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Installation

This program is written with VxRexx 2.0 and requires a run-time library, *vrobj.dll*. If you don't use VxRexx yourself, and if you haven't already done so, the file can be downloaded free of charge (except connect charges) from the *Watcom* forum on CompuServe. The file is *vrobj.zip* in library 16. After unzipping, place *vrobj.dll* in any convenient directory in the system *path* (e.g. *os2\dll* or the directory you create for *cMent*). You *must* also install the Rexx feature of OS/2 itself, if you haven't done so already.

The easiest way to install *cMent* is to copy all of the distribution files to a new directory and then include this directory in the *path*. Alternatively, if you have established directories for this purpose, you may copy the *.cmd* files to a batch file directory, and the *.exe* and *.set* files to a utility program directory (both in your *path*).

This completes the basic installation, but you must now create a template object from which you can peel off new project folders. You must also tailor the global *cMent.set* and *cMent.opt* files. Both of these steps are described below.

Project Folders

A project folder is basically a standard *Workplace Shell* folder object with *cMent.exe* added to its pop-up menu. It contains all of the files related to a single *.exe*, *.dll* or *.drv* target file. Typically, it would contain any number of *.c* and *.h* (or *.cpp* and *.hpp*) files, together with the intermediate *.obj* (or *.w*) files and the target file itself. A complex project might also include a *.csc* file (which is automatically passed through the *SOM* preprocessor) and/or a *.rc* file (which is automatically compiled to *.res* and then bound to the target *.exe* or *.dll*).

ferent compiler and/or linker. Note that in the default setup, *.exe* and *.dll* targets are linked through *ICC*, to allow proper handling of C++ templates. If you are not using C++, templates, or the *.w* intermediate code files, you can change this to *link386* instead.

The *.cmd* Files

The distributed *.cmd* files are used to translate source files into their targets. You may need to modify or add to these files if you are using different compilers or source extensions. This process is described in detail in the *registered* user's manual only.

Technical Support

Registered users can receive full technical support from the author by email to *Masterpiece Software*, account number *72650,1533* on the CompuServe network (*72650.1533@compuserve.com* from the internet). You can also receive support by regular mail to the company address on the cover of this manual. Telephone support cannot be provided, but we will call you if necessary to resolve your problem. We will also try to assist new, unregistered users but extensive setup assistance cannot be provided until after registration.

Registration

To register your copy of *cMent*, please send a US check for \$ 25 or an international money order for US\$ 30 to the address shown on the cover. You will receive the complete, latest version as well as a complete, printed manual. So please be sure to include your correct mailing address. Thank you for your support.

worked on. To start a new project, I simply drag off of the *Project* template into the *Opus* folder and then rename it. To start a new file, I drag from one of the source templates onto the appropriate project folder. But its *your desktop* we're talking about, and you can arrange it any way you like.

To create your template, drag a *folder* from the *Templates* folder to your chosen location and rename it to *Project* (or anything else you want). Then open *Project* and create basic program objects for the debugger and profiler you are going to use. Add any other files and objects you think you may need in all your new projects. Now, from *Project's* pop-up menu, open the settings notebook. On the *Menu* page, make sure the *Primary pop-up menu* is highlighted at the top of the page and select *create another* in the *lower* part. For *Menu item name* please use *~Build project* so that you will be compatible with all other users (the tilde allows *B* to be used as a single key to activate a build). For *Program name* you should enter the complete path and *cMent.exe*. Finally, on the *General* page, select the *Template* check box. Close the notebook and you're done!

The *cMent.set* file

This global file, and its little brother *cMent.opt*, are the main control files for the building process. You may also include local copies of these files within a project folder, to temporarily replace the global settings. In this case, the equivalent global file is not processed at all.

Normally, these files contain standard *SET* statements for environment variables used during the build process. These files are *interpreted* line by line within the main program and thus they may actually contain any complete, legal Rexx statement, including a *call* to another *.cmd* file. Because they are run from the main

program, the same environment is passed to all of the lower level tools (which is why things are done this way). *cMent.set* runs at the start of every build and creates the overall environment. The smaller *cMent.opt* runs afterward, but only if you select a final or "optimized" build. It is used to turn off debugging and to turn on optimization (e.g. *SET ICC=%ICC%/Ti-/O*).

The distributed files are tailored for IBM's *Cset++* and *MASM*. You will need to modify *cMent.opt* only if you are using another compiler, but you will almost always have to tailor *cMent.set* itself to suit the file structure of your system. It contains the following:

```
SET LINK386=/BATCH /ALIGN:4 /BASE:0X10000 /E /F /NOE /NOI /NOL
SET ICC=Q /N50 /W2 /Spt /Si /Fi /G4 /Gdf im /Ti /O- /OI /OI
SET SMEMIT=XH,XIH,XPH,XC,DEF

SET TOOL=d:\tool\ikit
SET CMP L=d:\compiler
SET TEMP=d:\temp
SET TMP=%TEMP%
SET SMTMP=%TEMP%

SET PATH=%CMP L%\BIN;d:\masm;%TOOL%\OS2BIN;%PATH%

SET INCLUDE=.;%TOOL%\CPLUS\OS2H;%CMP L%\INCLUDE;%CMP L%\IBMCLASS
SET SMINCLUDE=%INCLUDE%
SET LIB=.;%TOOL%\OS2LIB;%CMP L%\LIB;

SET SOURCE=CSC.CCC.CPP.CXX.C.HPP.H.ASM.INC.MAC.USA.RC
SET TARGET=CSC2CPP.C2W.CPP2W.ASM2OBJ.CCC2EXE.CXX2EXE.USA2RES.RC2RES

SET ASM=MASM.EXE /c /la /ml /p /s /t /z /i%TOOL%\ASM\OS2INC

SET CSC=SC.EXE

SET C=ICC.EXE /C /Fw /Ss /Tdc
SET CPP=ICC.EXE /C /Fw /Tdp
SET CCC=ICC.EXE /Ss /Tdc SETARGV.OBJ
SET CXX=ICC.EXE /Tdp SETARGV.OBJ

SET RC=RC.EXE -r

SET EXE=ICC.EXE /Get /Gu /OI /Tdp
SET DLL=ICC.EXE /Ge- /Gu /OI /Tdp
SET DRV=LINK386.EXE
```