

PSCAD V5 Software Setup – Quick Start (Lock-Based Licensing)

1. Introduction

This document provides quick start instructions for setting up PSCAD™ v5.0.0 to v5.0.2, for the Professional and Educational editions. Included are instructions to set up the lock-based license on either the PSCAD client machine or license server as applicable, install the License Manager if required, install PSCAD, activate the [license](#), and set up and test a [Fortran compiler](#) for use with PSCAD.

For more detailed instructions, please refer to this [article](#).

The boundaries imposed for the Professional and Educational editions are specified in this [article](#).

2. Updates to This Software

Release notes for updates to this software may be viewed from this [webpage](#).

The installers for other MHI Products previously came bundled with PSCAD v5.0.0 to v5.0.1 Update 3. Specifically, these were the installers for Enerplot, PRSIM and the PSCAD Initializer. As of v5.0.2, the non-PSCAD Product installers have been separated out from PSCAD, and are now available only as individual downloads.

3. Requirements

The following are required for this setup:

- a. If using the V5 license to run V4, see [Step 1](#) to determine compatibility and required configuration.
- b. [System requirements](#)
- c. Windows Administrator privileges
- d. If licensing will be hosted on this machine, the License.txt file and hardware USB lock
- e. If licensing will be hosted on a server, the server name or IP address is required for setting up the PSCAD client machine.

4. Obtaining Access to the Software

Obtain access to the software as follows:

- a. [Register](#) a MyCentre user account if you do not already have one.
- b. Send an email using your facility's e-mail domain to the [MHI Sales Desk](#) requesting the software; also provide your license number.
- c. The software download and setup instructions will be provided to authorized users through their MyCentre user account. [Log in to MyCentre](#), and download the software from your *Downloads* tab.
Note: If you are provided a join code, apply the join code first. The join code will link your authorized licenses and downloads to your user account. Refer to this [article](#) for instructions.

5. Installation Instructions – PSCAD Machine

On the PSCAD machine, install the software, as follows:

- a. Log in to [MyCentre](#), and download PSCAD from the “Downloads” tab.
See Step 4 if the download is not available.
- b. Unzip and save the folder to a local drive (e.g. desktop).
- c. Open the unzipped folder, right-click on “setup.exe” and select “Run as administrator”.
Select “Yes” when prompted by the Windows User Account Control. The installer will launch.

- d. When prompted to select products for installation:
 - Select PSCAD
 - Select GFortran if you do not have the Intel compiler (refer to Step 10 for information on selecting and setting up a compiler)
Note - When prompted, ensure to install GFortran to your C drive; other drives are not supported.
 - Select the License Manager on the PSCAD machine only if required, as specified in Step 6.
- e. When prompted to select the type of licensing, select “Lock-based self-licensing”.
- f. If the License Manager was selected for installation, refer to this installation starting at Step 6.b, then return to Step 5.g, below.
- g. If a Fortran compiler was installed, log out and log back in to your machine to apply the changes.
- h. If you will be using the Intel Fortran/Microsoft Visual Studio compiling software to build your projects (see Step 10), configure PSCAD appropriately as follows:
 - Configure PSCAD to be able to detect more versions of Intel Fortran compilers as per this [article](#).
 - If using Visual Studio 2015 or newer, configure PSCAD as per Step 2 of this [article](#).
Note - The default upon installation is for PSCAD to use Visual Studio 2013 and older.

6. Setup Instructions – Standalone License Manager

The following table specifies when the Standalone License Manager should be installed:

| License Host | License has one PSCAD Seat | License has Two or More PSCAD Seats |
|-----------------------------|---|---|
| Hosted on a Server Machine | Install License Manager on Server Machine | Install License Manager on Server Machine |
| Hosted on the PSCAD Machine | Do not Install License Manager on PSCAD Machine | Install License Manager on PSCAD Machine |

The Standalone License Manager may be installed and configured as follows:

- a. Launch the installation as follows:
 - If selected for installation, as part of the PSCAD installation (Step 5), or
 - From within the unzipped PSCAD installation package: Open the “License” folder from the main directory, right-click on “setup.exe” and select “Run as administrator”, or
 - From a separate download: Download the zipped file from this [article](#), extract (unzip) and save the files to the machine desktop. Right-click on “setup.exe” and select “Run as administrator”.
- b. When the License Manager installation launches, proceed through the menus.
- c. The *Setup Tool* will display as part of the installation:
(or the *Setup Tool* may be downloaded from this [link](#); extract the files, and run “SetupTool.exe”)
 - i. Configure the *Access* tab as follows:
 - On a PSCAD machine: Select “This machine only (private)”.
 - On a server machine, the following options are available:
 - Select “Authorized networks (protected)” to share with machines on specified networks, or
 - Select “Everyone (public)” to share with machines on any network that can reach the server.

- ii. If “Authorized networks (protected)” was selected in Step (i), above, configure as many rows in the *Networks* tab as required, as follows:
 - Note:** Refer to the detailed user manual posted [here](#) for further information on this.
 - “Description”: Enter a description for your own reference (not monitored by the utility)
 - “IP Address”: Specify a network
 - “CIDR Mask”: Specify the CIDR mask
 - “First...” and “Last...” IP address file fields: Will be populated automatically.
- iii. From the *Actions* menu, select “Save Settings and Exit”.
- d. When prompted whether to install or update your license, select “Yes” if you have the license text file (License.txt), follow Steps 7.d to 7.f, then return to Step 6.e, below. Or, if you do not have the license text file, select “No”.
- e. The License Manager installation will be complete.

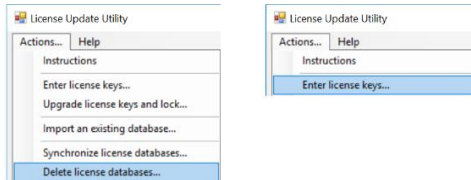
7. Setting up the PSCAD License

The license may be set up on the PSCAD machine or on the server as applicable. If the license file was not already installed (e.g. alongside the License Manager in Step 6.d), install the file as follows:

- a. Securely plug in the USB lock.
- b. Save the associated License.txt file to your desktop.
- c. From the Windows Start menu, locate and launch “Enter License Key” (this utility would have been installed alongside PSCAD or the License Manager), and select “Yes” when prompted by the *User Account Control*.

Note: If the *Enter License Key* utility is not available from your Windows Start menu, it may be downloaded from [here](#); extract (unzip) the files, and run the “LicenseUpdate.exe” file.

- d. From the “Actions” menu, select “Delete license databases”, and confirm when prompted. Then select “Enter license keys”, browse to the License.txt file when prompted, and select “Open”.



- e. A message similar to the following should display, listing the edition and license number; the utility may be closed:

```

LICENSE 1:
Added new license to database.
HVDC product   : Educational v5
Lock number    : 11111
Length of licence : unlimited
Quantity of licence: 25 MUL
Port number    : 2053
Start date     : Fri Oct 02 15:21:33 2020
Expiry date    : <none>
  
```

- f. If the license installation is unsuccessful, please contact our [support desk](#), ensuring to provide your license text file and the License Update log file (select “Save messages...” from the *Actions* menu).

8. Launching PSCAD

Launch “PSCAD v5x” from the Windows Start menu.

9. Activating a License

Activate the license as follows:

- a. Launch PSCAD as per Step 8.
- b. If *Licensing | Switch to Lock-Based* is specified, left-click on this option, and lock-based licensing will be set:

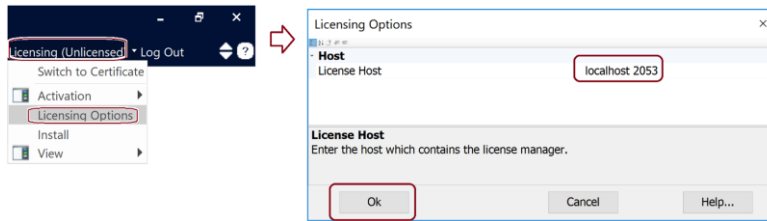


Warning:

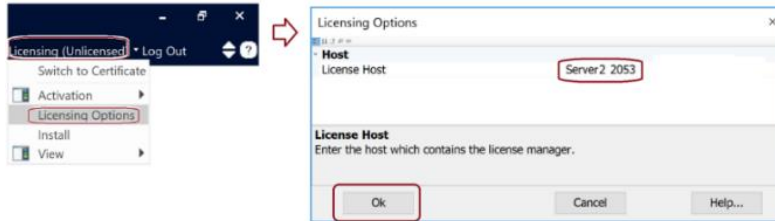
If Licensing | Switch to **Certificate** is specified, make no change.

- c. Configure the *License Host* field as follows:

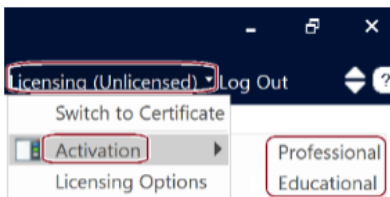
- i. If licensing is hosted on this PSCAD machine, enter "localhost 2053", then select OK:



- ii. If licensing is hosted on a server, enter the server name or IP address, then a space, then 2053. Then select OK. For example, if the server name is Server2, enter *Server2 2053*, as shown below:



- d. Select the Professional or Educational edition, as applicable:



- e. The software should now be licensed and available to use.
- f. Or, if license activation is unsuccessful, please send your licensing log files as specified in this [article](#) to our [support desk](#).

10. Selecting, Setting up, and Testing your Compiler

Information on selecting, setting up and testing your compiler for building your PSCAD projects may be viewed from this [topic](#).

If you have any compiler selection or setup questions, please forward your questions to our [support desk](#).

11. Resources for Using PSCAD

Resources for using this software are listed in this [article](#).

We hope this information was helpful. If you have any setup or usage questions, please contact our [support desk](#).