

How to Run the PSCAD Lightning Example using GFortran 4.2

This document provides instructions to set up your environment to compile the Lightning Studies example that comes bundled with the Lightning Studies Webinar using GFortran 4.2.

1. Setting up the GFortran 4.2 Software

- a. Install GFortran as per this article, and ensure to log out then log back in on your machine.
- b. Test your setup as per this article.
 - If there are any issues with your setup, please refer to Step 1 of this <u>article</u> for troubleshooting tips.
 - o If the matter persists, please obtain assistance from our Support Desk as per Step 2 of this article.

2. Downloading the Lightning Example Files

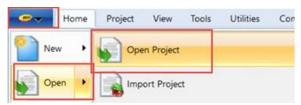
- a. Download the Lightning Example files from this article.
- b. Unzip and save the files to your machine, on a <u>local</u> drive.

Notes

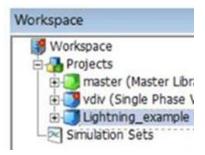
- 1. Do not save the files to "D" drive.
- 2. Do not save the files to a network drive.

3. Loading the Lightning example into PSCAD

a. Launch PSCAD, and load "Lightning_example.pscx":



b. The Lightning_example project will display in the Workspace:

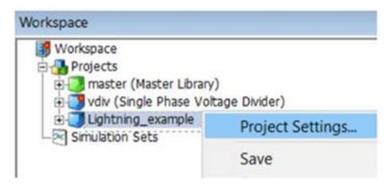


Initial 1

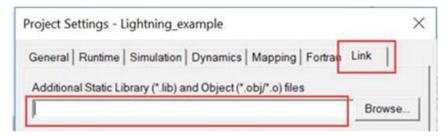


4. Linking the Lightning example object files into PSCAD

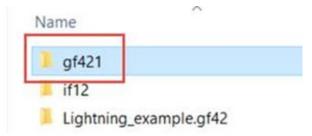
a. Right-click on Lightning_example, and select "Project Settings":



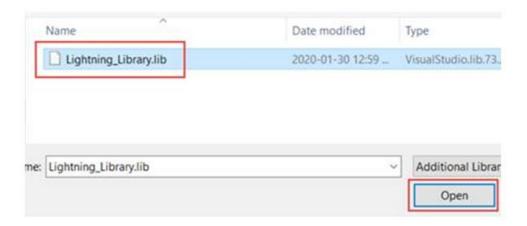
b. Click on the *Link* tab, and delete any text in the field as shown:



c. Select "Browse" in the above view, and when the Windows browser displays the downloaded *Lightning example* folder, open the gf421 folder:



d. Select the Lightning.Library.lib, then select Open:



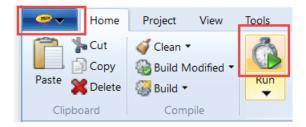
e. Close the Project Settings dialog.

Initial 2



5. Running the Lightning example

a. Run the case:



b. If properly set up, the simulation should run with no errors in the Build Messages pane nor in the Runtime Messages pane.

Initial 3