Cosmic and Codewright Integration Quick Start

This integration utility is intended to provide a quick setup of the Cosmic Compiler with the Codewright[™] Editor and GNU Make¹. This distribution includes example files, an error parser DLL for Codewright and a copy of the freeware GNU Make utility. When installed properly you should be able to load a Cosmic example project into the Codewright IDE, compile and build an example application.

The integration utility assumes that you have already installed a Cosmic Compiler and Codewright² on your system. The installation will ask you for the root directories for your compiler and Codewright. The Codewright Integrator may be used with the evaluation versions of the Cosmic Compiler and Codewright Editor.

The Cosmic Integrator Installation will perform the following operations:

- 1. The installation will first give you the option to install a copy of the GNU Make utility. Choose the compiler root directory or another directory that is in your execution path.
- 2. You will then be given a choice of which example project files you wish to install and which directory to place them in.
- 3. The installation will then ask you to enter the root directory for the Codewright Editor. The error parser for Cosmic Compilers (Errpar32.dll) will be copied to this directory and the cwright.ini file will be modified to load the error parser automatically by adding the following line to the cwright.ini file.

[LibPreLoad] LibPreLoad=ErrPar32.dll

4. The examples provided use the Codewright utility FTEE.EXE (FTEE32.EXE on WIN NT) to capture error messages created by the compiler. If you want to use the FTEE utility you must have the ftee.exe (or ftee32.exe) utility in your execution path. You can either copy the files ftee.exe and ftee32.exe to a directory in your path (e.g. the compiler folder) or the install utility will give you the option of adding the Codewright directory to your path. You must reboot for any changes to your path to take effect. Setup will give you the option to reboot upon completion.

Installation

To run the Codewright Integrator from diskette, open the Windows Explorer and select the appropriate floppy drive letter and double click on "setup.exe" and follow the onscreen instructions.

If you downloaded or received the Codewright Integrator from the Internet, open the Windows Explorer and double click on the file "cw_integrator.exe". This will extract the Codewright Integrator distribution using the Winzip self-extractor. When prompted, choose a temporary folder to store the distribution for installation. Click unzip to extract the files. This will unzip the distribution and then run Setup.exe to install the Codewright Integrator from the specified temp folder. Follow the onscreen instructions to complete the installation. Once the installation is finished you can delete the distribution from the temp folder.

¹ GNU Make is a freeware utility which is made available free of charge for the convenience of Cosmic Compiler user's. GNU Make is licensed under the GNU GENERAL PUBLIC LICENSE agreement which is included as a text file in this distribution (GPL.TXT). Cosmic Software does support or provide any warrantee either express or implied for GNU make.

² Codewright is a registered trademark of Premia Corporation. Cosmic Software does support or provide any warrantee either express or implied for Codewright.

Verifying Installation and Configuration

After the installation is complete and you restart Windows, you're ready to use Codewright with Cosmic Cross Compilers. Start Codewright and select ³**Project Space->Open** from the **Project** Menu. Browse for the directory where the desired example is installed. Change the file to **Project files(*.pjt**). Select one of the supplied .pjt files (e.g. demo12.pjt). An option box will pop up to ask if you would like to make a project specific database file(.sbl). Choose yes and you're ready to edit and build the demo application.

- 1. Select Project from the Windows Menu to open the Project Window to display the files in the project.
- 2. To test the GNU Make installation, Select **Rebuild** from the project menu to compile all of the files, link and create hex records. You should not receive any error messages.
- 3. Double click on a source file to open it for editing.
- 4. Select **Compile** from the project menu to compile the file.
- 5. Edit the file and create a syntax error, save and close the file.
- 6. Select **Build** from the project menu to recompile the file. You should see the compiler syntax error appear in the status bar at the bottom of the Codewright window and the source file should reopen and place the cursor on the line with the error.

Inspecting the Project Properties

To inspect the demo project properties, select **Properties** from the **Project** menu. This will open the Project properties dialog box.

- 1. Select the Directories tab and you should see the working directory has been set to the example path selected during installation.
- 2. Next select the **Files** Tab. You should see all the files associated with this Project. This will facilitate the **Load files** option and the **Save Files** command.
- 3. Choose the **Tools** tab. The demo project uses only the Tools items **Compile**, **Compile** (debug), Build and Rebuild.
 - a) To review the demo Compiler settings click on **Compiler** in the listbox and click the **compiler** button on the lower right. The **Compiler Name** box should contain the name of your Cosmic compiler and the command line options for **compile** and **compile with debug**. Click **okay** to return to the **Tools** Menu.
 - b) Click on **build** and **rebuild** to show their respective command lines.
 - c) The **Debug** command is not used by the demo, but may be setup to call any ZAP debugger. To configure, click on **Debug**, check only **No Command Shell** and use the Browse button on the bottom right to select the debugger executable or shortcut.
 - d) The **Execute** command is not used by the demo examples. However, the Execute command line may be used to run any application so it is often useful to run compiler utilities outside of make. Enter the desired command line to configure the execute menu item.

NOTE: Please ensure that the **Redirect Output** option box is checked and the "**VDOS**" and "**NO Command Shell**" options are **NOT** checked for Tools items **Compile**, **Compile** (**debug**), **Build** and **Rebuild**.

4. Select the Errors Tab. The filename proj.err should be included for you. This file is used to capture errors that may occur during any of the compile and build phases. The proj.err file should be located in your working directory. The Cosmic error parser "_CosmicCErrorinfo" should be visible for all three error parsers. Now click Okay to close the properties window.

This concludes the Cosmic and Codewright Integration Quick Start. Please refer to the Cosmic, GNU Make and Codewright User's manuals for complete instructions on the setup and usage of the respective programs.

³ Users of Codewright before Version 6.0 need to select **Open** from the **Project menu** then browse for the directory where the desired example is installed. Projects will have a .pjt extension. Select one of the supplied project files and your ready to edit and build your application.