to do.

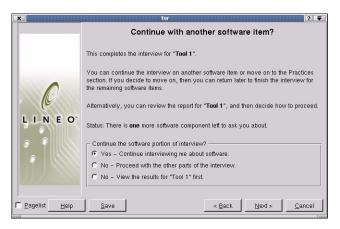


**Note:** The next several pages that appear apply specifically to the software piece you chose in Step 3.

**4.** Follow the screen prompts to complete the portion of the interview specifically related to your chosen piece of software.

You will essentially complete a series of questions related to the list item, as described in "Software Interview" on page 31.

When you complete the interview series for your chosen piece of software, a page similar to the following page appears.



5. (Optional) Click SAVE before continuing.

If you choose to save now and exit the wizard, you can continue the interview at a later time by choosing the LOAD button the next time you start this wizard.

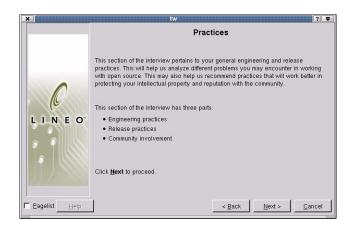
You might also choose SAVE now just to save your answers up to this point before moving on to another section of the interview.

- **6.** Choose an answer to the question "Continue the software portion of the interview?" and then click NEXT.
  - **6a.** To complete the survey questions for another piece of software in your list, choose "Yes—Continue..." and then follow the screen prompts until you are returned to the previous screen.
  - **6b.** To proceed to the Practices portion of the interview, choose "No—Proceed with other parts..." and then refer to the next section, "Interview: Part II—Practices" on page 39.
  - **6c.** To view the results of the interview completed on the last list item, choose "No—View the results..." and then view the results before proceeding.

This provides a quick preview of your responses for this software item. You may want to do this to gain a better understand of how your responses are being used.

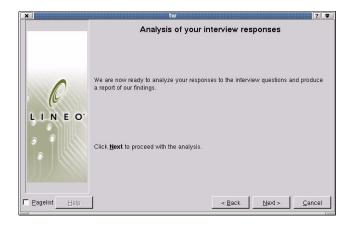
## **Interview: Part II—Practices**

If you indicated that you would like to complete the Practices Interview, the following page appears.

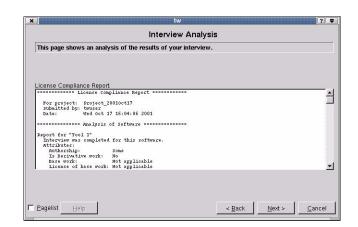


**1.** Follow the prompts on each page to complete the Practices Interview.

When you complete the "Practices" portion of the interview, the following page appears.



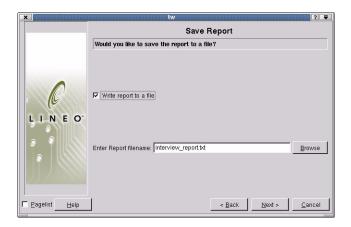
2. To complete the analysis and view the results, click NEXT.



A page similar to the following page appears.

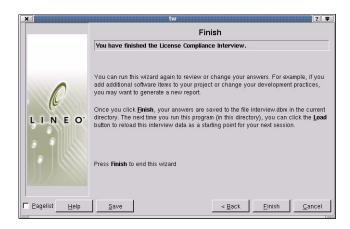
3. When you are finished viewing the results, click NEXT.

You are given the opportunity to save the results to a file on the following page.



**4.** On the Save Report page, indicate if and how you want to save the report and then click NEXT.

If you want to save the report to a file, enable the Write report to a file and then give your report a name.



The Finish page appears.

**5.** Read the Finish page for tips that might save you time on your next interview session.



**Warning:** Saving a report and saving your interview responses are not the same thing. Saving a report saves your interview results to a text file (which is static). Saving your interview saves your responses to a database (which is dynamic). If you intend to return to this interview and edit your responses or resume the interview, then click SAVE.

- **6.** To save your interview database to your current directory, click SAVE.
- 7. To exit the License Compliance Interview, click FINISH.

## **Resuming an Interview in Progress**

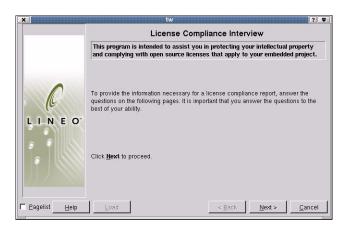
To resume a License Compliance Interview in progress:

 Open a terminal emulation window and then change to the directory where you saved your last interview by entering the following command:

**Chapter 4:** License Compliance Interview

#### cd /<directory\_with\_interview.dbm\_file>

- 2. Start Target Wizard.
- From the menu bar, choose File > Run Wizard.A dialog box appears with a list of wizards.
- **4.** Highlight License Compliance Interview and then click RUN. The first page of the License Compliance Interview Wizard appears.



**5.** If you would like to resume an interview in progress, click LOAD.



**Warning:** You are allowed only one interview database per directory (the database is named interview.dbm). If you have started an interview in this directory and you don't click LOAD, you will overwrite the previous interview.

For guidelines in completing the remaining pages in this interview, refer to "Interview: Part I—Software" on page 35 or "Interview: Part II—Practices" on page 39.

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