

Migrating Projects from Older Versions

1. Introduction

This document provides instructions for migrating a project that was developed in earlier versions of PSCAD (v3 to v4.2) to v4.6 format.

First, any projects created in v3 to v4.1 must be converted to v4.2.1 format. The v4.2.1 project is then converted to v4.6 format. All compiling errors and warnings should be resolved at these conversions.

During this process, new errors and warnings might be detected. This is because as PSCAD evolves, new rules for designing simulations are being developed, and some previous rules have been elevated from warnings to errors. To help with updating a project to this later version, special features in PSCAD v4.6 automatically detect and correct some of these new errors and warnings.

2. Requirements

- Windows 7, officially supported (later versions might work)
- Windows Admin privileges, required for software installation and running PSCAD v4.2
- Lock-based licensing, required for using PSCAD v4.2
 (if you do not already have lock-based licensing, please discuss with our support desk (support@pscad.com))
- Lock-based or certificate-based licensing, for PSCAD v4.6
- PSCAD v4.2.1 and PSCAD v4.6 installed (instructions for these installations are included below if required)

Note

The Compaq Fortran compiler is not compatible with PSCAD v4.6. It is recommended to use the Intel Fortran compiler instead. Or, use the Compaq compiler, and import your project into PSCAD v4.5.5 instead.

 License Manager v1.37 or later, required for licensing PSCAD v4.2 (instructions for installing LM v1.43 are included below if required)

3. Installing PSCAD v4.2.1

If not already installed, install PSCAD v4.2.1 as follows:

- Obtain a download for v4.2.1 from our sales desk (sales@pscad.com).
- Download the zipped folder, unzip it ("extract" the files), and save the files to a local drive (e.g. a new folder on your desktop).
- Right-click on the unzipped file "setup.exe", and select the option to run with Windows Administrator privileges. The installation will begin.
- When prompted to select the software for installation, select PSCAD. Also select GNUFortran if you do not use a commercial compiler for this project. Do not install the License Manager, as this version is old; a newer version is required to allow the licensing.



4. Installing and Configuring the License Manager

If License Manager v1.37 or later is not already present on the machine that is hosting the license, download and set up License Manager v1.43 as per instructions in the document License Manager Enhancements.

The License Manager must always be running in order to license PSCAD v4.2.1. To ensure it is running, select "Restart License Manager Service" from the Windows Start menu. Or, restarting your computer will also restart the License Manager.

5. Setting up PSCAD v4.2.1 to use a Commercial Compiler

If you will be running your PSCAD v4.2.1 case with a commercial compiler (e.g. Intel Fortran or Compaq Fortran), there are usually some minor configuration changes to make to your setup, so that PSCAD v4.2.1 is able to detect the compiler.

Note

These changes are not required if you will be running your v4.2.1 case using GNUFortran.

We typically use a tool we developed called the Fortran Medic to detect the setup and to then make these configuration changes. To proceed, please do the following:

- Download the latest "FortranMedic" from our website:
 - http://updater.pscad.com/utilities/FortranMedic.zip
- In the downloaded .zip file, run the FortranMedic.exe file.
- · Click on the Actions menu and select Start.
- After the utility is done retrieving information, click on the Actions menu and select Save Messages. The FortranMedic message window will display the location of the saved messages text file on your computer.
- Send in the log file (support@pscad.com). We will review your file, and then send you the steps to configure your environment.



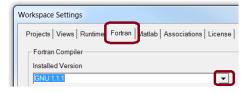
6. Save your Project to v4.2.1 Format

If your project was created in versions 3 to 4.1, save your project to the v4.2.1 format as follows:

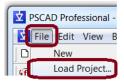
• Launch v4.2.1 with Windows administrator privileges (from the Windows Start menu, browse to the "PSCAD 4.2.1" link, right-click on the link, and select "Run as administrator").



- Ensure v4.2.1 is licensed.
- Select your compiler on the Fortran tab of the Workspace Settings, then select "OK". For example:



• Load your project.



• Double-click on the project in the workspace to highlight and select it, for example:



• Run the project:



- Resolve any build or run issues. If you require assistance with resolving these, please send in a support request (support@pscad.com), ensuring to include all messages, warnings, and errors for our evaluation.
- Once all issues have been resolved, save your project.



7. Installing PSCAD v4.6

If not already installed, install PSCAD v4.6 as follows:

- Obtain a download for v4.6 from our sales desk (<u>sales@pscad.com</u>) (or v4.5 if required for using the Compaq Fortran compiler).
- Install the software as per Section 2.3 of the manual <u>Software Installation and Licensing</u>.
- When prompted to select the software for installation, select PSCAD. Also select GFortran if you do not use a commercial compiler for this project.

Notes

GNUFortran is compatible with PSCAD v4.2.

GFortran 4.2 is compatible with PSCAD v4.3 to v4.6.

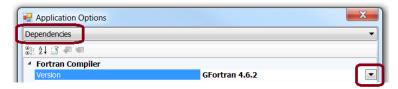
GFortran 4.6 is compatible with PSCAD v4.6.



8. Save your v4.2.1 Project to 4.6 Format

Save your v4.2.1 project to v4.6 format as follows:

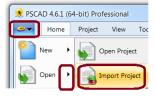
- Launch v4.6 (from the Windows Start menu, browse to the "PSCAD v46" link).
- Ensure v4.6 is licensed.
- Select your compiler in the Dependencies page of Application Options, then select "OK". For example:



• In the Workspace page of the Application Options, set the v4.x Legacy Import/Load features to detect and correct importing issues, then select "OK". For example:



• "Import" your v4.2.1 project.





• Run the project:



- Resolve any build or run issues. If you require assistance with resolving these, please send in a support request (support@pscad.com), ensuring to include your license number, and all messages, warnings and errors for our evaluation.
- Once all issues have been resolved, save your project.



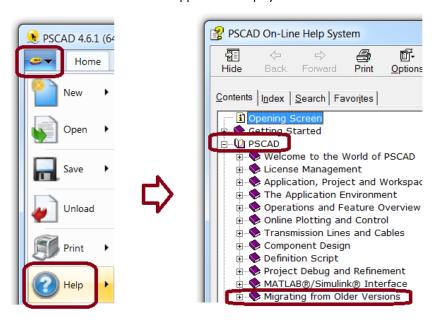
9. Further Information

More in-depth information is available in the PSCAD User's Guide, which may be displayed as follows:

- Display this information in .pdf format: Chapter 12 of the PSCAD User's guide v4.6.0.
- Display this information in .htm format for v4.6.2, available online here. Scroll down to "Migrating from Older Versions":



• Display this information within the PSCAD application help system as shown:



We hope this information was helpful for updating projects created in earlier versions of PSCAD to v4.6 format. If you have any questions, please contact our support desk (support@pscad.com).

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