

# OpusFSI

---

## Flight Simulator Interface for Prepar3D Getting Started - Single PC



January 11, 2022

## Contents

System Requirements .....	2
Windows problem running msi files fix ... ..	2
Software Installation .....	3
Installing the Demo version of OpusFSI .....	3
Purchasing OpusFSI .....	3
Upgrading OpusFSI .....	4
Setting up the OpusPDK Interface .....	5
Create Desktop Shortcuts.....	5
Automatically Selecting an Optional User Configuration File .....	6
Sharing and Security .....	6
Installation Log File.....	8
Error Messages.....	9
Initial Set Up and Configuration .....	10
Weather .....	12
Cameras.....	12
Spy.....	13
General Operation.....	14
Starting the OpusFSI Software Automatically with P3D .....	14
Turn off User Account Control (UAC) .....	16
Operating System Recommendations .....	16
PC Performance.....	16
Prepar3D Recommendations .....	17
Recommended Settings and Practice for Dynamic Live Weather .....	19
SimObject Path Additions.....	21
Ensuring AI Traffic uses the Correct Runway .....	21
FSUIPC Settings .....	21
TrackIR Settings .....	22
Using FS2Crew with OpusFSI .....	25
Uninstalling OpusFSI.....	26
FAQ and Troubleshooting.....	26

## System Requirements

- Lockheed Martin Prepar3D simulator.
- Windows 11/10/8/7 (64-bit version) operating systems.
- .NET Framework v4.7.2.
- FSUIPC (see note below).
- 90 MB hard disk space.

You need P3D, Microsoft .NET v4.7.2 and SimConnect to be installed on your server (and optional client) systems for OpusFSI to work.

### Microsoft.NET

You can check what versions of .NET you have installed in Control Panel by selecting Settings, System, Apps and features, then search for .NET and a list of installed versions will be displayed. For older operating systems check your c:\Windows\Microsoft.NET\Framework or Framework64 folders. You should see a v4.0.xxxxx folder etc..

### FSUIPC

FSUIPC is required on the SERVER system. FSUIPC is required on Live View clients that are used to display camera views.

You can download a free copy from <http://www.fsuipc.com>

### SimConnect

In the case of SimConnect, first make sure you have installed P3D, SimConnect is installed automatically with it.

If you have mislaid or corrupted your SimConnect then you can try re-installing it.

## Windows problem running msi files fix ...

To run a msi that doesn't have a valid Digital signature follow one of the methods mentioned below.

Method 1:

1. Right click on the file or program that you are not able to access.
2. Go to properties and click "Unblock".
3. Try to run the application again.

Method 2:

1. Click on start button.
2. Type "Internet Explorer" in the "Start Search Box" and select it from the menu.
3. Click on "Tools" in the menu bar and select "Internet Options".
4. Click on "Advanced tab" and locate "Allow software to run or install even if the signature is invalid" under the "Security" category and check the box.

5. Click Apply and then Ok.
6. Close the Internet Explorer and restart Internet Explorer.

#### Method 3:

1. Turn UAC OFF. Just type UAC into the start menu or Control Panel search box. Drag the slider to the bottom, never notify.
2. Run the Command Prompt in Admin Mode (not the same as you being an Admin user).
3. Type: bcdedit /set testsigning off
4. Reboot. Windows will power up in a test mode and will allow you to run any msi file.
5. Install the msi file. After installing the software ...
6. Run the Command Prompt in Admin Mode (not the same as you being an Admin user).
7. Type: bcdedit /set testsigning on
8. Reboot

After rebooting you should still be able to run msi files but may need to answer 'More Info' and 'Yes' to a Windows 10 user query.

### Software Installation

Ensure Microsoft .NET v4.7.2, SimConnect and FSUIPC are installed on your PC.

#### Installing the Demo version of OpusFSI

1. Click on the **OpusFSI\_v6 Demo or Upgrade** button on our downloads webpage and download (save) the **OpusFSI\_v6.msi** file.
2. Double click on the downloaded OpusFSI\_v6.msi file and follow the instructions to install the software into the standard **OpusFSI\_v6** directory. You may install the software onto any drive provided its folder name is OpusFSI\_v6 with the exception that you must not install OpusFSI in the **Opus Software**, **Prepar3D** or **Program Files** folders, and don't install in more than one folder on your PC.

Note that in Demo mode the Live Weather Engine is restricted to 160km (100 miles) in all directions and weather updating only whilst your aircraft is on the ground. Also World Weather Themes are not accessible in demo mode. Demonstration mode will run for 15 minutes with a minimum 2 minute interval required between runs.

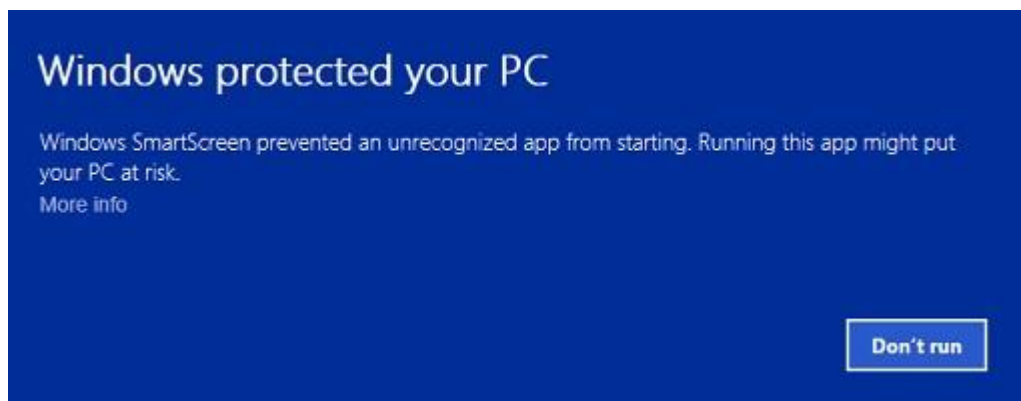
#### Purchasing OpusFSI

1. Click on the **Purchase OpusFSI\_v6** button on our downloads webpage and download (save) the **OpusFSI\_v6\_Flight1\_Purchase.exe** file onto your main 'flying' server (sim) system.

If you get a warning the signature is invalid then right click on the msi and select **Run Anyway**.

You may get some warning messages from your virus checker at this point which is quite normal for this file type and as a result the installation window may be hidden behind your browser window. You may need to stop your virus checker if it automatically deletes the msi or the exe files.

If you see the following screen then click on the **More info** button to run the software. Next select **Run Anyway**.



Using Windows Explorer navigate to the location of the downloaded file and run the software. If you have a problem running the software then right click on the file and click "Unblock".

2. If you have previously installed the Demo then uninstall it via Control Panel, Uninstall a program. Do not delete your OpusFSI\_v6 folder containing your camera and system configuration files.

3. Run the **OpusFSI\_v6\_Flight1\_Purchase.exe** file. A Flight1 form with 3 buttons will be displayed. If you already have a Flight1 account click button 1 to log in (this is optional and if you get any Flight1 login error messages don't use it). Click on buttons 2 and 3 to fill in your purchase details and then the Purchase button will appear, click on this button to complete purchase.

4. You will now find the OpusFSI\_v6.msi installation file in your 'unwrapped' C:\Opus Software folder. N.B. You need to keep your Flight1 key and licence files on drive C in the **C:\Opus Software** folder but can move the msi file to another drive.

Double click on the OpusFSI\_v6.msi file and follow the instructions to install the software into the **OpusFSI\_v6** directory. You may install the software onto any drive provided its folder name is OpusFSI\_v6 with the exception that you must not install OpusFSI in the **Opus Software** or **Program Files** folders, and don't install in more than one folder on your PC.

### Upgrading OpusFSI

There is an '**OpusFSI Check For Updates**' Add-ons Menu option. This option checks for any release or beta updates and provides options to download the latest update(s) into your standard C:\Opus Software folder. Alternatively if you wish to download the software manually then you can do so from our website downloads page.

### Release Upgrade

If you have previously purchased OpusFSI\_v6 and want to upgrade to the latest Release version then click on the OpusFSI v6 Demo/Upgrade link in the **Download Demo or Upgrade** column of our **Downloads** webpage and download the msi file. If you have a problem running the msi then right click on the file and select "Unblock".

Do not delete your **OpusFSI\_v6** folder. Double click on the Opus msi file and follow the instructions to install the software upgrade. All your original configuration (DAT and CMD) and camera definition (CAM, LIM and CDF) files will remain intact in the **OpusFSI\_v6** folder but it is a good idea to take a backup of your camera files anyway in case they get corrupted (this may happen when you revert to a previous version with a different CAM format).

### OpusFSI Beta Upgrade

Click on the **OpusFSI Beta** hyperlink in the **Beta Development** column and download the **OpusFSI\_v6 Beta msi** file.

Install as per the Release upgrade above.

### Setting up the OpusPDK Interface

The OpusPDK Interface is prepared by running the supplied PDKSETUP.EXE program in Run as Administrator mode. This setup program will create or modify the simulator's DLL.XML file, including all necessary launch statements ready for when you next run the simulator.

1. Open Windows Explorer.
2. Navigate to your OpusFSI\_v6 installation folder.
3. Right click on the PDKSETUP.EXE entry and select 'Run as Administrator'.

### Create Desktop Shortcuts

After installing the software we recommend you create a shortcut on your desktop for the server program. This shortcut will allow you to manually start your P3D system without too much fuss.

1. In Windows Explorer, navigate to your installation folder (OpusFSI\_v6) and right-click on the P3DSERVER.EXE program.
2. Select the **Send to - Desktop (create shortcut)** option.
3. Right-click on the new desktop icon, select Properties, in the Shortcut tab check the program is configured to **Start In:** your installation folder (OpusFSI\_v6). Select the compatibility tab (if available) and tick the checkbox to **Run this program as an Administrator**. Click **OK**.
4. Left click on the icon once to select it and then left click again to select the icon name, type in **OpusFSI\_v6 SERVER** to rename the icon.

You will find alternative program icons in the OpusFSI\_v6 installation folder should you wish to change the existing icon.

## Automatically Selecting an Optional User Configuration File

The P3DSERVER.EXE and P3DCLIENT.EXE start up programs accept an optional User CFG Filename as a program argument. When specified the User CFG File will replace the current FSISERVER.CFG or FSICLIENT.CFG file. This option allows you to create various OpusFSI server and client configurations. The configurations can be specific to different flight modes (e.g. the preferred weather options for VFR flying etc.).

To create a new configuration simply edit the options in OpusFSI, quit OpusFSI, then copy/rename the current CFG file as appropriate, finally append the name of your CFG file to the start up program. You can create various Desktop Shortcuts which utilise your various User CFG Filenames.

## Sharing and Security

### Firewall

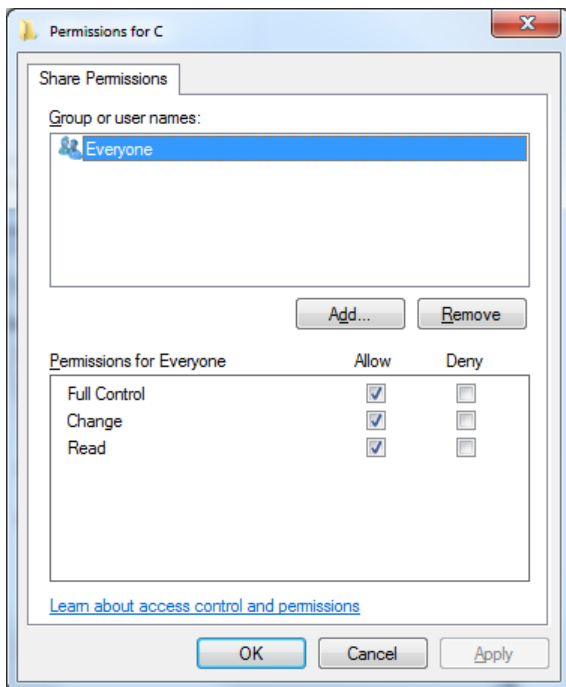
You may need to allow OpusFSI through your firewall. In **Control Panel** select **System and Security**, **Windows Firewall**, **Allow a Program or feature through Windows Firewall**. Click on **Allow another program** and browse to P3DSERVER (or P3DCLIENT on a client PC) in the OpusFSI\_v6 installation folder.

### Sharing

You may need to set sharing **and** security permissions on both your OpusFSI\_v6 and your Prepar3D folder in order for OpusFSI to write the necessary weather files into the Prepar3D\Weather\themes folder. This is usually necessary if you have installed the simulator in the Program Files folder, for this reason it is advisable to install the sim in a folder outside Program Files. If this does not work then set sharing and security permissions on your whole drive. Be aware that if you set permissions and sharing on the whole drive then you may have different permissions and sharing on subfolders so make sure you check the OpusFSI\_v6 and Prepar3D\Weather\themes folders. Also ensure the folders are not set to 'read only'.

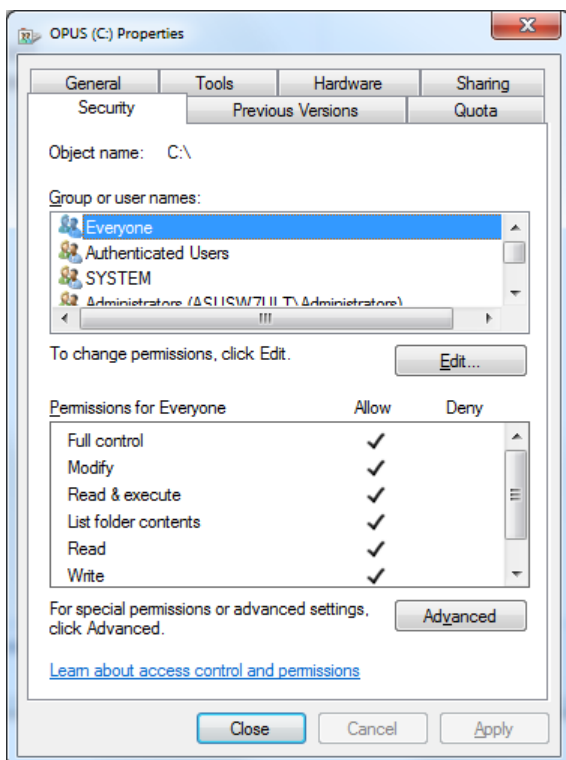
Absolute worst case, just install Prepar3D in its own folder (e.g. d:\Prepar3D), moving outside the secured Program Files folder. If OpusFSI still doesn't work correctly after setting sharing and security permissions a re-install may be necessary.

To set up *Sharing* on a folder/drive run Windows Explorer, right click on the folder/drive you wish to share, select **Properties**, select the **Sharing** tab, select **Advanced Sharing**, tick the checkbox to share the drive and enter a share name, make sure you use the single letter code, e.g. C, not 'Drive C' for instance. Click on **Permissions**, enter **Everyone** in the **Group or user names** box and tick the checkboxes to allow **Full Control** for **Everyone**.



## Security

To set up *Security Permissions* run Windows Explorer, right click on the folder/drive you wish to set Security settings for, select **Properties**, select the **Security** tab, select **Everyone** in the **Group or user names** box and ensure the Permissions are **Full Control**, if not click on the **Edit** button and tick the Permissions checkboxes to allow **Full Control** for **Everyone**. If **Everyone** does not exist click **Advanced**, click **Change Permissions**, click **Add**, type in the name **Everyone** and click **OK**. Then specify Full Control for your newly created Everyone group. Click **OK**.





Also select **Authenticated Users** in the **Group or user names** box and tick the checkboxes to allow **Full Control**.

## Installation Log File

The SERVER program will create a **FSISERVER.log** file in the OpusFSI\_v6 installation folder which will be automatically displayed if any installation errors are detected.

The log file is used to log the installation details along with any installation errors that are detected when the program is activated. Refer to this file and send it to Opus Software if there are any problems encountered when running the software.

Example content of the \OpusFSI\_v6\FSISERVER.log file ...

```
OpusFSI Flight Simulator Interface

Log Generated 23 April 2020, 16:33 Hrs

Installed Folder: C:\OPUSFSI_V6

FSICONFIG Sim Folder: E:\Prepar3D v5
FSICONFIG Sim Folder: OK
FSITHEMES Initialise: C:\OPUSFSI_V6\Weather\OpusWeather.WTB
FSIGENCOM Initialise: OK
FSIGENCOM Validation: OK

Data Download ...
Data Download Initiated
Data Download Completed
Data Download Checked
Data Download Validated

Invoking DLL Checks ...

No DLL Errors Detected.

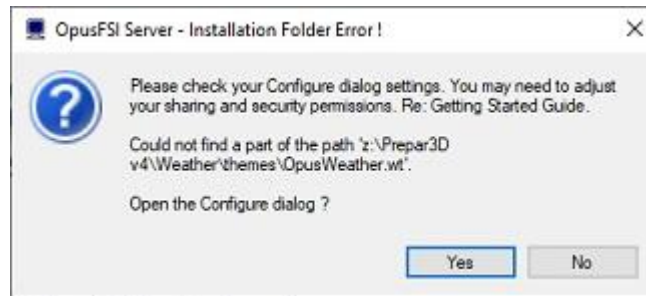
Licence Files:

OpusFSI v6 Licence : 11 December 2019

Installed Files:

P3DSERVER.EXE Version: 6.0.8.04 , 23 April 2020, 14:48 Hrs
FSDECODER.EXE Version: 6.0.8.04 , 23 April 2020, 14:48 Hrs
FSISYSTEM.DLL Version: 6.0.8.04 , 23 April 2020, 14:48 Hrs
OPUSFSI.DLL Version: 6.0.8.04 , 23 April 2020, 14:48 Hrs
OPUS64.DLL Version: Correct , 06 March 2018, 07:35 Hrs
```

## Error Messages



OpusFSI tries to copy the OpusWeather.WT weather file into the or Prepar3D\Weather\themes folder and will display this error message if it cannot do this.

If you see the above error message then it is essential that you check your installation folder is specified correctly in the Configuration dialog. Try reconfiguring the sim location again. If the dialog to enter the sim location does not appear then check it is not hidden behind another window and also ensure OpusFSI is set to **Run as Administrator**.

Also check your sharing and permissions, it is important to set permissions as well as sharing as described in the section above.

### System.TypeInitializationException error

You need .NET version 4.7.2 and SimConnect to be installed for OpusFSI and its SimConnect links to work.

You can check what versions of .NET you have installed in Control Panel by selecting Settings, System, Apps and features, then search for .NET and a list of installed versions will be displayed. For older operating systems you can check what versions of .NET you have installed by checking your c:\Windows\Microsoft.NET\Framework or Framework64 folders. You should see a v4.0.xxxx folder.

In the case of SimConnect, first make sure you have installed P3D, SimConnect is installed automatically with it. If you have mislaid or corrupted your SimConnect then you can try re-installing it for P3D.

### SlimDX error

You must ensure the P3DSERVER program ...

- Is starting in the correct c:\OpusFSI\_v6 folder.
- Has permissions to copy and rename the SlimDX DLL file.
- Is able to copy the current SlimDX DLL, it's not locked or write protected.
- Is not blocked by AV or Win Defender software.

Otherwise its attempt to copy and rename the SlimDX file will fail. You may also need to install the SlimDX dotNet 4 runtime using our supplied msi file in the OpusFSI\_v6 folder.

## OpusFSI won't run

If Opus won't run or immediately aborts then make sure it is installed in the OpusFSI\_v6 folder in the root directory and not a sub-folder of the drive. Otherwise reboot your PC, this problem may be due to a windows update which needs a reboot of your PC.

If you have set up the security and sharing permissions as described in the above section, have run as Administrator, and the software still won't run on Windows10 then run both the Microsoft **vcredist\_x86.exe** and **vcredist\_x64.exe** VC redistribution packages located in the OpusFSI\_v6 folder. For new Windows10 builds you may need to download and install the older 2013 C++ Redistribution packs (vcredist\_x64.exe and vcredist\_x86.exe) from the 'Other Downloads' section of our Downloads webpage <http://www.opussoftware.co.uk/opusfsi/downloads.htm>.

## Initial Set Up and Configuration

Run the P3DSERVER program on your Prepar3D system.

The SERVER program **MUST** be started in its local installation folder, in other words it MUST be started in **OpusFSI\_v6**.

**N.B. Do not run the P3DCLIENT program on your server PC since it will cause the sim to freeze, it is only used on networked client PCs.**

You do not need to run the flight simulator at this time since we are just going to configure the system.

Click on the **Configure** button to display the **OpusFSI Server - Configuration** dialog.



Figure 1 - FSI Server's Main Form

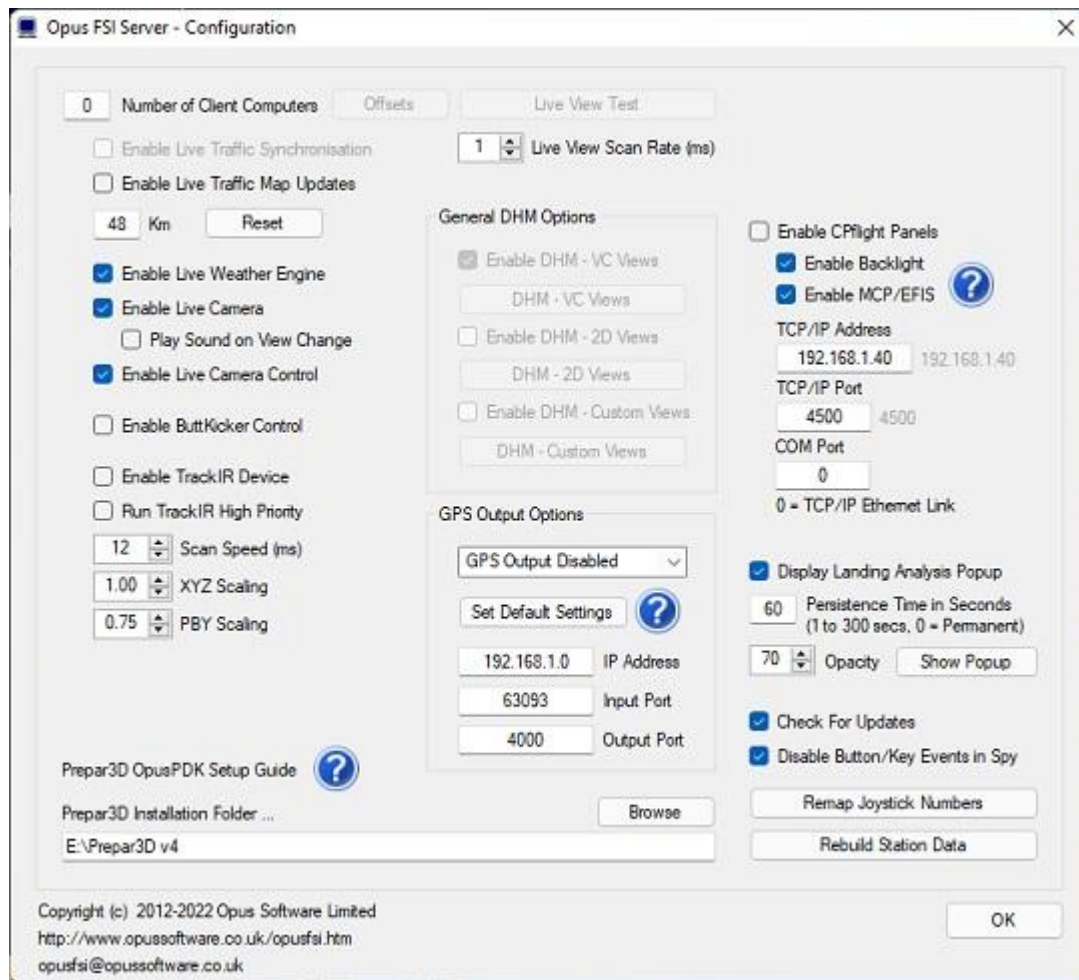


Figure 2 - FSI P3D Server Configuration Dialogs

The number of (**Live View**) client computers should be configured to zero.

**Live Traffic** displays local traffic on the LWA Map and may be configured within 32km (20 miles) to 192km (120 miles) of your aircraft.

Enable **Live Weather Engine** if required.

Enable **Live Camera** unless you want to control the views manually using **Live Camera Control** and use **General DHM Options**.

If you enable TrackIR please refer to the TrackIR section of this document for important initial set up and configuration details.

The **Live View Scan Rate** (0 to 60ms) adjustment is for networked systems and controls the position update rate communicated to the server enabling you to match the preferred rate found using the **Live View Test**.

Click on the **Browse** button and locate your simulator installation folder. N.B. Both the P3DSERVER and P3DCLIENT programs can detect which version of Prepar3D is active and set their version accordingly. Hence, if you run the Prepar3D simulator first there's no need to configure the correct

sim folder. These 'active Prepar3D sim' checks take precedence over any supplied sim folder configuration.

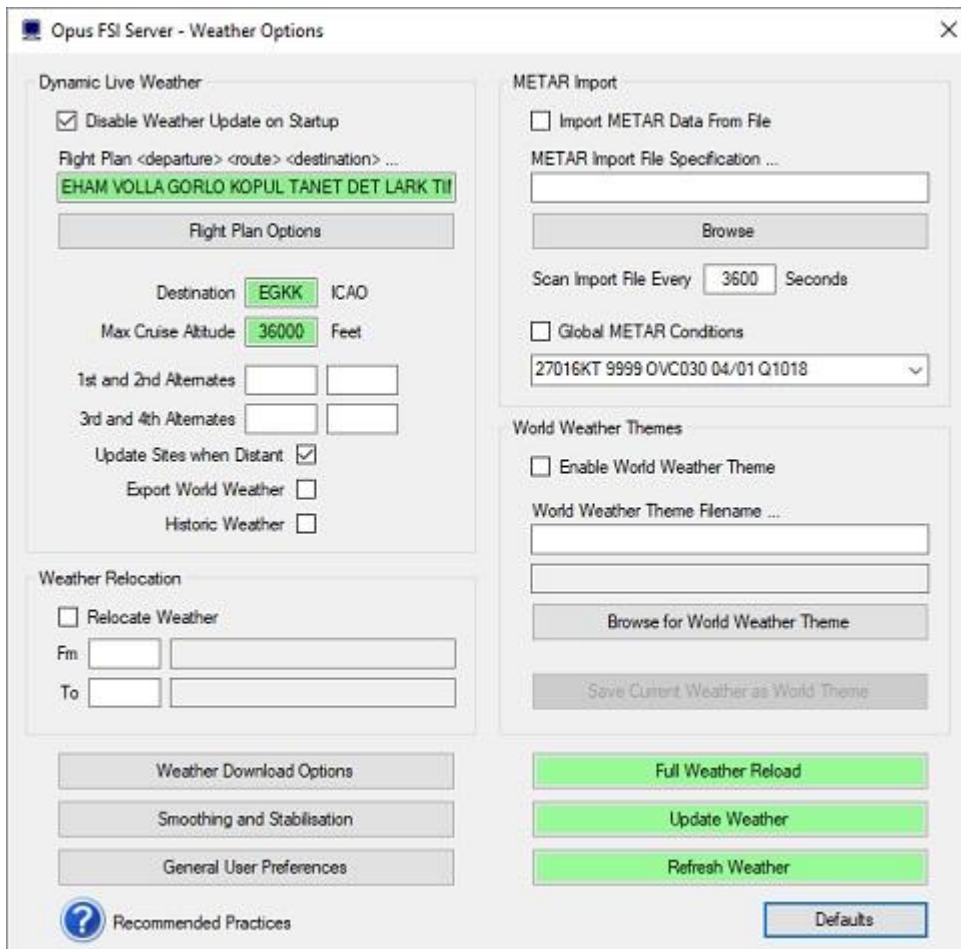
Close OpusFSI.

Run P3D.

Run OpusFSI.

## Weather

Click the **Weather** button on the server's form and set your **Destination** and **Max Cruise Altitude** if known, no need to set anything else unless you wish to tweak the settings.



The image shows the 'Opus FSI Server - Weather Options' dialog box. It is divided into several sections:

- Dynamic Live Weather:** Includes a checkbox for 'Disable Weather Update on Startup' (checked). Below it is a text field for 'Flight Plan <departure> <route> <destination> ...' containing 'EHAM VOLLA GORLO KOPUL TANET DET LARK TII'. There is a 'Flight Plan Options' button. Below that are fields for 'Destination' (EGKK) and 'ICAO'. 'Max Cruise Altitude' is set to '36000' Feet. There are input fields for '1st and 2nd Alternates' and '3rd and 4th Alternates'. A checkbox for 'Update Sites when Distant' is checked. There are checkboxes for 'Export World Weather' and 'Historic Weather'.
- Weather Relocation:** Includes a checkbox for 'Relocate Weather' (unchecked). Below it are 'From' and 'To' input fields.
- METAR Import:** Includes a checkbox for 'Import METAR Data From File' (unchecked). Below it is a text field for 'METAR Import File Specification ...' and a 'Browse' button. There is a 'Scan Import File Every' field set to '3600' Seconds. A checkbox for 'Global METAR Conditions' is unchecked. Below it is a dropdown menu showing '27016KT 9999 OVC030 04/01 Q1018'.
- World Weather Themes:** Includes a checkbox for 'Enable World Weather Theme' (unchecked). Below it is a text field for 'World Weather Theme Filename ...' and a 'Browse for World Weather Theme' button. There is a 'Save Current Weather as World Theme' button.
- Buttons:** At the bottom, there are three large green buttons: 'Full Weather Reload', 'Update Weather', and 'Refresh Weather'. There is also a 'Defaults' button.
- Footer:** Includes a 'Recommended Practices' link with a question mark icon.

Figure 3 - FSI Server's Weather Options Dialog

Click OK, and you are ready to fly.

For further details please refer to the OpusFSI\_v6\_Live\_Weather pdf guide which can be found in the **OpusFSI\_v6** installation folder, also available from our download page.

## Cameras

Please refer to the OpusFSI\_v6\_Live\_Camera pdf guide which can be found in the **OpusFSI\_v6** installation folder, also available from our download page.

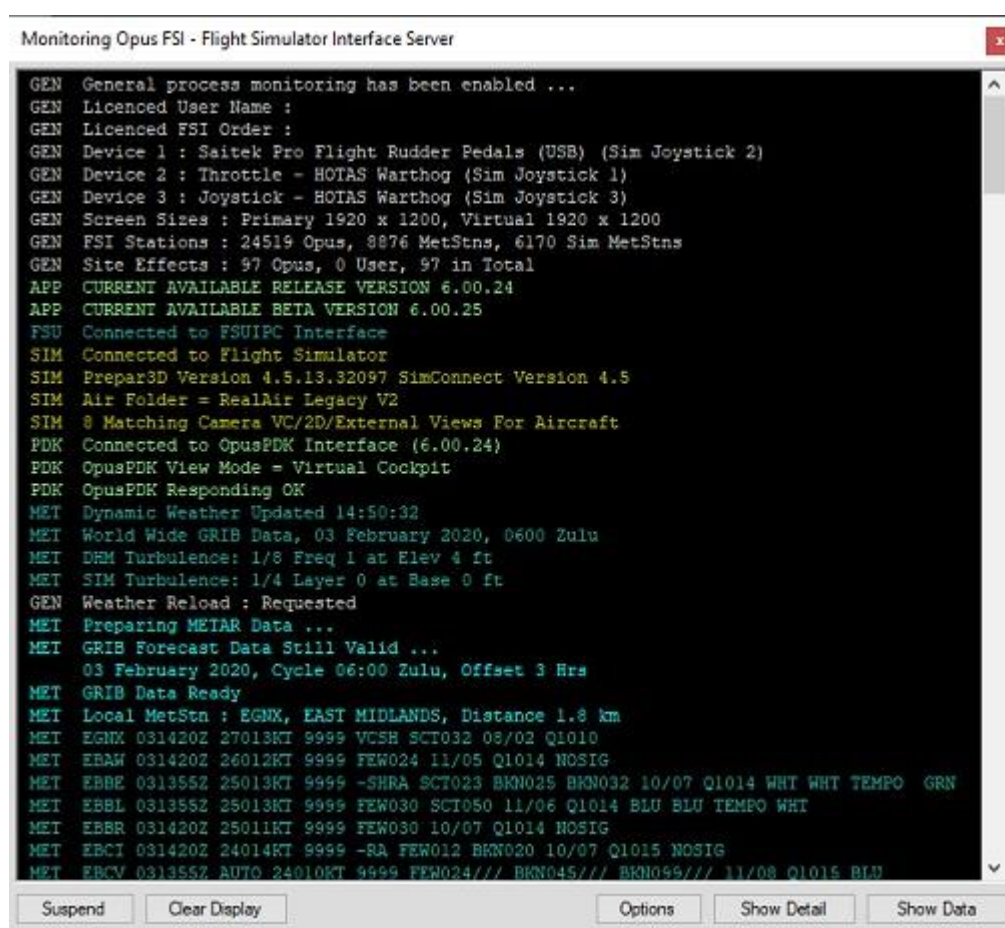
## Spy

If you run the simulator in windowed mode you can click on the OpusFSI server program's **Spy** button and monitor its progress. If you have enabled Dynamic Weather then you should witness the server programming initiating the live weather METAR download culminating in creating and updating the Dynamic Weather.

The **Options** button provides the means to specify the form's topmost, opacity, and font settings. The window can be resized.

The Spy window may also be opened via the simulator's Add-ons menu. This option opens the OpusFSI Spy window setting it Top Most on the display. You may find it useful to select the Spy window's Options and set the Opacity to something like 60 % and click Modify so that the window does not obscure anything on the sim's display.

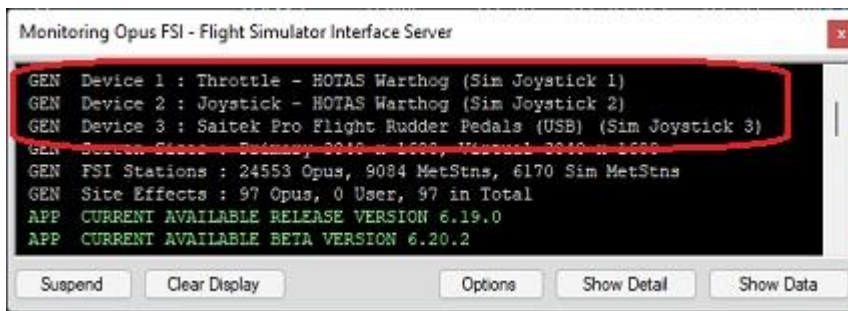
The Spy window is automatically cleared after ten minutes.



```
Monitoring Opus FSI - Flight Simulator Interface Server
GEN General process monitoring has been enabled ...
GEN Licenced User Name :
GEN Licenced FSI Order :
GEN Device 1 : Saitek Pro Flight Rudder Pedals (USB) (Sim Joystick 2)
GEN Device 2 : Throttle - HOTAS Warthog (Sim Joystick 1)
GEN Device 3 : Joystick - HOTAS Warthog (Sim Joystick 3)
GEN Screen Sizes : Primary 1920 x 1200, Virtual 1920 x 1200
GEN FSI Stations : 24519 Opus, 8876 MetStns, 6170 Sim MetStns
GEN Site Effects : 97 Opus, 0 User, 97 in Total
APP CURRENT AVAILABLE RELEASE VERSION 6.00.24
APP CURRENT AVAILABLE BETA VERSION 6.00.25
FSU Connected to FSUIPC Interface
SIM Connected to Flight Simulator
SIM Prepar3D Version 4.5.13.32097 SimConnect Version 4.5
SIM Air Folder = RealAir Legacy V2
SIM 8 Matching Camera VC/2D/External Views For Aircraft
PDK Connected to OpusPDK Interface (6.00.24)
PDK OpusPDK View Mode = Virtual Cockpit
PDK OpusPDK Responding OK
MET Dynamic Weather Updated 14:50:32
MET World Wide GRIB Data, 03 February 2020, 0600 Zulu
MET DRM Turbulence: 1/8 Freq 1 at Elev 4 ft
MET SIM Turbulence: 1/4 Layer 0 at Base 0 ft
GEN Weather Reload : Requested
MET Preparing METAR Data ...
MET GRIB Forecast Data Still Valid ...
03 February 2020, Cycle 06:00 Zulu, Offset 3 Hrs
MET GRIB Data Ready
MET Local MetStn : EGNX, EAST MIDLANDS, Distance 1.8 km
MET EGNX 031420Z 27013KT 9999 VCSH SCT032 08/02 Q1010
MET EBAW 031420Z 26012KT 9999 FEW024 11/05 Q1014 NOSIG
MET EBBE 031355Z 25013KT 9999 -SHRA SCT023 BKN025 BKN032 10/07 Q1014 WHT WHT TEMPO GRN
MET EBBL 031355Z 25013KT 9999 FEW030 SCT050 11/06 Q1014 BLU BLU TEMPO WHT
MET EBBR 031420Z 25011KT 9999 FEW030 10/07 Q1014 NOSIG
MET EBCI 031420Z 24014KT 9999 -RA FEW012 BKN020 10/07 Q1015 NOSIG
MET EBCV 031355Z AUTO 24010KT 9999 FEW024/// BKN045/// BKN045/// 11/08 Q1015 BLU
```

Spy indicates what joystick numbers have been mapped to each controller device. The button events within the Spy window will also indicate what physical device is currently mapped to the simulator's joystick number. The joystick order should match the controller order within the simulator's Controls Settings. If they don't then you can change the order via the **Remap Joystick Numbers** button in the Config dialog.





## General Operation

If you are using TrackIR then run TrackIR and the sim before running OpusFSI.

If you are not using TrackIR then the SERVER program should be run after Prepar3D, or you may configure your system to run the server program automatically each time you start Prepar3D. When the SERVER program is activated it will resume its previous minimized or visible state, and will be displayed in its last known location on the screen. The SERVER program will automatically abort when the sim is shutdown.

## Starting the OpusFSI Software Automatically with P3D

The P3DSERVER program can be started automatically each time P3D is run, simply by editing the content of the standard P3D **exe.xml** file.

The P3D **exe.xml** file can be found within the **c:\Users\username\AppData\Roaming\Lockheed Martin\ Prepar3D\** directory where 'username' identifies your login account name.

If the file doesn't exist then you can create it using Notepad, just remember the xml file extension when saving the file.

Edit the xml file using Notepad. Paste the contents of the **OpusFSI \_ExeXml\_Server.txt** file at the end of the xml content. You should paste the content in just before the closing `</SimBase.Document>` statement.

For example, after editing the content of the xml file, the content should look something like this,

```
<?xml version='1.0' encoding='Windows-1252'?>
```

```

<SimBase.Document Type='Launch' version='1,0'>
<Descr>Launch</Descr>
<Filename>exe.xml</Filename>
<Disabled>False</Disabled>
<Launch.ManualLoad>False</Launch.ManualLoad>
<Launch.Addon>
  <Name>OpusFSI Flight Simulator Interface Server</Name>
  <Disabled>>false</Disabled>
  <Path>c:\OpusFSI_v6\P3DSERVER.EXE</Path>
  <CommandLine>DELAY2000</CommandLine>
</Launch.Addon>
</SimBase.Document>

```

Of course you may already have several Addons listed in the xml file. In which case you will find each Addon specified within a separate <Launch.Addon> .. </Launch.Addon> block.

You will need to edit the **c:\OpusFSI\_v6\P3DSERVER.EXE** entry and specify the correct drive location if you have installed it anywhere other than the standard C drive.

The P3DSERVER program will accept a delay command line argument in the form **DELAYn** where **n** is the required start delay in milliseconds (e.g. P3DSERVER.EXE DELAY2000 will delay the program start by 2 seconds). This argument can be used to delay an auto start within the simulator's EXE.XML file using the <CommandLine>DELAYn</CommandLine> entry, for example,

```

<Launch.Addon>
  <Name>OpusFSI_v6 Flight Simulator Interface Server</Name>
  <Disabled>>false</Disabled>
  <Path>c:\OpusFSI_v6\P3DSERVER.EXE</Path>
  <CommandLine>DELAY2000</CommandLine>
</Launch.Addon>

```

will delay the SERVER programs start by 2 seconds (2000 mS).

You can also specify more than one command line argument, for example,

```

<Launch.Addon>
  <Name>OpusFSI_v6 Flight Simulator Interface Server</Name>
  <Disabled>>false</Disabled>
  <Path>c:\OpusFSI_v6 \P3DSERVER.EXE</Path>
  <CommandLine>DELAY2000</CommandLine>
</Launch.Addon>

```

will delay the P3DSERVER programs start by 2 seconds and also automatically select the P3D simulator type. The program arguments can be specified in any order. The program arguments are,

DELAYn ... Delays the program start by 'n' milliseconds.  
 NONE ... Auto selects No Connection To Simulator type (CLIENT only).




When you next run the sim if you are prompted to trust OpusFSI then confirm Yes.

In all Prepar3D version 3+ modes (requiring dotNet v4 SimConnect) the usual P3D server or client is activated.

### Turn off User Account Control (UAC)

User Account Control (UAC) can prevent OpusFSI from running automatically with P3D on Windows systems. If this happens turn off UAC as follows,

1. Open User Accounts by clicking the **Start** button , clicking **Control Panel**, clicking **User Accounts and Family Safety** (or clicking **User Accounts**, if you are connected to a network domain), and then clicking **User Accounts**.
2. Click **Change User Account Control settings** (or **Turn User Account Control on or off**). If you are prompted for an administrator password or confirmation, type the password or provide confirmation.
3. Move the slider bar to **Never notify** (or clear the **Use User Account Control (UAC) to help protect your computer** check box) to turn off UAC, and then click **OK**.

### Operating System Recommendations

Select the High Performance Power Scheme to ensure optimum performance whilst using the simulator.

### PC Performance

We recommend turning off all virus scanners whilst running the sim since they can have a serious effect on performance.

Disable Windows Defender.

Don't have any internet browser windows open, they decrease performance.

Deleting Window's **CompatTelRunner.exe** will also increase performance,

Microsoft try and prevent this overly demanding 'spy' program from being deleted. However, removing it is quite straight forward once you've done it a few times.

#### Step 1 - Locate the program

Open Windows Explorer, navigate to the **C:\Windows\System32** folder, and locate the **CompatTelRunner.exe** program.

#### Step 2 - Take ownership

Right click on the program, select **Properties** then the **Security** tab. Click on the **Advanced** option. You will see the program's **Owner** is set to **TrustedInstaller**, click on the **Change** option next to it.

In the 'Enter the object name..' text box type **Everyone** and click **OK**. Click OK again to close the Advanced Security dialog.

Now in the CompatTelRunner Properties dialog (Security tab still), click on the **Edit** button followed by the **Add** option. Type **Everyone** in the text box again and click **OK**.

Finally back in the Properties box, highlight **Everyone** in the Group list and then tick the **Full Control** checkbox in the **Allow** options.

Click **Apply** and **Yes** to the prompt.

Click **OK** twice to close all the dialogs.

### Step 3 - Delete it

You should now be able to right click on the CompatTelRunner.exe program and select the Delete option. If not, restart the PC and delete the file. With the program deleted Microsoft can no longer spy on you and gather compatibility telemetry data and more important your PC won't work at a snails pace while it does.

Just be aware Microsoft will occasionally reinstall its CompatTelRunner program during certain updates.

## Prepar3D Recommendations

Ideally your simulator should be installed on a dedicated SSD or HDD, at the very least try and install your simulator on a different drive to your Addons, this will ensure the simulator runs more smoothly. Avoid installing the simulator in Program Files since this causes permission problems.

You cannot start OpusFSI until P3D has loaded its flight, or a prepared Default flight (remember you can always relocate after the start up). Do NOT run OpusFSI when P3D has its 'Create Flight' dialog on display. This is due to a bug in P3D. We recommend you create a Default flight with nil wind; load the Default flight; update the weather using OpusFSI; use the ATIS over the radio to confirm the active runway after injecting the weather, this ensures the correct runway is allocated.

You can of course start P3D in the setup screen, just make sure you load your flight BEFORE running OpusFSI.

In P3D the **Enable Volumetric Fog** option is set automatically using the VolumetricFog setting within the Prepar3D.CFG file. If you change this setting during a P3D session then either change the **Enable Volumetric Fog Effect** in OpusFSI to match P3D or restart OpusFSI.

Don't have an internet browser window open (or even minimised) when running the sim since it usually has a detrimental effect on the sim's performance.

## OpusPDK Interface Setup Guide for P3D

The OpusPDK Dynamic Link Library (OpusPDK\_v45.DLL) provides a fast and efficient direct link into Lockheed Martin's Prepar3D simulator via the Prepar3D PDK interface.

This interface imposes minimal demand on the Prepar3D simulator and provides for fast and efficient camera control for all OpusFSI view transitions, panning sequences, and general eye point positioning. This interface is highly recommended and used for all Live Camera, Live Camera Control, and DHM eye point movements.

The OpusFSI PDK interface is enabled by launching the OpusPDK\_v45.DLL library within the Prepar3D simulator itself. The PDKSETUP program will add the required OpusPDK launch statements to the simulator's **DLL.XML** file. If the DLL.XML file does not exist on your system the PDKSETUP program will create one automatically.

FYI the Prepar3D **DLL.XML** file is located in the standard AppData folder e.g.  
C:\Users\<user\_name>\AppData\Roaming\Lockheed Martin\Prepar3D v5

Where <user\_name> is your Windows user name. To make these folders visible in Windows Explorer you may need to edit your folder options. Open Folder Options via the **Windows Explorer View - Options - View** tabs. Then tick the **Show hidden files, folders and drives** option. I would also recommend you disable the **Hide Extensions for known file types** option.

### Setting up the OpusPDK Interface

The OpusPDK Interface is prepared by running the supplied **PDKSETUP.EXE** program in **Run as Administrator** mode. This setup program will create or modify the simulator's DLL.XML file, including all necessary launch statements ready for when you next run the simulator.

1. Open Windows Explorer.
2. Navigate to your OpusFSI\_v6 installation folder.
3. Right click on the PDKSETUP.EXE entry and select 'Run as Administrator'.

### Checking to see if the OpusPDK Interface is Active

After running the simulator and starting OpusFSI you can check the state of the OpusPDK Interface simply by opening the OpusFSI **Spy** window. If the OpusPDK Interface is already active and connected you will see a statement similar to the following reported in a yellow colour within the Spy window,

SIM Connected to OpusPDK Interface (6.00.0)

If the Spy window is opened before the sim connection then the following statements will be displayed in a red colour,

SIM Link established with OpusPDK (6.00.0)  
SIM OpusPDK Library Version Validated

If at any time OpusFSI detects an incorrect (out of date) OpusPDK library version it will display a Windows Prompt warning you something is wrong. In which case you may need to reinstall OpusFSI making sure the simulator is shutdown first.

Under normal circumstances, the software monitors the health of the OpusPDK Interface all the way through to the P3D simulator response, checking the link every 4 seconds. All changes in PDK status will be reported via the OpusFSI Spy window as either 'OpusPDK Not Responding At The Moment' or 'OpusPDK Now Responding OK'.

The PDKSETUP.EXE utility program will accept optional TEST and REMOVE program arguments. The program arguments can be appended in any order and are not case sensitive. The TEST argument will prevent the simulator's DLL.XML file being created or modified in any way. The REMOVE argument will remove rather than add the OpusPDK launch statements.

### Typical DLL.XML file content with just FSUIPC5 and OpusFSI Add-ons

```
<?xml version="1.0" encoding="Windows-1252"?>
<SimBase.Document Type="Launch" version="1,0">
<Descr>Launch</Descr>
<Filename>dll.xml</Filename>
<Disabled>False</Disabled>
<Launch.ManualLoad>False</Launch.ManualLoad>
<Launch.Addon>
<Name>OpusPDK</Name>
<DLLType>PDK</DLLType>
<Disabled>False</Disabled>
<ManualLoad>False</ManualLoad>
<Path>C:\OpusFSI_v6\OpusPDK_v45.DLL</Path>
</Launch.Addon>
<Launch.Addon>
<Name>FSUIPC 5</Name>
<Disabled>False</Disabled>
<Path>E:\Prepar3D v5\Modules\FsuiPC5.dll</Path>
</Launch.Addon>
```

### Recommended Settings and Practice for Dynamic Live Weather

- Upgrade to the latest Version.
- Set all Defaults in all weather dialogs. \*
- Specify your Destination.
- Specify your Max Cruise Altitude. \*\*
- Update the Weather. \*\*\*
- Check the Weather \*\*\*\*

\* This will enable the cloud and visibility smoothing, wind stabilisation and dynamic wind control options in the Weather Smoothing dialog.

\*\* If you specify a **Max Cruise Altitude** of 4000 feet or more the LWE will download and process the GRIB forecast data from NOAA.

\*\*\* If you have specified Background GRIB Processing in the Weather Downloads dialog then the GRIB data extraction and lengthy decoding will proceed at a slower pace and can take several minutes. Otherwise the processing will be done as fast as possible at the expense of the sim performance or frame rates. The GRIB data is only downloaded once before flight and the decoded data will be valid all day or at least for nine hours so this is normally not a concern or problem. However, most users need GRIB data for flight planning and preparation.

\*\*\*\* Before flight you should get into the habit of checking the weather. At the very least display and check the Opus Local, Lower, Upper, and Destination Weather reports. You may also like to examine the various Opus text reports accessed via the sim Add-on menu. There are separate reports showing the downloaded METARs, all the GRIB wind and temperature targets from 4000 feet up to FL540, all the en route weather for any specified flight plan including TAFs if you have enabled them, and finally an easy reference to all relevant SIDs and STARs. This report gives a handy direction and bearing for each listed SID and STAR.

The Opus weather reports (e.g. the Destination Weather) should be checked during climb and descent to monitor all wind and temperature targets, compared with the actual sim ambient conditions. This way you will know that your sim is operating as expected.

Never disable weather updates, the sim will NOT cope on its own it simply cannot contain all the necessary data.

Text Weather Reports, located in the OpusFSI\_v6\Weather folder and accessed via the sim Add-on menu ...

- OpusWeather.txt ... The downloaded METARs
- OpusWeatherReport.txt ... The GRIB data report
- OpusFlightReport.txt ... The flight plan en route weather report
- OpusSIDSTARReport.txt ... The relevant SIDs and STARs

Live Weather Assistant (LWA) and Weather Map data ...

- Surface Visibility
- Precipitation Levels
- Surface QNH
- Surface Temperatures
- Cruise Level Temperatures
- Upper Level Temperatures
- Surface Winds
- Cruise Level Winds
- Upper Level Winds
- Cruise Level Turbulence
- Upper Level Turbulence
- Lower Level Cloud Cover
- Medium Level Cloud Cover
- Met Station Cover

The LWA and up to six weather maps can be displayed on the server or a networked client.

## SimObject Path Additions

The **OpusFSI\_SimObjects\_Template.txt** file can be used to define a list of SimObject paths not currently identified by OpusFSI, normally add-on aircraft that have been installed elsewhere and not defined anywhere that OpusFSI checks.

Copy and rename the supplied **OpusFSI\_SimObjects\_Template.txt** file to **OpusFSI\_SimObjects\_P3D.txt**. OpusFSI will check and process the **OpusFSI\_SimObjects\_P3D.txt** file for the additional path specifications.

N.B.

Prepar3D systems should already include a 'simobjects.cfg' file within their common application data (c:\ProgramData) folder. These files are also checked and decoded by OpusFSI so try not to duplicate additional Simobject paths in the above text file if used. Your specified SimObjects folders should each contain the same Airplanes or Rotorcraft sub-folders as the standard SimObjects folder within the sim. The SERVER and CLIENT programs will accept SimObject Addon paths that end in specific sub-folder names '\Airplanes' or '\Rotorcraft' (with or without a trailing backslash). Previously the standard '\SimObjects' root folder was assumed and the sub-folder names '\Airplanes' or '\Rotorcraft' were appended prior to looking for the additional (addon) SimObjects.

Don't forget to check that any add-on folders are shared with adequate sharing and security permissions.

Each path must be entered on a separate line in the form,

Path = <full\_path\_specification>

For example,

Path = E:\3rd Party\Company\_XYZ\SimObjects

*The SERVER and CLIENT create a log file named **SimObjects\_P3D.log**. This log file lists all SimObject Airplane and Rotorcraft paths that are checked along with any errors encountered during the process. The log file helps determine the reason why any aircraft/rotorcraft are not detected by the SERVER program.*

## Ensuring AI Traffic uses the Correct Runway

Create a Default flight with 0 wind. Load the Default flight. Update the weather using OpusFSI.

Use the ATIS over the radio to confirm the active runway after injecting the weather, this ensures the correct runway is allocated.

Using this simple procedure will always ensure your AI traffic start out using the correct runway.

## FSUIPC Settings

FSUIPC is required on the SERVER system. FSUIPC is required on Live View CLIENTs that are connected to the simulator and used to display camera views.

You can download a free copy from <http://www.fsuipc.com>

We recommend you do not run OpusFSI automatically via FSUIPC since some users have reported problems running it this way.

Turn everything off in FSUIPC, we recommend disabling all settings. We do not use FSUIPC for any weather or turbulence related effects.

If you choose not to install/activate FSUIPC then at the moment OpusFSI will not be able to pause the sim, it is normally paused when opening certain Opus dialogs. Hence you will have to pause and unpause the sim manually.

To disable FSUIPC simply remove the associated <Launch.Addon>...</Launch.Addon> entries within the simulator's dll.xml file.

```
<Launch.Addon>
  <Name>FSUIPC 5</Name>
  <Disabled>False</Disabled>
  <Path>Modules\FSUIPC5.dll</Path>
</Launch.Addon>
```

## TrackIR Settings

The 64-bit FSITRACKIR.EXE control program relies exclusively on the new high speed 64-bit OpusPDK Interface. Hence, the OpusPDK Interface must be activated to use this new TrackIR program. If the OpusPDK Interface is not active then the 32-bit SimConnect FSITRACKIR control program will be activated instead.

Before using the interface you MUST 'Check For Game Updates' within your TrackIR5 and ensure OpusFSX (or OpusFSI) is listed in **Titles** under the **Advanced Settings** tab, then **restart** TrackIR.

Prior to using the TrackIR5 device via OpusFSI you must ensure TrackIR5 does not directly connect to the P3D simulator. To accomplish this you MUST rename the two SimConnect manifest files within the TrackIR5 installation folder. The folder is usually located in,

c:\Program Files (x86)\NaturalPoint\TrackIR5 (Win 7 64-bit)

BEFORE using the Opus TrackIR interface the files you MUST rename are **simconnect.manifest** and **simconnectSP2.manifest**. We recommend renaming these files to **simconnect\_RENAMED.manifest** and **simconnectSP2\_RENAMED.manifest**

If you wish to revert back to using TrackIR without the OpusFSI interface then you will have to change these files back to their original names.

Check your TIR manifest files after any TIR update, the TIR software can create new files after the upgrade.

Do not copy SimConnect.dll to your root directory otherwise TrackIR will find it and connect directly to the sim instead of OpusFSI.

Run TrackIR and the sim before running OpusFSI. Minimise the TrackIR program to prevent FPS loss.

Do not run any other program that controls the camera views, creates camera shake effects or interfaces to TrackIR. Make sure no such program or subordinate task is running, do not allow any other program to connect to TrackIR prior to OpusFSI.

### **TrackIR Tuning**

TrackIR effects must be tuned using the TrackIR program. TrackIR can be used with the default TrackClip, or it can be used with TrackClipPro. The latter has its own LED emitters and its setup is very different from TrackClip, refer to the TrackClipPro and TrackClipPro sections below.

Make sure you have **Video Processing Mode** set to **Precision** or **Standard** with a Precision Mode Smoothing of **100**. It has been brought to our attention that on some systems TrackIR can become very jerky if 'precision' is disabled, its default key assignment is F7 so it's possible to inadvertently change its setting if you use F7 to increase flaps.

### **TrackClip**

We would advise initially setting the Speed to 1 and the Smoothness to 50. You should experiment on your system and set values your PC is happy with to avoid any jerky DHM movements. Use the test options within the DHM dialog to see what the DHM should look like on your system, then try taxiing up and down in windowed mode and adjust your TrackIR smoothness to give you the optimum effect.

Make sure your **Light Filter Threshold** isn't set too high, try setting **70**, and adjusting from there, with a max setting of **12** for your IR Brightness. Light pollution and an incorrect **Light Filter Threshold** setting are the number one main causes of flicker.

### **TrackClipPro**

It has been reported that for TrackClipPro the Camera IR brightness should be zero and Light Filter Threshold should be set to a high value. The easiest way to get the correct settings is to click the TrackClipPro button in the TrackIR window and it will reset the Camera settings automatically.



## Troubleshooting

### ***TrackIR Flickering or Erratic Movement***

Problems arise when the light threshold is wrong. If it is too low, extraneous light sources in the room will falsely trigger TIR into seeing that other light source as one of the TrackClipPro's beams. This causes all kinds of false head-rotation issues, which show up as flickering.

The easiest way to solve the problem is to go into the TrackIR main view, right-click on the head-graph window, and choose Camera View, and then tweak the Light Threshold to a point where there is NO red 'false light sources' visible anywhere during the full range of head movement. This can even change during the course of a day (depending on the intensity of reflected light from windows, eye glasses, items in the room etc.).

Your IR brightness levels should be zero. Try selecting the old Trackclip momentarily and then re-select TrackClipPro, and this should clear the IR settings back to zero (off). The TrackClipPro does NOT require the camera to send out IR signals (which are normally reflected off the front of the old Trackclip for the camera to pick up). Instead, the TrackClipPro generates its own light beams directly (that's why it's connected by wire and powered) - but of course, the camera can still get confused if there are large alternate light sources in the room competing with it.

Here is a handy little tip for fixing TrackIR jerkiness, <http://airdailyx.blogspot.co.uk/2012/09/spf100-track-ir-adx-tutorial.html>

Make sure you don't have any monitoring programs (e.g. FSUIPC autosave) running since they can cause TrackIR to become jerky.

Try enabling the **Run TrackIR High Priority** option in the Server Configuration dialog if TrackIR is not operating smoothly. You may need to try different versions of the TrackIR drivers to get it working smoothly on your system.

### ***TrackIR will not Connect to OpusFSI***

If you update the TrackIR software remember to rename the two SimConnect manifest files within the TrackIR5 installation folder.

Search your system and make sure there are no more manifest files located anywhere. Check your root directory and in fact search the entire PC for them. If TIR finds any manifest file it will not attempt to connect to Opus or anything else apart from the sim direct.

Try running everything manually and don't use any automated method. Run TrackIR manually after P3D, then finally run P3DSERVER, in other words do not run TrackIR and P3DSERVER automatically via P3D or FSUIPC.

### **OpusFSI TrackIR Settings**

Within OpusFSI set the TrackIR scan speed to 25 initially, the XYZ scaling to 1 and PBY scaling to 0.75. These can be adjusted on the fly from within the Configuration dialog.

The TrackIR scan speed can be altered from 6ms to 60ms. If TrackIR is jerky then adjust this setting (try 25-30) in conjunction with your TIR device Speed and Smoothness settings to reach an optimum effect. If you set the scan rate too high it stutters, if you set it too low it jumps.

The PBW setting should be adjusted in conjunction with the TIR device speed settings to determine the range of head movement and how far you can see behind you.

**You may need to try different versions of the TrackIR drivers to get it working smoothly on your system.**

If you are still having problems with jerkiness after setting the TIR light levels then you can try enabling **Run TrackIR High Priority** in the Server Configuration dialog.

### **TrackIR Operation**

TrackIR can be enabled or disabled for each camera view within Live Camera, this is useful for instance when you want to adjust the GPS via a small click spot, if TrackIR (and DHM) movement is frozen you can operate the click spot no matter how unsteady your head is.

The TrackIR interface can be toggled on/off within the Cameras dialog (Toggle TrackIR On/Off button), allowing camera configuration and editing with the TrackIR device either on or off.

### **TrackIR Cockpit Limits**

To set up TrackIR cockpit limits refer to the **OpusFSI\_Live\_Camera.pdf** document.

### **TrackIR Updates**

Check your TIR manifest files after any TIR update, the TIR software can create new files after the upgrade which you will need to rename again (see above for details).

## **Using FS2Crew with OpusFSI**

There can be an issue using FS2Crew since it relies on the 2D Panel initially being loaded. You can work around this by creating a 2D default camera view for your aircraft and follow the procedure below. Note this example procedure uses the NGX aircraft.

1. Start OpusFSI, enter Destination, Cruise level and any Alternates.
2. Start P3D.
3. Wait for NGX to initialize in 2D mode (20 second countdown).
4. Switch to 3D VC
5. Start FS2Crew.
6. Commence Preflight.

## Uninstalling OpusFSI

If you wish to uninstall OpusFSI prior to an upgrade then uninstall via Control Panel, Uninstall a Program. Do not delete your OpusFSI\_v6 folder (containing your configuration files) or Opus Software folder (containing your licence files).

### Can't uninstall OpusFSI

If you are having problems uninstalling Opus due to a missing msi or registry corruption then use the following Microsoft utility, <https://support.microsoft.com/en-gb/help/17588/fix-problems-that-block-programs-from-being-installed-or-removed>

Alternatively if you wish to remove OpusFSI completely from your system and have used Live Camera then first restore your aircraft.cfg files by disabling Live Camera in the Configuration dialog. A message box informs you that Live Camera is removing the Camera Definitions from all aircraft.cfg files for you. These changes will NOT be noticeable until you either restart P3D, or reload a completely different aircraft type forcing P3D to reload the modified cfg file. Uninstall OpusFSI via Control Panel, Uninstall a Program.

## FAQ and Troubleshooting

### Can I use other software packages with OpusFSI?

We strongly recommend the use of 3rd party packages such as FEX for their sky and cloud textures, or HDEv2 (freeware) for clouds with the sky upgraded by Danny Glover. You will really see the benefit of using the OpusFSI Live Weather Engine with these textures loaded. We do not include or load any sky and cloud textures, we just create and load the most detailed and realistic weather. However, if you rely on the default sky and cloud textures within P3D then no matter how detailed the weather is it will not look very impressive. Disable the weather update in 3rd party packages to prevent conflict with the OpusFSI weather engine.

If your aircraft doesn't include sounds then we would also recommend the use of packages such as Accu-Feel for the sound effects but with the Accu-Feel global turbulence, chop, gusts, and clear air turbulence aircraft movement options disabled since they conflict with OpusFSI.

TrackIR can be used with OpusFSI but Automatic Head Movement will be automatically disabled. You must follow the set up instructions in the OpusFSI\_v6 Getting Started guide.

ButtKicker and ButtKicker compatible devices can be used with Opus.

### How to Purchase

Follow the link from our home web page or display our downloads page and click on the **OpusFSI v6** link in the **Purchase or Reinstall** column. Alternatively use this link, [http://www.opussoftware.co.uk/opusfsi/OpusFSI\\_v6\\_Flight1\\_Purchase.exe](http://www.opussoftware.co.uk/opusfsi/OpusFSI_v6_Flight1_Purchase.exe)

Download the Opus Flight1 Purchase exe onto your main 'flying' server (sim) system to purchase the product. If you have previously installed the OpusFSI demo then uninstall it.

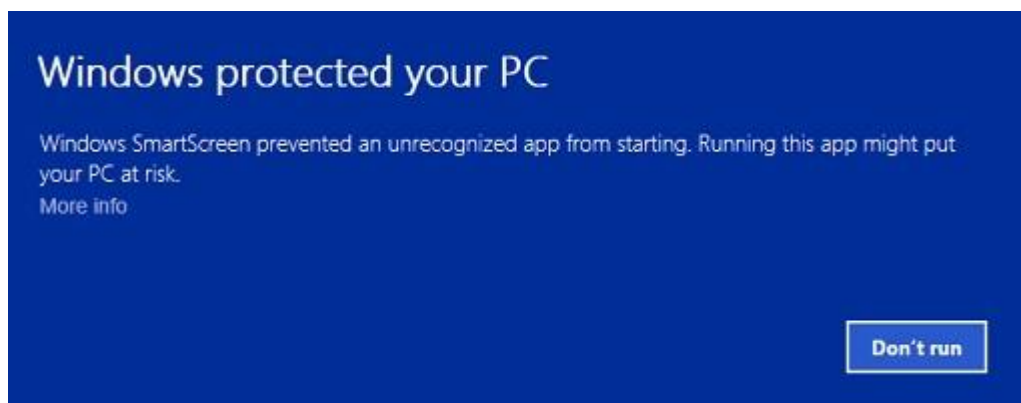
When you run the purchase file a Flight1 form with 3 buttons will be displayed. If you already have a Flight1 account click button 1 to log in (this is optional and if you get any Flight1 login error messages don't use it). Click on buttons 2 and 3 to fill in your purchase details and then the Purchase button will appear, click on this button to complete purchase.

After purchase, the Opus msi installation file will be unwrapped into c:\Opus Software along with your license key and you will receive an email confirmation of your order. Run the msi to install Opus and follow the instructions in our Getting Started guide.

### **I can't download Opus (or signature is invalid or corrupt)**

If you get a warning the signature is invalid then right click on the msi and select **Run Anyway**.

If you see the following screen then click on the **More info** button to run the software. Next select **Run Anyway**.



Using Windows Explorer navigate to the location of the downloaded file and run the software. If you have a problem running the software then right click on the file and click "Unblock" or follow one of the other methods in [Can't run the msi in Windows](#).

Internet Explorer seems to be the most reliable browser for downloads. Try downloading on a different computer if possible. If you are downloading the purchase file on another computer, make sure it runs, and then move it to your flight sim computer using the [Flight1 licence transfer tool](#).

If you are having problems downloading then make sure your anti-virus software is disabled, anti-virus software may also delete our software after it has been downloaded or installed unless you make the Opus exe programs trusted applications.

### **I can't start my Flight1 downloaded application (it never runs), so I can't purchase the software**

You need to make sure Data Execution Protection (DEP) allows the EXE to run. You can check your DEP settings by selecting Control Panel, System and Security, System, System Protection, Advanced tab, Performance Settings, Data Execution Prevention tab. Select "Turn on DEP for

essential Windows programs and services only" option, or try to add the EXE you downloaded to the exception list.

Also, ensure that you have full Administrator access to the computer and you may need to disable any virus scanner or spyware program that is running.

If you still have problems refer to the Flight1 website troubleshooting.

If all else fails then download it on another computer, make sure it runs, and then move it to your flight sim computer using the Flight1 licence transfer tool.

### **My payment was not accepted by PayPal**

Email us for further assistance.

### **My virus scanner gives me a warning for the Flight1 downloaded application**

Unfortunately, one of the most common issues when people can't get software to run is interference from a Virus or Spyware scanner. Although they do good things, in many cases they can interrupt programs you may want to run. If you get an error message that does not appear to be from the downloaded EXE, you need to make sure your virus or spyware scanner is disabled prior to running the EXE. If you are concerned about this, you can scan the file prior to running it, and then after your purchase, if you are prompted to automatically run the setup application, select No, then manually scan the setup application. This is usually extracted right after your purchase is made.

False-Positive reports with software is common.

### **'The cabinet file is corrupt' error message**

If you see the error message,

***The cabinet file '\_xxx' required for this installation is corrupt and cannot be used. This could indicate a network error, an error reading from the CD-ROM, or a problem with this package***

then it is most probably a corrupted msi file so just download it again. If you are using Chrome then try another browser.

### **'There is a problem with the windows installer package. A DLL required for this install to complete could not be run...' error message**

The installer doesn't have permissions to access the folder C:\Users\<name>\AppData\Local\Temp.

Go to Properties > Security on the folder and give Everyone the Full control permission.

### **Can't uninstall OpusFSI**

If you are having problems uninstalling Opus due to a missing msi or registry corruption then use the following Microsoft utility, <https://support.microsoft.com/en-gb/help/17588/fix-problems-that-block-programs-from-being-installed-or-removed>

## Can't run the msi in Windows

### Method 1:

1. Right click on the file or program that you are not able to access.
2. Go to properties and click "Unblock".
3. Try to run the application again.

### Method 2:

1. Click on start button.
2. Type "Internet Explorer" in the "Start Search Box" and select it from the menu.
3. Click on "Tools" in the menu bar and select "Internet Options".
4. Click on "Advanced tab" and locate "Allow software to run or install even if the signature is invalid" under the "Security" category and check the box.
5. Click Apply and then Ok.
6. Close Internet Explorer and restart Internet Explorer.

### Method 3:

1. Turn UAC OFF. Just type UAC into the start menu or Control Panel search box. Drag the slider to the bottom, never notify.
  2. Run the Command Prompt in Admin Mode (not the same as you being an Admin user).
  3. Type: `bcdedit /set testsigning off`
  4. Reboot. Windows will power up in a test mode and will allow you to run any msi file.
  5. Install the msi file. After installing the software ...
  6. Run the Command Prompt in Admin Mode (not the same as you being an Admin user).
  7. Type: `bcdedit /set testsigning on`
  8. Reboot
- After rebooting you should still be able to run msi files but may need to answer 'More Info' and 'Yes' to a Windows 10 user query.

## System.TypeInitializationException error

You need .NET version 4.7.2 for P3Dv4 onwards and SimConnect to be installed for OpusFSI and its SimConnect links to work.

You can check what versions of .NET you have installed in Control Panel by selecting Settings, System, Apps and features, then search for .NET and a list of installed versions will be displayed. For older operating systems you can check what versions of .NET you have installed by checking your `c:\Windows\Microsoft.NET\Framework` or `Framework64` folders. You should see a `v2.0.xxxxx` folder in addition to the `v4.0.xxxxx` folder.

In the case of SimConnect, first make sure you have installed P3D, SimConnect is installed automatically with it. If you have mislaid or corrupted your SimConnect then you can try re-installing it.

## SlimDX error

You must ensure the P3DSERVER program ...

- Is starting in the correct c:\OpusFSI\_v6 folder.
- Has permissions to copy and rename the SlimDX DLL file.
- Is able to copy the current SlimDX DLL, it's not locked or write protected.
- Is not blocked by AV or Win Defender software.

Otherwise its attempt to copy and rename the SlimDX file will fail. You may also need to install the SlimDX dotNet runtime using our supplied msi file in the OpusFSI\_v6 folder.

## Opus won't run or aborts

If Opus won't run or immediately aborts then make sure it is installed in the OpusFSI\_v6 folder in the root directory and not a sub-folder of the drive. Otherwise reboot your PC, this problem may be due to a windows update which needs a reboot of your PC.

If this doesn't work then reinstall SimConnect.

## OpusFSI won't run in Windows 10

If you have set up the security and sharing permissions as described in the above section, have run as Administrator, and the software still won't run on Windows10 then run both the Microsoft **vcredist\_x86.exe** and **vcredist\_x64.exe** VC redistribution packages located in the OpusFSI\_v6 folder. For new Windows10 builds you may need to download and install the older 2013 C++ Redistribution packs (vcredist\_x64.exe and vcredist\_x86.exe) from the 'Other Downloads' section of our Downloads webpage <http://www.opussoftware.co.uk/opusfsi/downloads.htm>.

## When I install and run P3DSERVER it runs in demonstration mode

You must install the Flight1 purchase file on your C drive. You can move the msi to another location but must leave the OpusFSI\_v6 and/or OpusFSI licence and key files on drive C in the C:\Opus Software folder.

Opus can only be installed on one drive in one folder. Uninstall any old versions of Opus using Control Panel, Uninstall a Program. Do not delete your OpusFSI\_v6 folder though since your configuration (DAT and CMD) and camera (CAM, LIM and CDF) files are stored there, assuming you want to keep them.

Check your OpusFSI\_v6\FSISERVER.log for errors.

If your Name and Order Number are blank in the Spy window then your licence file cannot be accessed due to either file permission problems or a corrupt licence file.

If you try and edit the licence file it will become corrupt, you should not open the licence file. If this has happened download and reinstall the **Purchase OpusFSI\_v6** file.

Refer to Reinstalling Opus on a new or reformatted PC.

Your system will require a valid OpusFSI licence, internet access and the computer clock must have the correct time.

### **Simulator's Installation Folder, Unable to access the installation folder...**

Opus tries to copy the OpusWeather.WT weather file into the or Prepar3D\Weather\themes folder and will display this error message if it cannot do this.

If you see the above error message then it is essential that you check your installation folder is specified correctly in the Configuration dialog. Try reconfiguring the sim location again.

Also check your sharing and permissions, it is important to set permissions as well as sharing as described in the OpusFSI Getting Started guide.

### **Spy Error Messages**

#### ***Failed to establish link with FSUIPC***

##### ***Error code 8***

Error code 8 means you have the wrong Flight Simulator system for FSUIPC. Have you specified the correct P3D installation folder in the OpusFSI configuration dialog?

### **Opus stops working**

Make sure you only have one copy of Opus installed in Windows Control Panel using the Uninstall Programs option (not some Cleaner type package).

All the FS... EXE and DLL files in the OpusFSI\_v6 folder should have the same date, if they don't then uninstall Opus and reinstall.

The software looks for the licence and key files on drive C in your c:\Opus Software folder.

Don't install Opus in the Opus Software, sim, or Program Files folders, and don't install in more than one folder on your PC.

### **P3D freezes or my aircraft will not move**

The problem is caused by running both the Opus SERVER and CLIENT programs on the same PC. If you have a standalone system you must only run the P3DSERVER program, do not run the client program that will freeze your sim (it is only intended to be run on networked client machines).

Don't run OpusFSI automatically via FSUIPC.

Before disabling 3rd party camera packages their configuration utility must be run and the "Restore" function selected to restore all camera views to P3D default, otherwise 3rd party camera definitions are not removed from the aircraft config files and can cause problems.



## The master battery and parking brake indications aren't correct

You need to install FSUIPC on the OpusFSI client PCs. You can download a free copy from <http://www.fsuiipc.com>. FSUIPC is used for the following functions; setting the sim clock, master battery and parking brake, and pausing the sim.

## Overspeed and Underspeed Warnings

If you are flying with the sim rate speeded up, especially above x6 then it is possible to get overspeeds or underspeeds. Even at x6 speed, your auto pilot or P3D may oscillate the air speed repeatedly causing repeated overspeeds. You should disable the P3D 'stress causes damage' option.

## Reinstalling OpusFSI on a new or reformatted PC

Download and run the [Purchase OpusFSI v6 file](#).

[Reinstall using your Flight1 account](#), you will need your email and account password. You can [request your account password](#) from Flight1 if you have forgotten it. If you don't have a Flight1 account then you can [create one](#).

If you still can't reinstall then [request a new key file](#) from Flight1.

You may install the software onto any drive provided its folder name is OpusFSI\_v6 with the exception that you must not install OpusFSI in the **Opus Software**, **Prepar3D** or **Program Files** folders, and don't install in more than one folder on your PC.

## Prepar3D v5 Settings Error - Please correct errors or click Cancel

There is a bug in Prepar3D v5 that rears its head when trying to change its Options after OpusFSI weather has been injected. This is because the Prepar3D weather checks think it's an error if the cloud tops of one layer are above the cloud base of another. In such cases P3D gives the prompt,

*Please correct errors or click Cancel*

There is however a simple solution until LM get round to correcting this,

1. Select **Weather** options.
2. Select the **Clouds** Layers.
3. Delete any overlapping cloud layers.
4. Select **OpusWeather** again in the **Weather Conditions** section.
5. Click **OK**.

In Step 3 you may also simply reduce the overlapping cloud **Tops**. Again don't forget to reselect **OpusWeather** before clicking OK.

Step 4 (selecting **OpusWeather** again) is **MOST IMPORTANT** in order to preserve the injected weather.

Additional FAQs regarding weather, camera and network issues can be found in the relevant [Weather](#), [Camera](#) and [Getting Started Networking](#) user guides.