FSUIPC5: 64-bit application interfacing module for Lockheed-Martin's Prepar3D version 4

Flight Simulator Universal Inter-Process Communication 5
by Pete Dowson, © 2018

Support Forum: Pete Dowson's Support Forum

INSTALLATION and REGISTRATION GUIDE

Version 5.14 of FSUIPC4.dll

Note: All my Windows based software is always available in the latest versions from http://www.schiratti.com/dowson**.** (Selected modules are also available elsewhere).

This is *not* my web site (I have none) but the list is there courtesy of Enrico Schiratti

NOTE that the earliest version of P3D4 supported by this release is P3D 4.1.

Contents of package *(where to find things)*

As well as the document you are now reading, and a document listing recent changes, this package contains "**Install FSUIPC5**.exe".

The Installer itself will install the following module in the P3Dv4 **Modules** folder (which will be created if necessary), and a subfolder within this called **FSUIPC Documents:**

FSUIPC5.dll	The FS module itself, version 5 (in the Modules folder)

and the files listed on the following page, all in the **Modules\FSUIPC Documents** sub-folder:

Files placed in the Modules\FSUIPC Documents folder

Main FSUIPC4 Documentation

FSUIPC5 User Guide.pdf	The user manual, in Adobe Acrobat format
FSUIPC5 for Advanced Users.pdf	More technical information only (Acrobat format)
FSUIPC5 History.pdf	A list of changes in each version (Acrobat format)

Additional specialised facilities in FSUIPC

ASN WX Radar facilities in FSUIPC4.pdf	Details of facilities generating data and bitmaps for WXRadar
Profiles in Separate Files.pdf	Description of newer facility for managing profiles.

LUA Plug-ins: Documentation and Examples

FSUIPC Lua Plug-Ins.pdf	Introducing the powerful Lua plug-in facilities
FSUIPC Lua Library.pdf	Documentation for the additional FSUIPC Lua libraries
Example Lua Plugins.zip	A zip file containing some short Lua examples
Lua license.pdf	A copy of the Lua licensing agreement
Lua Plugins for VRInsight Devices.pdf	Special support for VRInsight devices
LuaFileSystem.pdf	Description of the Lua file system provisions

Information about data provided through FSUIPC4 offsets

List of FSX and P3D Controls.pdf	FSX/P3D controls list (Acrobat format) (But see ***Note*** below)
FSUIPC4 Offsets Status.pdf	Includes offset lists, for use in Offset controls and plug-ins (except where mentioned, FSUIPC5 offsets are the same as those for FSUIPC4)
Offset Mapping for PMDG 737NGX.pdf	List of offsets to access 737NGX data
Offset Mapping for PMDG 777QOTSII.pdf	List of offsets to access 747QOTSII data
Offset Mapping for PMDG 777X.pdf	List of offsets to access 777X data

***Note**: When run, FSUIPC5 will generate an up-to-date list of controls specific to the version of P3D you are using. This is a plain text file, not a PDF, but it will be your definitive list, rather than the general one installed as a PDF.*

For other bits and pieces, like TrafficLook and WeatherSet, please visit my Support Forum. You will also usually find interim versions and bug fixes there—well worth a regular scan. The link is shown above, in the subtitles.

If you want more application programming details you need to get the FSUIPC4 Developer Kit, (SDK), which applies equally to FSUIPC5. Currently this is composed of the FSUIPC SDK from http://www.schiratti.com/dowson plus supplementary documents and updates from the SDK link in the "**Updates ...**" Announcement on the Support Forum.

The following pages provide full instructions on Installing and/or Registering FSUIPC5, and Registering WideFS7

Installation

Before trying to install FSUIPC5 you must have actually run P3Dv4 at least once. If you have not yet run it, do so first. This is necessary because certain essential files are not created until you have done so.

For the installation, you probably need elevated administrator privileges. This didn't use to be the case—all installers got such privileges automatically—but Microsoft tightened up security significantly and now it seems only their own style of Installer (msi files) are automatically treated correctly.

Place the “Install FSUIPC5.exe” program onto your desktop, or into a temporary folder, and right click on it, selecting "**run as ... Administrator**". This method allows it to run with sufficient privilege..

This will do several things, in order:

1. Checks that you have sufficient Administrative privileges to perform the installation successfully. If not it will prompt you to re-run "as administrator", or even re-log onto Windows as the administrator too.
2. Finds your P3Dv4 installation: It will do this by checking the Registry. If, for some reason, the Registry is not pointing correctly to your P3Dv4 installation the installer will present you with options. These are:

   ByPass: simply ignore the fact that the Registry gave this information,

   Fix: remove the invalid registry entries so that it doesn’t happen again, or

   Find: asks you to find the program in an Explorer Window. There’s an option then given to change the path given by the Registry, to mach. This choice can be aborted by pressing “Cancel” in the Explorer window, which makes it like “ByPass”.
3. Checks the version of Prepar3D.EXE: FSUIPC5 will not install if the version does not match the version (or one of the versions) for which this release was built.
4. Checks for existing FSUIPC5: If there is already a Modules folder in the installation, and that folder contains a version of FSUIPC5 later than the one being installed, the latter will not install. Otherwise the modules folder is created if necessary and FSUIPC5.DLL is copied into it.
5. Enables special permissions for the Modules folder, so that on Windows the INI, LOG and KEY files can be created and updated whilst P3Dv4 is running.
6. Finds the path to your Prepar3D.CFG file—or all of those that may be used if more than one. These are in folders related to the users of P3Dv4. If a suitable path is not found, installation cannot be automatically completed. A vital file is needed there—DLL.XML. Without this, P3D’s SimConnect system will not load FSUIPC5.
7. Other files (documents, in fact) in the package are then copied into the Modules folder alongside FSUIPC5. These are for your reference.
8. Whilst it does this it will display what it is doing on screen, in a readable text “Log”.
9. When it has finished, if all is well, you will get a confirmatory prompt.

If anything goes wrong there will be information about this in the Log, and you will get a different prompt, telling you of the problem. If this happens, *before* clicking “Ok”, scroll through the Log (there’s a scroll bar on the right if the log is longer than the Window) to look for lines mentioning problems or errors or warnings. If you want help, click on the “Save As” entry in the Menu and save the log with a name such as “FSUIPC5 install.log”. This will contain everything needed to help you. Just show its contents in a message to me in my Support Forum.

Finally, the Installer offers you the chance to Register FSUIPC5 and/or WideFS7, or simply check your registration.

You do NOT have to Register at this time. In this case simply click the 'Not now' button to continue.

Otherwise, first select whether it is FSUIPC5, WideFS7 or both you are registering (or checking).

The options offered are:

- Delete the previous registrations (this also lets you enter new ones). This is useful when you are changing one of the Keys in order to get your Name and Address/Email the same for both FSUIPC5 and WideFS7.
- Check the existing registrations. This will also effectively re-register you automatically if you have re-installed Windows or moved to a new PC, and have copied your previous FSUIPC5.KEY file into the P3Dv4 Modules folder already. It saves you having to re-enter the Key(s).
- Enter new registrations for FSUIPC5 and/or WideFS.

When you press 'Go ahead' you will be presented with the standard FSUIPC registration dialogue where you can enter your details and the Key. If you selected “Both” FSUIPC5 and WideFS7, you will get first one, then the other, though you will not have to enter your name and address/email twice, those will be remembered. For more about Registration see below.

Entering Registration Details

If you pay for a registration key for FSUIPC5 then you get access to all the facilities it provides. The 12-character key you will purchase is inextricably related to the name and address (normally your email address) you used when applying for the Key. It is this information you need to enter. When you’ve checked the option to register FSUIPC5 in the Installer, you will be presented with a dialogue similar to the one shown on the right. Enter the details *exactly*: all three parts, the Name, Email/Address and Key need to be correct in every respect. Use cut-and-paste from the original to ensure this.

Note that it does *not* matter if your email address is changed later. It is not used as an email address, on as a means of identifying you as the license holder. If necessary you can actually register WideFS7 with a different email or other address and a different name.

All these details are remembered by FSUIPC5 in a file called “FSUIPC5.KEY”, which is saved alongside FSUIPC5 in the Modules folder. **Save a copy of your FSUIPC5.KEY file** (from the Modules folder). If you change computers, or reinstall Windows, you will need to re-register, and this is made much easier if you still have that KEY file. Note that the file is actually an ordinary text file which you can read in any text editor. Keys can exceptionally be provided which expire on a certain date, or they can last forever. Normally, for full payment, an everlasting key will be provided.

WIDEFS7: WideServer registration, and WideClient

Note that WideFS7 Registrations originally purchased for use with FSUIPC4 and FSX or P3D versions 1-3 are valid for the WideFS implementation for FSUIPC5. You do not need to buy it again! ***BUT this is dependent on you using the same user name for both FSUIPC and WideFS!***

WideFS7 registration follows an identical procedure and can be done at the same time. The Name *and* Address fields can each be the same or different to those used for FSUIPC5 registration.

If you registered WideFS7 then in P3D its operation can be disabled and enabled using a button on the right-hand side of the first FSUIPC5 options page. You will find the parameters for WideServer in the [WideServer] section of the FSUIPC5.INI file. You will not normally need to change anything there, though you may want to experiment with different protocols (ProtocolPreferred parameter). To do this you can disable WideFS7 on the options screen, edit the INI file, then re-enable WideFS7 again.

Except for the fact that the WideServer.DLL doesn’t exist separately, and the parameters are in the FSUIPC5.INI file, the documentation for WideFS7 version 7.xx is the same as for WideFS 6.xx, as included in the main WideFS.ZIP file which you can download from the usual places. Please note that any version of WideClient from 6.50 onwards is compatible with WideFS7’s Server—there is no specific “version 7 WideClient”—but you are advised to use the latest available (6.999z4 at the time of writing, available from the Support Forum if not from the Schiratti web site).

INVALID KEY PROBLEMS

Please note that registration keys are only valid from the date of purchase. If you find your registration not working or the keys rejected, please **check that your PC has the correct date set**. It often happens that when folks install a new PC or motherboard, or even re-install Windows, the system date is left, forgotten and not corrected.

Additionally, please note that most newly purchased Keys will not work correctly with old versions of FSUIPC. You need to keep your FSUIPC up to date!

ADDENDUM: IDENTIFYING FILES IN WINDOWS EXPLORER

Recent versions of Windows Explorer have the nasty habit of hiding important parts of filenames from you. This is supposed to make things easier, but often it does the reverse. "Log" files are shown without the '.log' part and are just labelled "text files". Similarly, "INI" and "CFG" files are shown with that important part omitted and just labelled "configuration settings" (if you are lucky). Even the programs themselves aren't correctly shown with the .EXE or .DLL part.

You will need to fix this at some point. In Windows Explorer, go to Tools, Folder Options, View tab, and scroll down the list. Uncheck "Hide extensions for known file types". Then, when you need to look at a log or find your settings you'll be able to identify it correctly.