

WEST: How to use WEST 64-bit?

In WEST, models are described in an object-oriented declarative modeling language. From these descriptions, executable C code is automatically and transparently generated. This C code is subsequently compiled and linked into a dynamically-linked library (DLL).

The **WEST 32-bit** installer includes the free Borland 5.5 C++ compiler for creating executable models in the form of DLL's. The **WEST 64-bit** installer however does not contain such a compiler, as there exists no C compiler that on the one hand can freely be included in installers, on the other hand is able to generate 64-bit binaries, and on top of that works well for a variety of models. It is therefore left to the user to install a C compiler of one's liking separately, should one wish to use WEST 64-bit.

In order to get WEST 64-bit to work, the most obvious option is to install the Visual Studio Community C compiler, as follows:

- Download Visual Studio Community, e.g. from <https://www.visualstudio.com/en-us/products/free-developer-offers-vs.aspx>
- Perform a custom installation, with only VC activated
- After installation of WEST, edit <PublicDocuments>\DHI\WEST\bin\WESTStart.bat
- Add the following (or similar) at the top of the file:
CALL "C:\Program Files (x86)\Microsoft Visual Studio 14.0\VC\bin\amd64\vcvars64.bat"
Mind the use of "CALL" and quote the path
- Optionally, if faster compilation at the expense of slower simulation is desired, add the following to WESTStart.bat:
SET TORNADO_CC_OPTIMIZE=no
- Save WESTStart.bat and start WEST

If there is no real need for using the 64-bit installer (such as the ability to address more than 4 Gb of memory), one is advised to use the 32-bit installer (even on a 64-bit operating system), as it includes a C compiler and therefore has a much more straightforward installation process.