FSUIPC 4.929 changes since 4.92

NOTE that this version works with Prepar3D versions 1.4, 2.0 and 2.1, but no other P3D versions.

New Facilities

1. The repeat rate of controls assigned to axes in the "range assignment" options (the right-hand side of the axis assignments tab) can now be changed. the parameter goes into the relevant [Axes] section of the FSUIPC4.INI file, and is:

   RangeRepeatRate=10

   with the default being 10 per second as shown. The range is 1 to 100, but be aware that this is approximate, depending on other loads on FS, and will varie as much as 30% either way.

2. Changes have been made to the Installer and the DLL itself ready for testing on the upcoming Prepar3D version 2. At present these may be unreliable and for testing only by the closed Beta participants.

3. The Installer now copes with systems in which ESP or Prepar3D is installed but where either FSX has been incompletely removed (leaving Registry entries pointing to where it was), or a faked FSX has been created in order to fool FSX-only installers.

   Note that does not mean it will cope with a Prepar3D.EXE renamed as FSX.EXE in the proper P3D folder. If you need an FSX.EXE there too, just have both EXE's present.

4. The facility to ensure selections 1-4 are properly associated with their main event, such as Pushback, Engine, and so on, is changed to allow three different modes, controlled only by the INI file parameter TimeForSelect.

   TimeForSelect=4 is as it was before, allow up to 4 seconds to connect Select 1-4 to all types of controls which can accept them, *including* radio related controls. The number of seconds can per chosen to suit the user, and modified in the Miscellaneous tab in FSUIPC options.

   TimeForSelect=0 completely disables the entire facility including the interception of the controls, so that there is no chance of FSUIPC interfering with their sequence relative to any other events. With this option selected the facility to adjust it in the FSUIPC Options is disabled.

   TimeForSelect=-4 allows the 4 seconds to connect Select 1-4 to all types of controls which can accept them, *excepting* radio related controls. The number of seconds can per chosen to suit the user, and modified in the Miscellaneous tab in FSUIPC options.

   Note that you cannot switch between these three options in the FSUIPC options dialogue. You can only change the time when one of the enabling settings have been made in the INI file.

5. If you've ever suffered the problem of FSX, running in full screen mode, suddenly minimising itself because some other program running in the background has taken the focus for itself, and you've had problems identifying exactly what it was, then FSUIPC now offers a way: add

   Debug=Please
   LogExtras=x40

   to the [General] section of the INI file before running FSx, and FSUIC will log details of the process which is gaining the Focus and/or being Activated and so causing FS to lose its focus.

   Note that when the focus is taken by a system process or service, it won't be identifiable.

6. Prepar3D version 2.0 (build 9448) is now supported.

   Note that the FSUIPC menu facility to Load Flights is intended to be able to load either .FLT format flights (eg from P3D version 1 or FSX) or the new .FXML format flights, saved by P3D version 2. However, there currently appears to be a bug in SimConnect which allows FLT files to be correctly loaded but not FXML files. See also item 7.

7. An extra parameter can be added to the [General] section of the FSUIPC4.INI file to instruct FSUIPC4 to operate work-arounds to some current P3D errors or omissions. This parameter is:

   P3Dv2Fiddles=Yes

   At the time of introduction (version 4.924) this does the following:

   * Offsets controlling the Master Battery use the control instead of the non-working SimConnect variable
   * The Load Flight facility in FSUIPC operates only with .FLT files because SimConnect won't load .FXML files
   * AutoSave saves both .FLT and .FXML format files, so that the Load Flight facility in FSUIPC can be used with such saved files.

8. The TextMenu option, to show SimConnect messages and menus on a WideFS client PC, is now available on FSX (Acc or SP2) and P3Dv2. This needs a registered install of FSUIPC4 (4.928 or later), and a WideClient with a suitable Lua plug-in: the TextMenu.lua one provided in the Lua plug-ins package is usable for this. The key part of this is the event.TextMenu function.

   If you do not want to use this facility at all you do nothing. FSUIPC4 won't even hook into SimConnect texts *by default*. To enable the option you must set

   NewIntercepttextMenu=Yes

   Messages sent to a client can be removed from the FS screen. Menus are not removed unless the parameter is changed from Yes to Full. Even then, the menu in FSX cannot be completely removed. It is shrunk and moved top left, hopefully interfering less with your view. In P3Dv2 it is removed altogether.

   Note that this option was previously enabled by default (disabled by InterceptTextMenu=No), but it seems it was problematic with some interaction with other add-ons causing a crash in FSUIPC (see bugs fixed).

A new FSUIPC-added control, RemoteTextMenuToggle, is provided which allows the text and/or menu display to be swapped with the FSUIPC-diverted text display (such as that from Radar Contact) without losing either, whilst those displays are still relevant.

9. FSUIPC4 now cooperates with "Active Sky Next" (ASN). Two specific changes apply: first the hooks normally applied into the FSX/P3D weather system for FSUIPC's smoothing actions are not performed when ASN is active, as it uses those hooks itself. Second, by adding a parameter to the [General] section of the FSUIPC4.INI file, thus:

   ASNplanWX=<full path to ASN's active plan weather file>

   you can use the TextMenu.lua plug-in on a WideFS client PC (see previous item) to display weather data for your route—including departure and arrival METARs, and wind and temperature data from TOC to TOD and beyond.

   You should be able to find the plan weather file, once ASN has been run with a plan inserted or automatically loaded from FS, by looking in the

   AppData\Roaming\HiFi\ASNFSX (or ASNP3D)\Weather

   folder. The file is called activeflightplanwx.txt.

   When FSUIPC4 is set with this facility you can toggle the derived display, shown by the TextMenu.lua plugin (or similar) by using a key or buttons assigned to the control ASNweatherBroadcast. If there are more lines than can be shown at one time then simply keep pressing the same control to page forward through them. After the last line another press will restore the previous display -- if it is still relevant. [See also the RemoteTextMenuToggle control described above]

   The number of lines shown at one time can be set by the [General] INI parameter:

   ASNplanLines=n

   where n is a value between 10 and 20 inclusive. The default is 13, matching the FSX SimConnect menus.

   Note that if the ASNweatherBroadcast control does *not* appear in your drop-down assignments list it is because the parameter is not set correctly, or FSUIPC4 doesn't think ASN is running.

10. With release 4.924 or later an updated version of the List of FSX controls document is installed. Now called List of FSX and P3D controls.pdf, it contains some previously omitted controls added by FSX Acceleration, and a lot of new controls included in P3D version 2.

11. Two additional assignable FSUIPC controls are added to allow folks to free up the use of the middle mouse button without having to go into the FSUIPC options:

    Mousemove option toggle (1145)
    Mouselook option toggle (1146)

    These turn the denoted option off or on, effectively exactly the same as going into the Miscellaneous option tab and unchecking or checking the option there.

12. An option is added, enabled by setting

    DelayedMouseLookZoom=Yes

    In the [General] section of the INI file. With this set, when in Mouselook mode the zoom action on the mouse wheel is activated only when the movement has been sustained for a little while (2/3rds second or so). This is to prevent unintentional zoom changes when initially pressing the button to look around.

Bugs fixed

1. A problem which seems to occur only in Windows 8.1, apparently due to rogue data coming to FSUIPC4 from SimConnect, is fixed -- basically by simply discarding it.
2. The Installer now automatically removes any compatibility layer entries in the Registry which mention FSUIPC. Specifically this is any data entry within this key which even mentions "FSUIPC":

   HKEY_CURRENT_USER\Software\Microsoft\Windows NT\CurrentVersion\AppCompatFlags\Layers

   It seems that entries here with FSUIPC4 labelled "IgnoreFreeLibrary" can cause FSX or Prepar3D to crash on start up, with crash data pointing to the entry point of FSUIPC4.
3. The scanned joystick button states recorded in offsets 03C0 to 03FF were being set incorrectly, the joystick numbers being mixed up and results placed in the wrong offsets. This bug applies to FSUIPC3 and FSUIPC4, and is now fixed. Evidently few people ever used the facility.
4. Numpad 'Enter' can now be correctly used as an FSUIPC4 assigned key. Previously it could be assigned, but the assignment then never worked -- it was treated like the main keyboard Return key instead.
5. The size and position of the FSUIPC Console Log window is now not saved when FS is closed with that window minimised. This means next time FS is started it will appear at its previously saved position.
6. An error in the Installer which caused the Install log and the registration Key file to be omitted in a P3D version 2 installation if the only installations it had to cater for were P3D v1.4 and v2, is fixed. (The work-around before was for the user to manually copy over those files).
7. A problem where the hooks used by FSUIPC4 to provide direct wind control were taken over by ASN's installed FSX module, and thus stopping others making use of these even when ASN was not actually running, is fixed by enabling the full use of those hooks despite the module being loaded, yet allowing ASN to take over when it is actually running.

   The actions of ASN taking over wind control and relinquishing it are logged in the FSUIPC4 log.

   For this to work, FSUIPC needs to detect the running of ASN. This needs an update of ASN from HiFi with a modified FSX module which gives an efficient and foolproof indication. Meanwhile, the only way to let FSUIPC direct wind controls operate is by disabling the loading of the AS CONNECT module(s) in the FSX DLL.XML file.

8. A very long-standing bug is fixed which can, in very unusual circumstances, crash FS during initialisation whilst FSUIPC is processing the INI file.
9. The Text Menu interception, for sending SimConnect texts and menus to WideClient for display on other PCs, had a compatibility problem with some other add-ons and this caused FSUIPC to crash on some systems. This has been fixed in 4.928, but, just in case there are other such problems, the interception is now defaulted off ("No") rather than on ("Yes") -- see details added in the New Facilities section above.
10. Version 4.928 fixes a bug introduced recently by the TimeForSelect=0 option (see above). This not only did what it is described as doing, but also stopped FSUIPC sending the relevant controls of its own volition (such as when using offset 3367 to control aircraft exits).
11. The hooks placed into FS in order to operate the weather smoothing are now undone before FSUIPC is fully closed down in case something keeps the weather system active a little after SimConnect tells FSUIPC to close. This may avoid some of the infrequent crashes on close down which have very occasionally been reported.