

A guide for (co)simulation between PSCAD/EMTDC and Matlab

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1 Fundamental for The (Co)simulation

What's you need for the (co)simulation are Matlab, PSCAD/EMTDC and another Fortran compiler. We recommend to use the *Intel Visual Fortran Composer XE*. We assume that you can get these software and correctly install them.

There are some things that I want remind the readers:

1. As Intel Visual Fortran is embedded with Visual Studio, so before you can use Fortran compiler a proper version Visual Studio is need;
2. The Matlab version must fit the needs of PSCAD/EMTDC.

So, it's clearly the steps of setting up the (co)simulation environment is:

- Install The software
 - Step 1: Install Visual Studio, we recommend to use Visual Studio 2010;
 - Step 2: Install Fortran compiler, the recommended version is Intel Visual Fortran Composer XE 2011.5.221;
 - step 3: Install Matlab, The 2012 α edition is the newest that can fit the need of PSCAD/EMTDC 4.5;
 - Step 4: Install PSCAD/EMTDC 4.5, typical install is OK.
- After install all the software, we need to find the “Application Options” from PSCAD/EMTDC which is shown as Figure 1;
- Find the **Fortran Compiler** from “Dependencies” In the Application Options shown as Figure 2;

To run the (co)simulation shown as Figure 3 you may need the administrator permission of the computer.

Enjoy it!

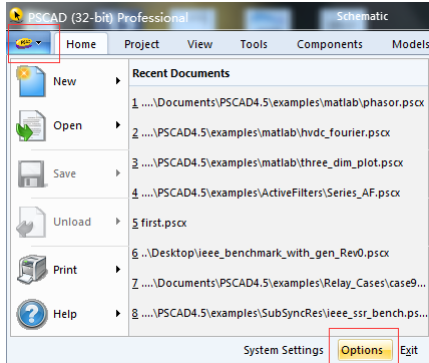


Figure 1: Where to find The options

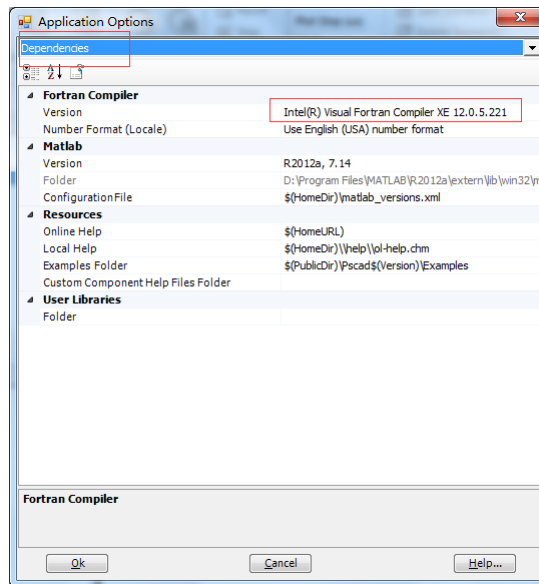


Figure 2: Set of the (co)simulation environment

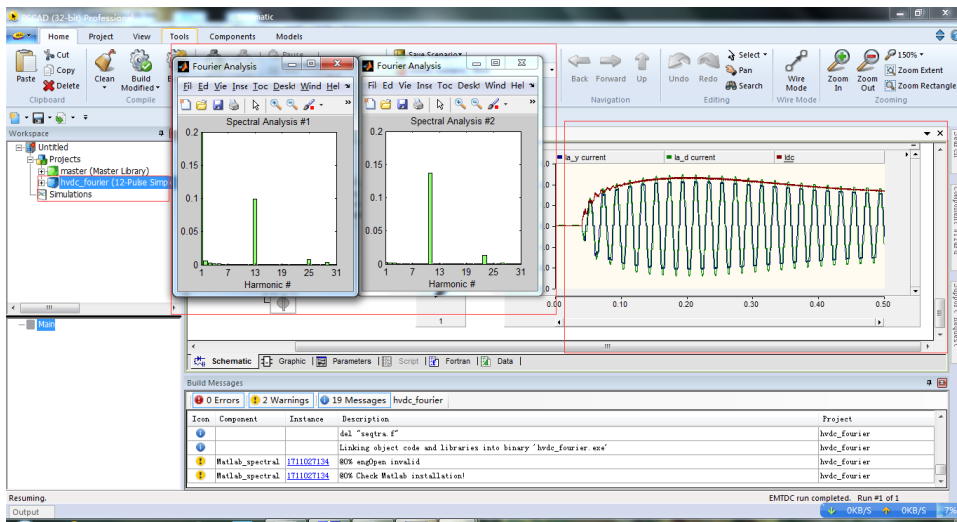


Figure 3: Set of the (co)simulation environment