

Building DurexForth

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Packages needed

1) Cygwin

- a. Main page: <https://www.cygwin.com/>
- b. Download: https://www.cygwin.com/setup-x86_64.exe

2) ACME assembler

- a. Main page: <https://sourceforge.net/projects/acme-crossass/>
- b. Download: <https://sourceforge.net/projects/acme-crossass/files/latest/download>

3) DurexForth

- a. Main Page: <https://github.com/jkotliniski/durexforth>
- b. Download: <https://github.com/jkotliniski/durexforth/releases>
- c. Source: <https://github.com/jkotliniski/durexforth/archive/master.zip>
- d. Facebook: <http://www.facebook.com/DurexForth>

4) WinVICE

- a. Main page: <https://sourceforge.net/projects/vice-emu/>
- b. Download: <https://sourceforge.net/projects/vice-emu/files/releases/binaries/windows/>

5) RapidEE (optional)

- a. Main page: <https://www.rapidee.com/en/about>
- b. Download: https://www.rapidee.com/download/RapidEE_setup.exe

6) VS Code

- a. Main page: <https://code.visualstudio.com/>
- b. Download: <https://aka.ms/win32-x64-user-stable>
- c. Forth Extension:
<https://marketplace.visualstudio.com/items?itemName=rickcarlino.forth>
- d. Acme Assembler Extension:
<https://marketplace.visualstudio.com/items?itemName=TonyLandi.acmecrossassembler>

To install

I set up a Dev folder at `C:\users\me\documents\Dev`. This is in a nice 'safe' place away from `C:\` (root) and the path has no spaces in it.

- a) Install Cygwin, Acme, and DurexForth source to the \Dev folder VICE can be there or anywhere else
- b) Set up environment variables for the following. Environment variables are a way to give short names to complicated paths, etc. It is then easy to use the name rather than have to remember the whole path. They also come in handy in other ways which we won't delve into here. I like using 'RapidEE' on Windows to do this as it makes the job MUCH easier. That is what I will be using here to demonstrate the process.
 - a. `CYGWIN = C:\users\me\documents\Dev\cygwin` etc.
 - b. `ACME = path`
 - c. `DUREX = path`
 - d. `VICE = path`
- c) Add `%CYGWIN%`, `%ACME%`, `%DUREX%`, `%VICE%` to your path

To build

- 1) Add `CC=gcc` to top of Makefile. Depending on how your Cygwin is set up it might or might not default to using `GCC` as the C compiler. DurexForth compiles a helper program using `gcc`. If we add this line to the top of the DurexForth makefile it will know to use `gcc` no matter what our Cygwin defaults to.
- 2) Run Cygwin
- 3) Type in `cd %durex` to go to durex folder `/cygdrive/...your_path.../dev/durexforth-1.6.4`
- 4) Type in `make` Make all
- 5) You are done, your `Db4` file is ready to use