

# PSXseecon Traffic

**Version 6.11**  
for Windows 10 only

## Manual

Aug 15, 2017

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# 1 Introduction

PSXseeconTraffic has been developed as an add-on for the [Aerowinx PSX](#). However, since version 5.0 it also supports any user aircraft in P3D and FSX. You can fly with your aircraft with live traffic.

PSXseeconTraffic injects the aircraft within range of your aircraft in your Flight Simulator. For these aircraft the liveries (type and airline) are created as real as possible, depending on how many different AI aircraft you have installed in P3D/FSX.

A list of the liveries that you have installed is input for PSXseeconTraffic and can easily be created with my [VMRGenerator](#) application.

PSXseeconTraffic makes the AI traffic look very smooth. It calculates a position for each live AI aircraft approximately 32 times per second, by computing latitude, longitude, height, bank and pitch. It also takes care of setting the throttles, strobes, lights, flaps and it handles the landing gear at take-off and landing.

It also provides a mechanism to put AI aircraft at parking positions at your origin and destination airports.

In the version for PSX, PSXseeconTraffic sends information to PSX about nearby aircraft to be displayed in the Navigational Displays (TCAS) at the FlightDeck.

Flying in live traffic implies that you have to set your Flight Simulator at real-time, it has no use to choose another day/time, while the live traffic stream is always real-time. For the same reason one should not fly in accelerator mode.

The live traffic information is provided by [RealTraffic](#). The data from RealTraffic is based on ADS-B transponder data of aircraft. When airborne this gives very good results, on the ground it depends on airport policy. At some airports pilots must have their transponder on, while on other airports they have to switch off their transponder after landing. At those airports there will be not much taxiing traffic to see. But on the other airports you may follow the aircraft after landing taxiing to the gate or from the gate to the take-off runway.

You may also notice a difference in quality of their ADS-B equipment, the newest aircraft have the best while older ones need replacement. The good news is that these replacements will take place soon (within a few years).

## 1.1 Co-existence with 3d party traffic, such as VATSIM, IVAO, MyTraffic?

I don't recommend to add third party traffic. It sounds weird to me that you should want as well live traffic as on-line or "canned" traffic.

However, because of several requests that I received, I made it technically possible that both systems can co-exist, or better phrased: PSXseeconTraffic will not be disturbed by other traffic. What the effect of PSXseeconTraffic aircraft on the third party will be, I don't know ...

PSXseeconTraffic will detect third party aircraft, injected in your Simulator by other programs then PSXseeconTraffic, and it will log a message containing the callsign. The third party aircraft will be ignored.

Do note that there is no collision detection between third party aircraft and live- or parked aircraft.

## 1.2 System Requirements

PSXseeconTraffic is a C++, 32 or 64 bit Windows application for **Windows 10**.


You need Microsoft Visual C++ Redistributable for Visual Studio **2015**. The standalone installers for x86 (vc\_redist.x86.exe) and x64 (vc\_redist.x64.exe) can be [downloaded here at Microsoft](#).

**The 32 bit version** of PSXseeconTraffic depends on (side-by-side-configuration) the Microsoft Simconnect Client version **10.0.61259**. The installation file **SimConnect.msi** can be found in

```
..\Prepar3D v3\redist\interface\FSX-SP2-XPACK\retail\lib\SimConnect.msi
```

and in FSX at a similar location. Install the SimConnect Client at the PC running PSXseeconTraffic.

**The 64 bit version** has **no** side-by-side dependencies. It looks like you do not need to install any Simconnect Client.

	The 64 bit version is for Prepar3D v4 only!
---	---

## 1.3 Disclaimer

The RealTraffic stream gives position updates of all aircraft around you every nine seconds. In order to correct for internet transmission lags, and to be able to vectorise the traffic, PSXseeconTraffic buffers the input for thirty seconds. The traffic you see is therefore **thirty seconds behind real time**. If you would consult apps such as [FlightRadar24](#), or would listen to a real ATC channel, this has to be taken into account.

Note that one should also not use the FSUIPC traffic limiter.

The data of RealTraffic is not perfect. Most of the time aircraft land at runways, but sometimes they don't. Please take note of the known issues in following section.

## 1.4 Known issues

The data coming from **RealTraffic** is not always correct. This may lead to the following issues:

- Sometimes aircraft do not land at the runway but in the fields ...
- Some airlines/aircraft-types always seem to land besides the runway; as-if their ADS\_B equipment is not sending the right info.
- Sometimes aircraft disappear from the RealTraffic stream for more than 30 seconds which will lead to disappearance from your Flight Simulator while popping up again (a little) later.
- Runways that lay higher than the surroundings, such as KFSO (with the sea) may cause problems with landings at certain QNHs. They may come in too low, due to the incorrect height above ground measurements, just before the runway.
- Some airlines perform much better than other airlines.

Issues with **SimConnect**:

If an aircraft's gear is not extended when landing or when it dives into the ground, or if an aircraft fails to climb after take-off, there is probably a temporary SimConnect problem in your Flight Simulator (*PSXseeconTraffic is not/no longer getting altitudes above ground from AI aircraft from SimConnect*).

If so, stop PSXseeconTraffic, restart your Flight Simulator and then restart PSXseeconTraffic, to get everything back to normal again.

Issues with **sceneries**:

Some sceneries have runways that are not at the exact spot. For example EHAM of Aerosoft. Aircraft land and take-off way off the centre line.

### **1.5 Forum and FAQ**

For questions & answers and discussions use my Forum at [MyCockpit.org forum](https://mycockpit.org/forum).

In my Forum you will find an [FAQ](#).

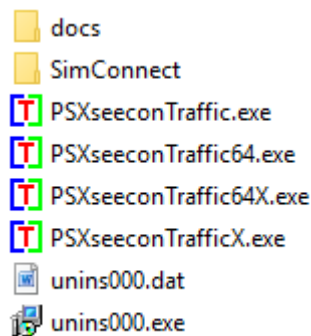
## 2 Installation

### 2.1 Download and install

Download setup\_PSXseeconTraffic\_vx.y.zip from [www.lekseecon.nl/PSXseeconTraffic.html](http://www.lekseecon.nl/PSXseeconTraffic.html).

Unzip and run the **installer**. You may install PSXseeconTraffic at any Windows 10 PC in your local network. **However, do not install it in the C:\Program Files ... folder!**

After installation, you will have a PSXseeconTraffic folder containing the following files and folders:

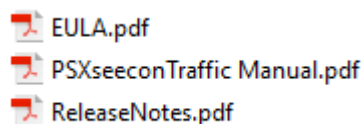


PSXseeconTraffic.exe is the 32 bit application to be used with any user aircraft in FSX or P3D (v3 or v4). PSXseeconTraffic64.exe is the 64 bit application to be used with any user aircraft in Prepar3D v4 only!

PSXseeconTrafficX.exe is the 32 bit application to be used with the Aerowinx PSX with FSX or P3D (v3 or v4). PSXseeconTraffic64X.exe is the 64 bit application to be used the Aerowinx PSX with Prepar3D v4 only!

Note that for all versions the configuration and log files are named PSXseeconTraffic.cfg and PSXseeconTraffic.log.

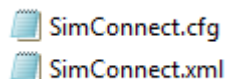
The **docs** folder contains the following files:



Documentation is provided by means of the pdf files PSXseeconTraffic Manual and ReleaseNotes.

The EULA is the End-User License Agreement. This is a legally enforceable contract between you and the Author. By accepting the installation you agree to be bound by the terms of this EULA.

The **SimConnect** folder contains the following files:



For the use of these files see section 3.2.

A **separate** download provides folder **parked** with 5398 airport files, see section 7.1. Unzip and put the folder parked inside PSXseeconTraffic.

Another **separate** download provides the **ParkPosGenerator**, see section 3.3.

## **2.2 Update and removal**

Download PSXseeconTraffic\_vx.y.zip, unzip and simply run the installer. It will first uninstall your previous version and then install the new one. PSXseeconTraffic.cfg and SimConnect.cfg (if in use) will not be touched, same for your parked folder.

Removing PSXseeconTraffic from your PC can be done running the uninstaller, just like any other Windows program.



## 3 Preparations

### 3.1 Create an AI\_liveries.txt file

PSXseeconTraffic does not come with AI aircraft, you have to install these yourself.


On the internet you may find lots of sites describing how to install AI aircraft, for instance [this step-by-step guide for FSX](#), or this you tube video explaining [installing WoAI in P3D V3](#).

Don't forget to add the correct entries for your installed freeware and payware aircraft in  
 P3D v2: <appdata> Prepar3D.cfg  
 P3D v3: C:\ProgramData\Lockheed Martin\Prepar3D v3\SimObjects.cfg  
 P3D v4: C:\ProgramData\Lockheed Martin\Prepar3D v4\SimObjects.cfg  
 FSX: <appdata> FSX.cfg.

If you forget it your AI aircraft will not be activated in your Simulator and you will see no traffic and you will find lots of "cannot create messages" in the log of PSXseeconTraffic.

When you're satisfied with the number and diversity of the AI aircraft in your Flight Simulator, you have to create a file with all the AI liveries that you have installed. You have to do that with my tool [VMRGenerator](#).

Download and install VMRGenerator according to the instructions at my website. Run it, it will create the file **AI\_liveries.txt**.

	Copy the file AI_liveries.txt into your PSXseeconTraffic folder or enter a full path to the VMRGenerator folder in the User Interface, see section 5.7
---	--

VMRGenerator recognizes a livery based on information it finds in the **aircraft.cfg** or **sim.cfg** file of AI aircraft(-s). It searches for the lines with:

parameter	is used as
atc_model=	ICAO aircraft type code
atc_id=	Registration code(-s)
title=	Title of livery
atc_parking_codes=	ICAO airline code(-s)

The IVAO package does not support all these parameters, but thanks to their rigid information structure VMRGenerator can generate rules for their aircraft. However, you must have installed IVAO with its default folder name IVAO\_MTL, in order to be recognised by VMRGenerator. IVAO liveries are recognised based on:

parameter	is used as
max 4 letters after "IVAO_" in the folder name	ICAO aircraft type code
atc_id=	Registration code(-s)
title=	Title of livery
first 3 letters after the aircrafttype code in the title=	ICAO airline code

Normally a livery has of course only one unique Registration code. However, you may fill in multiple Registration codes separated by comma's. Thus it is easier to separate different groups of liveries for a single type without having to install all liveries. For example to

differ between normal BAW 744 liveries and BAW Oneworld 744 liveries. Or to separate all freighter liveries of a certain type from the passenger liveries of that same type.

Another advantage is that if the callsign is missing an aircraft may be marched upon its registration code.

The registration codes for lots of airlines can be found [here](#).

### 3.1.1 How to deal with private aircraft (PVT)?

Private (GA) aircraft often do not have an airline code. I recommend to use a non (ICAO) existing airline code **PVT** (for Private) for these type of aircraft. So change the `atc_parking_codes` lines to

```
atc_parking_codes=PVT
```

```
or for IVAO_MTL: title=<aircrafttypecode>PVT
```

in `aircraft.cfg` files that define a private aircraft livery.

This way you can add this code manually in an airport text file for parking positions where you want to see private aircraft only. The ParkPosGenerator will generate this code for GA\_Light positions too, if no airline is specified.

### 3.1.2 How to deal with Government aircraft?

Government aircraft sometimes do not have an ICAO airline code. I recommend to use a non (ICAO) existing airline code **GOV** for these type of aircraft. So change the `atc_parking_codes` line to

```
atc_parking_codes=GOV
```

```
or for IVAO_MTL: title=<aircrafttypecode>GOV
```

in `aircraft.cfg` files that define a government aircraft livery.

## 3.2 Configure SimConnect [networked use of PSXseeconTraffic only]

If, and only if, you run PSXseeconTraffic and your Flight Simulator at different computers, in your local area network, you have to configure SimConnect. If so perform the following two steps.

### 3.2.1 Configure SimConnect.cfg

Open the file `SimConnect.cfg` with Notepad and change the IP address in the line **Address=192.168.1.105** to show the IP address of the computer running your Flight Simulator and put the file in the PSXseeconTraffic folder!

### 3.2.2 Configure SimConnect.xml

*PSX users: If you already have VisualPSX running remotely from your Flight Simulator you do not have to change the **SimConnect.xml** file at the Flight Simulators computer, because PSXseeconTraffic uses the same Port (**29764**) as VisualPSX.*

Open the file `SimConnect.xml`, that comes with PSXseeconTraffic, with *NotePad* and change the IP address in the line `<Address>192.168.1.105</Address>` to show the IP address of the computer running your Flight Simulator.

If you have no other applications using SimConnect with P3D/FSX you will need to install SimConnect.xml as follows:

P3D: Copy or move SimConnect.xml to the computer running P3D and place it in the folder C:\Users\\AppData\Roaming\Lockheed Martin\Prepar3D v3

FSX: similar

Otherwise, if you do have other applications using Simconnect with P3D, such as AS16/ASNNext, you will need to **append** the lines starting with <SimConnect.Comm> and ending with </SimConnect.Comm>, **to your existing Simconnect.xml** above the line </SimBase.Document>. The location of your SimConnect.xml file is given above.

So add this block of code, with of course the IP address of your FlightSim PC, see above:

```
<SimConnect.Comm>
  <Disabled>False</Disabled>
  <Protocol>IPv4</Protocol>
  <Scope>global</Scope>
  <MaxClients>64</MaxClients>
  <Address>192.168.1.105</Address>
  <Port>29764</Port>
  <MaxRecvSize>8192</MaxRecvSize>
  <DisableNagle>False</DisableNagle>
</SimConnect.Comm>
```

### 3.3 Install or generate parking positions for your simulator

You can download from my website a **Parked** folder with some **5400** airport files, put the Parked folder in the PSXseeconTraffic folder.

However, you may want to generate new ones, because you have other airports than I have, or you have the same airports but from a different manufacturer.

If so, download **ParkPosGenerator** from my website and unzip it to your FlightSim PC. See the ParkPosgenerator Manual for further instructions.

## 4 Operations

### 4.1 Start and configure Flight Simulator

- Prepar3D versions 2.5 or later or Microsoft FSX SP2
- Make sure the Airline Traffic density and General aviation traffic density is set at **0%**.
- Set the day/time to system time, and fly in 1x mode (no acceleration).
- FSX: Do not select "Aircraft cast shadows on the ground"

### 4.2 Start and configure PSX (PSX only of course!).

- Make sure you have real-live / real-time weather in PSX.
- Connect PSX with your Flight Simulator, by using [VisualPSX](#) or [PSX.NET P3D ExternalSim](#) for visuals.

### 4.3 Start and configure RealTraffic

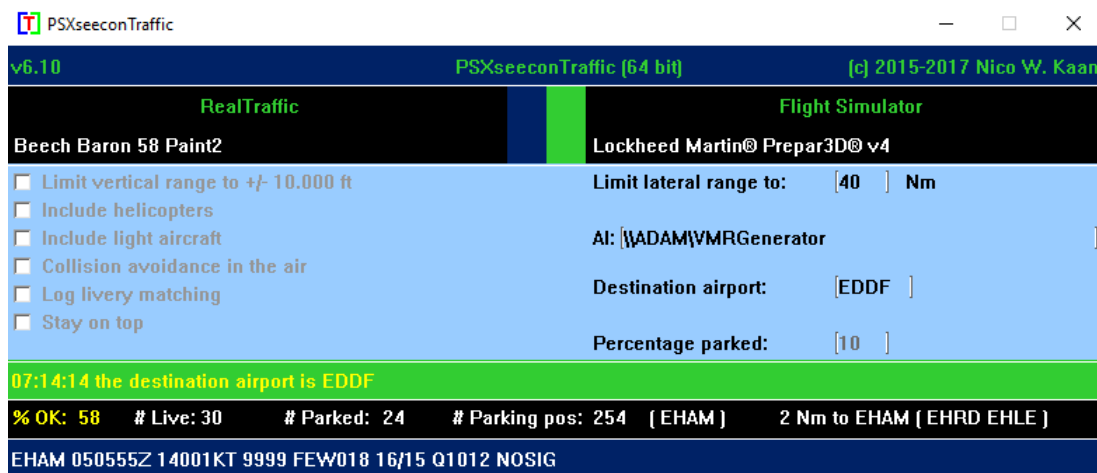
Make sure you are using **Windows** version **4.0.7** or later. For the Settings :



Select the values **exactly** as shown above!!

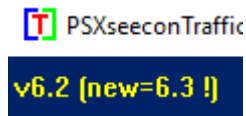
### 4.4 Start and configure PSXseeconTraffic

Out of the box, PSXseeconTraffic64 will start up like this:



The header line gives information about the version, program name (32/64 bit) and copyright. There is a checkbox to make the program always stay on top of your screen.

At each start-up PSXseeconTraffic will check if there is a new version available. If so the – normally- green version message in the main window will turn yellow, and the new version number will be indicated:



This is just a reminder, you have to download and install the new version yourself. Decimal version changes are just reminders. However, if a full version change is possible the program will halt with error 77, and you have to update first.

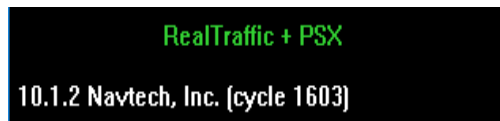
The black area below the header is divided into two sections:



The right section is always about your Flight Simulator (P3D or FSX), it shows in white font its version.

The left section depends on the version. In non-PSX version it is titled RealTraffic, it shows in white what aircraft you are flying in your Flight Simulator.

In the version for PSX the left section will be titled RealTraffic + PSX, and in white the Aerowinx PSX version is shown:



In the middle there are two adjacent coloured vertical status bars. The left one indicates the status of RealTraffic, the right one indicates the status of Flight Simulator.



If the right one is red, Flight Simulator is not connected. If the right one is yellow, Flight Simulator is connected but not running, maybe you are loading a flight or browsing in the menu items. If the left one is red: Real Traffic is not connected, or for the PSX version, PSX is not connected. If the left one is yellow: Real Traffic (or for the PSX version: PSX) is connected but PSXseeconTraffic is not yet connected to the Foreflight datastream provided by RealTraffic.

If the left one is **dark blue** and the right one **green**, the necessary programs for that version are successfully connected!

#### 4.5 Log file

During each session a file **PSXseeconTraffic.log** will be written in the same folder as PSXseeconTraffic.exe. The **previous** version will be renamed to **PSXseeconTraffic0.log**.

Of interest are the warning messages about liveries that could not be created in your Flight Simulator. You should remove these from your AI\_liveries.txt file, or better remove the respective AI aircraft in your Flight Simulator, by changing the aircraft.cfg file.

At the end of the log file a summary is given about the liveries used for live traffic.


## 5 Parameters

The light blue area in the middle contains the check and text boxes for parameters that you can set:

<input type="checkbox"/> Limit vertical range to +/- 10.000 ft	Limit lateral range to: [ 40 ] Nm
<input type="checkbox"/> Include helicopters	AI: { \ADAM\VMRGenerator
<input type="checkbox"/> Include light aircraft	Destination airport: [ EDDF ]
<input type="checkbox"/> Collision avoidance in the air	Percentage parked: [ 10 ]
<input type="checkbox"/> Log livery matching	
<input type="checkbox"/> Stay on top	

In the PSX version there is this extra line:

PSX hostaddress: [ 127.0.0.1 ]

 <p><b>Important!</b></p>	<p><b>How to enter a new value:</b></p> <p>Put the cursor in the textbox (indicated by the light square brackets) edit the value, and after editing <b>press</b> the <b>Enter</b> key in order to make the new value active!</p> <p>In the green information line feedback will be given about your new value.</p>
---	--

### 5.1 Limit vertical range (default off)

If the limited vertical checkbox is selected, then only aircraft within 10.000 feet difference in altitude with PSX/the user aircraft are taken into account.

### 5.2 Include helicopters (default off)

If include helicopters checkbox is selected, helicopters will be shown in your Simulator.

### 5.3 Include light aircraft (default off)

If include light aircraft checkbox is selected, light aircraft will be shown in your Simulator.

### 5.4 Collision avoidance in the air (default off)

In the air a "near collision" is defined if an AI aircraft is within 3 nm laterally and +/- 800 feet vertically from the user aircraft. See further the next section.

Note that collision avoidance on the **ground always** takes place:

It will check, each second, for the near collision of the PSX /user aircraft with a live aircraft. If so, the live aircraft will be removed for at least 30 seconds. It will return if there is no longer a near collision.

It will also check, each second, for the near collision of the PSX/user aircraft or a live aircraft with a parked aircraft. If so, the parked aircraft will be removed. It will not return during the session at this airport.

The "rules of thumb" for detecting a near collision at the ground are as follows:

- there are three categories of aircraft Light+Helicopters, Middle or Heavy;
- two aircraft types collide if the distance between their main gears is less than a value dependent on the aircraft categories of both parties.

### 5.5 Always stay on top

If checked the application will always stay on top of your screen.

### 5.6 Hostaddress (default 127.0.0.1 PSX version only)

The IP-address (hostaddress) of PSX. If PSX runs at another computer than the one running PSXseeconTraffic you have to give the IP-address of the PSX main server. If you have entered a valid IP-address PSXseeconTraffic will exit. Just re-start PSXseeconTraffic to let this new IP-address become active.

### 5.7 AI (default empty)

This is a textbox in which you can enter a **full path name** to your VMRGenerator folder. If you do that you do not need to copy the file AI\_Liveries.txt into the PSXseeconTraffic folder each time after you have run VMRGenerator.


It may be a full path at the same PC or at a networked PC. In case of networked, use two slashes followed by the PC name followed by a slash and then the name of the share.

### 5.8 Log livery matching (default off)

If checked information about each livery match (parked and live aircraft) is written to the log file. For the matching process of live aircraft see the Introduction chapter. For the matching process of parked aircraft see section 7.1.

### 5.9 Limit lateral range (default 40 nm)

All aircraft within a lateral range of **100 nm** can be selected for display in your Flight Simulator. The **default lateral** range is **40 nm**, you may change that number in the lateral range text box to values between 5 and 100.

	<p>If you are using FSUIPC make sure that the settings for "Limit TCAS range" on the Misc tab are equal to the value in PSXseeconTraffic.</p> <p>And don't use the FSUIPC Traffic limiter!</p>
---	--

### 5.10 Destination airport (default empty)

This is the ICAO code of your destination airport. Put the cursor in the textbox, type an ICAO code edit and **press Enter**. Information messages will give you feedback. Only destinations that are present in your parked folder (section 7.1) are allowed.

If your destination is within 40 NM, parked aircraft will be placed on your destination airport (if percentage parked > 0 of course).

If you fill in a new destination, and there are no parked aircraft at your origin, PSXseeconTraffic will show the # parking positions and percentage parked values of your destination airport file immediately.

If you fill in a new destination while you are still at your origin, the # parking positions and percentage parked values of your destination will be shown as soon as your origin airport is out of sight and parked aircraft have been removed.

So you have enough time to manually overrule the percentage (if needed), before parking of aircraft at your destination takes place.

#### **New in version 6.10!**

PSXseeconTraffic will automatically detect your Destination airport from a .PLN file exported –for instance- by Professional Flight Planner X (**PFPX**) into a subfolder **flightplans**.

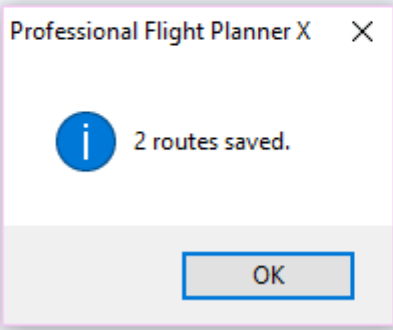
Create an empty subfolder first.

In order to let PFPX export a .pln file, you could perform the following 'trick': Use the Prepar3D v2 entry and give it a link to PSXseeconTraffic\flightplans, by browsing to it:

<input checked="" type="checkbox"/>	Prepar3d v2	D:\PSXseeconTraffic\flightplans
<input checked="" type="checkbox"/>	Prepar3d v3	<Documents>\Prepar3D v4 Files

If you now prepare a flightplan for your flight, it will not only be exported to Prepar3D v3/v4 Files but also to PSXseeconTraffic\flightplans!

Add-On	Location
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Prepar3d v2	D:\PSXseeconTraffic\flightplans
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Prepar3d v3	<Documents>\Prepar3D v4 Files

The screenshot shows a dialog box titled "Professional Flight Planner X" with a close button (X) in the top right corner. In the center, there is a blue information icon (i) followed by the text "2 routes saved.". At the bottom of the dialog box, there is an "OK" button.

PSXseeconTraffic will take the latest (in time) created .PLN file with a DepartureID equal to your actual origin airport.

Other tools that provide a .PLN file –such as ProATC- maybe used too.

### 5.11 Percentage parked (default 30)

The percentage parked value. This defines, on average, how many of the available parking positions at an airport will get a parked aircraft. These parking positions are drawn randomly such that on average the specified percentage of the parking positions will have an aircraft (see section 7.1).

This value will be set to the airport specific value automatically, if an airport file contains a setting for parameter PERCENTAGE\_PARKED, see section 7.1

Only for destination airports you may change this value manually, in the time frame between PSXseeconTraffic showing the percentage in the destination airport file, and when parking starts!



## 6 Messages

### 6.1 Info line

In the green box below the parameters, information messages in yellow font, may appear:

09:59:34 looking up QNH for airport EHAM

### 6.2 Status line

The black box, below the green box, gives the following information:

#### 6.2.1 %OK

Shows how successful PSXseeconTraffic is in matching the correct liveries for the live aircraft. Above 80% it is shown in green, between 50% and 79% it is shown in Yellow, and below 50% it is shown in red.

#### 6.2.2 # Live Aircraft

Shown is the number of **live aircraft** injected and controlled by PSXseeconTraffic in your Flight Simulator. Note that this number includes the (up-coming) ones that are in the 30 seconds buffer, so it is not always the number of aircraft that you see (immediately) in your flight simulator.

#### 6.2.3 # Parked Aircraft

Shown is the number of **parked** aircraft at your origin or for your destination, in your Flight Simulator.

This value may decrease while PSXseeconTraffic removes a parked aircraft when a collision with the user aircraft or a live aircraft is about to happen.

This value may increase when a live aircraft disappears from the RealTraffic stream while it is at a parking position (probably arriving at this position). PSXseeconTraffic will position it correctly at the parking position and it'll stay there as a parked aircraft, until another live aircraft claims this position.

#### 6.2.4 # Parking positions ( Airport )

Shows the number of parking positions available at either the origin airport (where you start your flight) or at the destination airport. The airport identifier is shown between parenthesis.

#### 6.2.5 Close to

Shows max three airports that the user aircraft is close to. This info gets updated every 10 minutes.

### 6.3 Warning / Error messages line

In the dark blue (bottom) box of the window, warning messages, in red font, may appear:

PSXseeconTraffic (64 bit), for any user aircraft in Prepar3D v4

*Only in the not for PSX version:*

METAR messages, in white font, will appear like this:

EHAM 111455Z 11005KT 070V160 CAVOK 13/04 Q1020 NOSIG

The dark blue box turns red if an error messages in yellow appears, for example:

**51: File AI\_liveries.txt not found**

Error messages are always **severe**. You have to exit PSXseeconTraffic yourself with the Windows X button.

The error messages (*and what to do*) are:

#	Error Message (and what to do)
51	File AI_liveries.txt not found <i>Create this file, see section 3.1, and either put it in the PSXseeconTraffic folder or make a link to it (see section 5.7)</i>
52	AI_liveries.txt does not contain liveries <i>Make sure you have AI aircraft installed, and create such a file, see section 3.1.</i>
77	New full version is available, update first please. <i>Update to the latest version first, please.</i>

Aerowinx PSX version only:

17	Connect to TCP/IP failure, <hostaddress>, <port> <i>A Fire Wall might block the connection to PSXSeeconTraffic request. Allow PSXseeconTraffic access.</i>
18	Connection attempt to PSX timed out <i>Is your hostaddress value correct (see section 5.1)?</i>
19	PSX not detected <i>Is PSX running?</i>
20	Bind to RealTraffic failed. <i>Is Aerowinx PSX running? Are you running the non-PSX version? Use a ...X.exe version.</i>

## 7 Support Files

### 7.1 Airport files in folder parked

In order to get rid of empty airports PSXseecontraffic provides a mechanism to park aircraft at parking positions. Sub folder **parked** contains the files, with names as (airport) ICAO code.txt, that specify parking positions.

At my website you can download a folder **parked** with a large number of airports. However, you can generate all files for your airports with my **ParkPosGenerator** tool (see section 3.3). These files can be used directly or you can manually make them even better fit to your liking.

With “\_\_\_” (three underscores) you can specify a wild card for the airline, so PSXseeconTraffic may take any airline available. With the (non-ICAO) existing code **PVT** you specify that you only want private (non airline) aircraft at this position.

A line that starts with a semicolon is treated as a comment.

When you start a session at the ground at an (origin) airport for which there are parking positions defined, PSXseeconTraffic will generate parked aircraft. Live traffic will appear after the parked aircraft have been generated.

When you fly away from the origin airport, the parked aircraft will be removed when you are greater than 5 nm from the airport.

When a destination airport comes into sight (40 nm or closer), PSXseeconTraffic will place aircraft at the specified parking positions of the new airport. During the allocation of parked airport, live traffic is placed on hold in order to prevent SimConnect errors. *This is a temporary solution until we have found the cause of these SimConnect errors.*

How many parking positions will get a parked aircraft depends on the percentage parked value. If you do not want parked aircraft, just specify 0% percentage parked.

The **matching** is slightly different from the matching for live aircraft, while if no suitable livery is found, the gate will not get a parked aircraft.

The call sign of a parked aircraft is **ICAO Airlinecode + sequence number + \_**

In an airport file you may also specify a value for the following parameter:

**PERCENTAGE\_PARKED=nn**

You may put this line anywhere in the file. Airport files generated by the ParkPosGenerator (see section 3.3) already contain such a line.

If you start PSXseeconTraffic at an airport for which an airport file exists in folder parked with this parameter, this value will be taken into account immediately, instead of the current generic one.

Other advantages of having parking positions defined for an airport is that it makes it possible to place departing live traffic at parking positions at the right position with the right heading and to “promote” a live aircraft ending its session at a parking position to a parked aircraft instead of having it disappear. So even with percentage\_parked=0 you may see some parked aircraft.

## 8 Live aircraft animations

PSXseecontraffic may control landing gear, throttles, spoilers, flaps and all lights of live aircraft. Of course only for those aircraft that support the respective SimConnect events!

### 8.1 Landing gear

The landing gear is retracted about three seconds after lift-off. The landing gear is extended if the aircraft is landing (lowering in height) and less than 2000 feet above the ground.

### 8.2 Throttles

The engines are switched off when positioned at a gate. The throttles are set to idle at the ground, to full when taking off and in the air, and to half when landing. This has effect on the sound coming from the AI aircraft (if sound is configured for the AI aircraft in your Sim).

### 8.3 Spoilers

The spoilers will go up at touch down; the spoilers go back to normal when speed is low enough or the aircraft has vacated the runway.

### 8.4 Flaps

The flaps are set to twenty at the ground for departing aircraft and to up for arriving aircraft and when in the air. During the landing phase the flaps will go gradually to flaps down. Flaps will go up when the aircraft vacates the landing runway.

### 8.5 Strobes

The strobes are set to on if an aircraft is taking-off; the strobes are set back to normal when the aircraft has landed and vacated the runway.

### 8.6 Landing Lights

Landing lights are on below 10.000 feet, and off when the aircraft has landed and vacated the runway.

### 8.7 Cabin Lights, Navigation Lights and Beacon

Cabin lights, Navigation lights and Beacon are always on.

### 8.8 Taxi, Logo and Recognition Lights

Taxi lights are on at the ground.

Logo lights are always on below 10.000 feet (although lots of AI aircraft also put Logo Lights on if cabin lights are on ...).

Recognition lights are always on below 10.000 feet.

*[For the parked aircraft: cabin lights and logo lights are on (if not parked at a ramp), engines are shut down, spoilers set to normal and flaps are up.]*

## 9 Livery matching proces

From the information coming from RealTraffic:

```
BRG  Dist  C/S  (Type Reg)  From  To
128* 0.1NM CAW456 ( B738 ZS-ZWA) CPT -> HLA
183* 0.9NM   N( BE20 ZS-NWK) CPT ->
117* 3.6NM SAA316 ( A319 ZS-SFG) CPT -> JNB
26* 21.9NM SAA307 ( A320 ZS-SZA) JNB -> CPT
69* 27.5NM   ( B738 ZS-SJT) CPT ->
96* 33.3NM SA8622 ( RJ85 ZS-SSK) GRJ -> CPT
341* 62.7NM   (      ) ->
```

the following items are important for livery matching:

RealTraffic info	Role in matching
<b>Type</b>	Determines the (ICAO) type of the livery.  If this field is empty, the aircraft will always be skipped.
<b>Reg</b>	The registration code uniquely identifies a livery (type + paint).  If this field is empty and field C/S is empty, the aircraft will be skipped.
<b>C/S</b>	From the call sign the <b>ICAO airline code</b> will be derived. If 3 letters followed by at least one digit is not found it will search for two letters (IATA) followed by at least one digit and two other characters.  The airline code determines the "paint" of the livery.  If this field is empty and the registration code is not empty, the aircraft is given the call sign <b>UFO&lt;sequence number&gt;</b> .  If this field is empty and the registration field is empty, the aircraft will be skipped.

With this information a livery for a live aircraft is searched in a best effort matching process in –up to- seven steps:

Step	Match	Indicated by
1	Registration code	=== r
2	ICAO airline code and ICAO aircraft type	===
3	airline and similar type(-s)	=s=
4	Generic Boeing, Airbus, Embraer, Bombardier or ATR livery and type. Generic (fabric) livery without an airline paint. In order to get these liveries found, use BOE, AIB, EMB, BBA or AED as airline code in your [fltsim.x] section as parking_codes= value.	=g=
5	random airline livery and type	=x=
6	random airline livery and similar type(-s)	=X=
7	a default aircraft livery, chosen out of a number of liveries from the same aircraft category (Heavy, Middle, Light or Helicopter)	=d=

**For UFO's** : The missing call sign information may become available in RealTraffic later. Dependent on whether the UFO livery was generated based upon a registration code or not two things may happen. If it was registration based, the same livery will be created in the Sim again, but now with the correct call sign. If it was not registration based, a new matching process will take place based on the new call sign; the outcome will be created in the Sim.