



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

### 1. Introduction

This document provides quick setup instructions for PSCAD™ v5.0.0 software, the standalone license manager, GFortran compiler, and the lock-based license. For more detailed instructions, please refer to the user manual posted to this [article](#).

### 2. Scope Boundaries

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

### 3. Requirements

The following are required for this setup:

- [System requirements](#)
- Windows Administrator Privileges
- If licensing will be hosted on this machine, the License.txt file and hardware USB lock
- If licensing will be hosted on another machine (server), the server name or IP address

### 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 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, as shown:



### 5. Installation Instructions – PSCAD Machine

On the PSCAD machine, install PSCAD, as well as the GFortran compiler and License Manager if required, as follows:

- a. Download the zipped file, extract (unzip) and save the files to your desktop.
- b. From the unzipped files, right-click on “setup.exe” and select “Run as administrator”. The installation will launch.
- c. When prompted to select products for installation:
  - Select PSCAD
  - Select GFortran if you do not have a license for the Intel compiler (refer to Step 10 for information on selecting and setting up a compiler)

- Select the License Manager on the PSCAD machine only if:
  - This is a server machine, and will share licensing with client machines over the Network, or
  - This is a machine for running PSCAD, AND licensing will be hosted on this machine, AND the license contains two or more seats.
- d. When prompted to select the type of licensing, select “Lock-based self-licensing”.
- e. If the License Manager was selected for installation, refer to this installation started at Step 6.c, then return to Step 5.f, below.
- f. When the installation is complete, log out and log back in to your machine to apply the changes.

## 6. Setup Instructions – Standalone License Manager

The Standalone License Manager is installed in the following situations:

- **On a Server Machine (Network Licensing):** If licensing will be hosted on a server and shared with client machines over the Network, the License Manager MUST be installed on the server, alongside the license.
- **On a PSCAD Machine (Local Licensing, Multiple Seats):** If licensing will be installed locally on a PSCAD machine, AND if the license contains two or more seats, the License Manager MUST be installed on the PSCAD machine, alongside the license.

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

- a. Launch the installation as follows:
  - As part of the PSCAD installation (Step 5), or
  - As part of a separate download:
    - Download the zipped file, extract (unzip) and save the files to the machine desktop.
    - From the unzipped files, , 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:
      - Select “Authorized networks (protected)” to share with machines on specified networks, or
      - Select “Everyone (public)” to share with machines on any network.
  - 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.f, below. Or, if you do not have the license text file, select “No”.
- e. The License Manager installation will be complete.

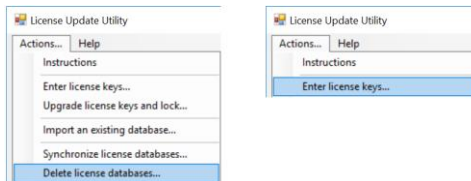
## 7. Setting up the PSCAD License

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 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 utility log file (select “Save messages...” from the *Actions* menu).

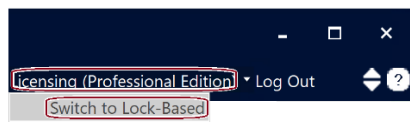
## 8. Launching PSCAD

Launch “PSCAD v5x” from the Windows Start menu.

## 9. Activating a License

Activate the license as follows:

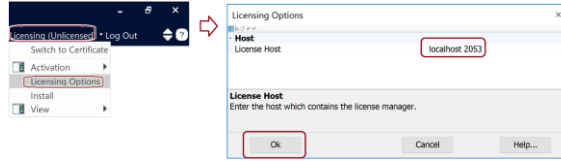
- a. Launch “PSCAD v5x” from the Windows Start menu.
- b. If Licensing |Switch to **Lock-Based** is specified, select this option:



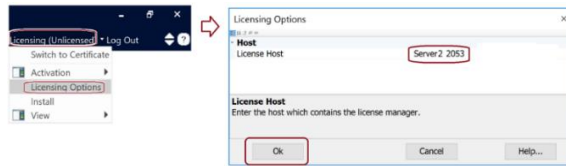
**Warning:** If Licensing | Switch to **Certificate** is specified, make no change.

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

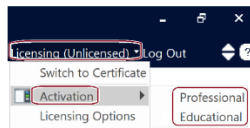
i. If licensing is hosted on the PSCAD machine, enter “localhost 2053”, then select OK:



ii. If licensing is hosted on a server, enter the server name or IP address, and a space and 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

A third-party compiler is required for building PSCAD projects. PSCAD supports the Free GFortran compiler that comes bundled with the PSCAD installer, as well as the commercially available Intel® Parallel Studio Composer Edition for Fortran for Windows. If using the Intel compiler, another third-party software is also required, Microsoft® Visual Studio. Refer to [detailed information on selecting your compiler](#).

GFortran may be installed alongside PSCAD as per Step 5.c, or it may be [installed separately from PSCAD](#).

For selecting and setting up the Intel compiler, please refer to the following references:

- [Selecting the Intel compiler version and license type](#)
- [Selecting the Visual Studio version and edition](#)
- [Setting up the software](#)

Once PSCAD and the compiler are installed, your setup should be [tested](#) before building your own projects.

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 available in this [article](#).

We hope this information was helpful. If you have any setup or usage questions, please contact [support@mhi.ca](mailto:support@mhi.ca).