

farrokhi.net's

Language 2000

Ultimate Compiler Detection Utility

User's Guide and Technical Information

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<http://farrokhi.net>

What is Language2000?

Basic information and program history

Language2000, as its name shows, is the Ultimate Compiler Detection Utility. But not just compilers, it also detects lots of Modifiers, Compressors and Encryptors.

This is not a new idea to determine compiler of a program. There are lots of programs like this and this is not a new idea. I got the idea from a program, which was written in 1990 by J.E.Smith. It was a program, called “whatis” for detecting the development language and compiler of executable binaries. There were lots of limitations. It was too old and just detects a limited variety of old compilers. After I saw “whatis”, I decided to make a new program to detect newer compilers and encryptors.

In the first version of program, “Language” (my new program) was able to detect almost 12 compilers and 5 EXE compressors. The pattern database was inside the executable program.

Now, the new version of this program detects about 30 modifiers 45 compilers. The database is not hardcoded and could be upgraded easily from outside of the program. I will update the database frequently and the database is downloadable from my web site.

You can find more information about online-update at end of this document.

Let's start

Working with Language2000, the user interface

Because you may use this program frequently, it should have a user-friendly user interface. I tried my best to make it easy to use. I know I can make it better, but don't know how! Your opinions and ideas are very important for me. Please take a look at Chapter 3 to find out how to contact.

There are two ways to examine your file in Language2000. The easiest way is to drag file from windows explorer and drop in on the main window of program.

The second ways is to open the file using Open button in main window of program (as shown in figure 1) then select an .EXE, .DLL, .OCX or any kind of binaries.

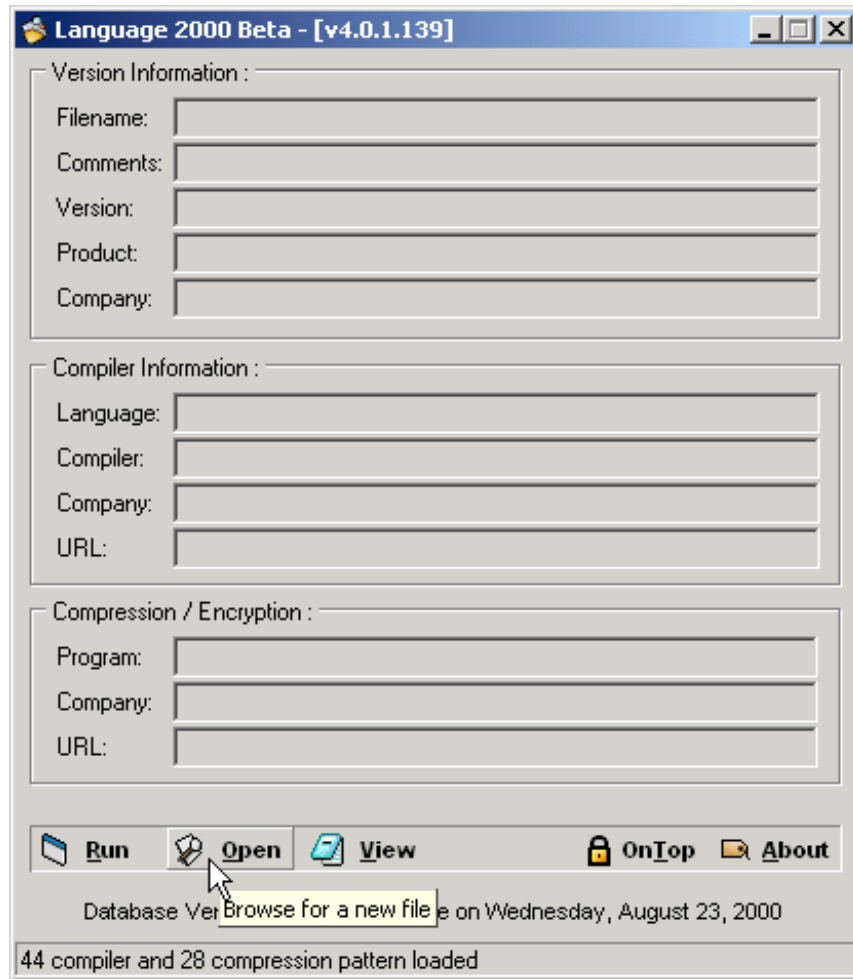


Figure 1: The main window of program. Select **Open** button to open a file.

After opening the file, program loads the image of binary into the memory and then scans the binary for patterns. After some seconds (depends on your computer) program shows information about your binary file.

This information contains:

- 1- Version information of file (if exists)
- 2- Information about compiler and language (if detected)
- 3- Information about modifier (if detected)

Figure 2 shows a sample output of program.

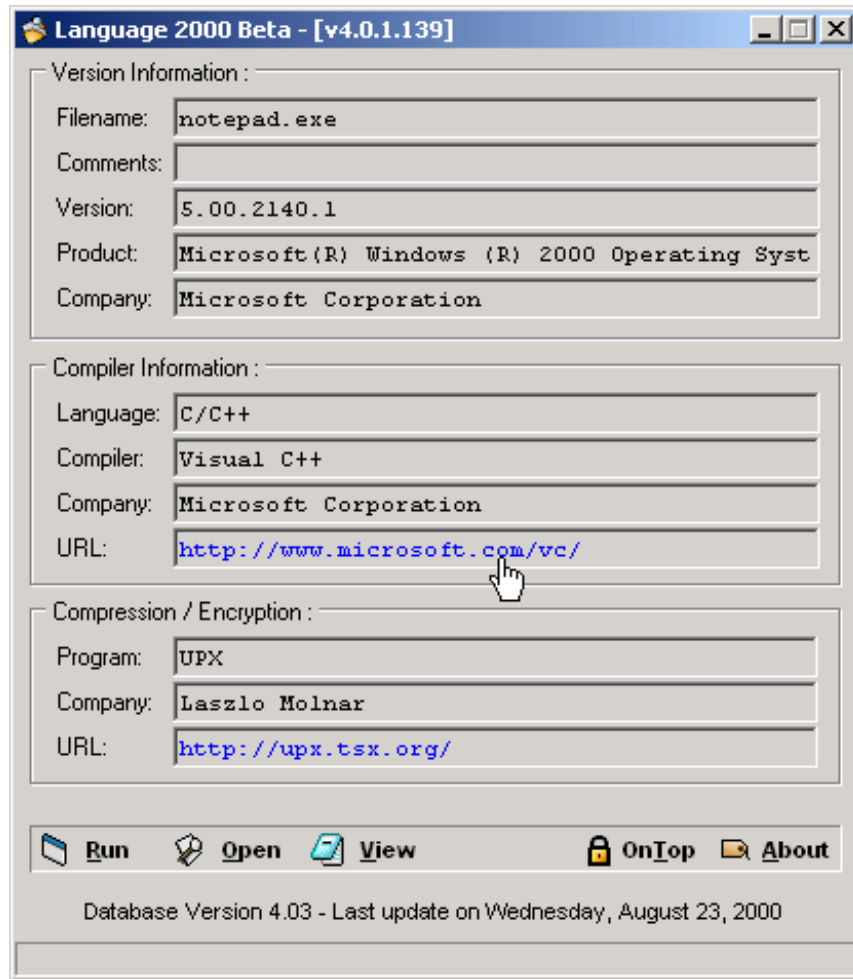


Figure 2: Sample output of program

Pressing View button will open selected file into notepad. In my own version, the program opens the file in BIEW, which is my favorite binary viewer (<http://biew.sourceforge.net>). But because you may do not have BIEW on your machine, I changed it to Notepad.

Pressing Run button will also executes current file, if possible.

I tried to give all information about compilers/modifiers, including the company name and their web address.

Please note that program would be unable to determine the compiler if the file is compressed or encrypted.

Or program may be unable to detect some compilers/modifiers because there is no information about them in database. In this case please send me information about the compiler, Internet address, it's company or anything you know about it. I will test it and add it to database.

Bugs and Problems

I found a bug! What should I do?

You may find a bug, have an idea, have suggestion, or you may want to say thank you!

To report bugs, please send me information about the bug, your computer, operating system and special case of causing problem (if any). I will solve the problem in future versions.

If you know a compiler/modifier that program does not detect, please send information about it

Address to send information about bugs: l2k-bugs@farrokhi.net

Ideas, suggestions and reports: babak@farrokhi.net

The official homepage of program: <http://farrokhi.net/language>

I will update database files frequently. Please note the date of last update on the main window of program and check out web site for newer version of database.

Database information

Information about known compilers and modifiers

Here is a list of known compilers. Most of times, Language2000 uses more than one pattern to determine a compiler.

Company	Compiler
Microsoft	Quick Basic, Microsoft C, Quick C, Visual C, Visual Basic, FoxPro
Borland	Turbo Pascal, Borland Pascal, Turbo C, Borland C, Delphi
Watcom	Watcom C
Symantec	Symantec C
Others	Zortech C, LSI-C, Lattice C, LCC, DJGPP, DJASM, RSX, FPC

Modifiers:

Modifier	Company / Author
PKLite for DOS and Win	PKWare Corporation
ProPack for DOS	Rob Northen Computing
LZExe for DOS	Fabrice Bellard
Diet for DOS	Teddy Matsumoto
PECrypt	Random & acpizer
PELOCKnt	MARQUIS
PE-PACK	ANAKiN
PEShield	ANAKiN
Petite	Ian Luck
NeoLite	NeoWorx
PC Guard	Blagoje Ceklic
CodeCrypt	Defiler
PECompact	Jeremy Collake
VGCrypt	Virogen
WWPack32	Piotr Warezak and Rafal Wierzbicki
DBPE	Ding Boy
PCPEC	Phrozen Crew
UPX	Laszlo Molnar
PE Deminisher	Teraphy / Phrozen Crew

ASPack	Alexey Solodovnikov
ASProtect	Alexey Solodovnikov
BJFnt	MARQUIS @ UCF98
Alloy	PGWare
NFO	Bart
PeX	Bart
TElock	tHE EGOiSTE