

Smartcopilot is an x-plane plugin for pilots who want to fly in shared cockpit.

**The flight in shared cockpit requires rigor** in the flight preparation, in x-plane settings and configurations and tools used.

To establish a good connection and be quickly operational, Smartcopilot requires that **the general configuration (aircraft, scenes, plugins, addons ...) be identical between the two pilots.**

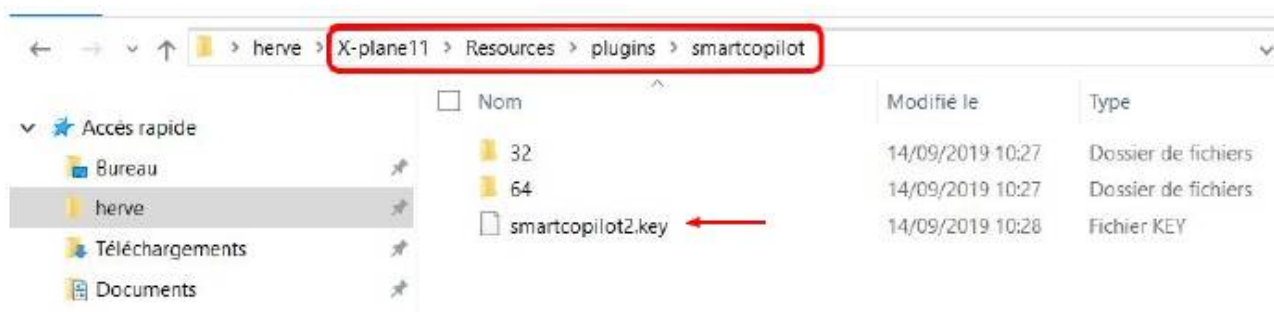
This tutorial offers you in the first part an introduction to its installation, configuration and startup and in a second part tips to fly on IVAO and VATSIM, a checklist of prerequisites and verifications to perform.

### Plugin installation :

After downloading the [latest version of the plugin](#), unzip the archive and place the **Smartcopilot** folder in your plugin directory >>> "%userprofile%\Resources\plugins\".

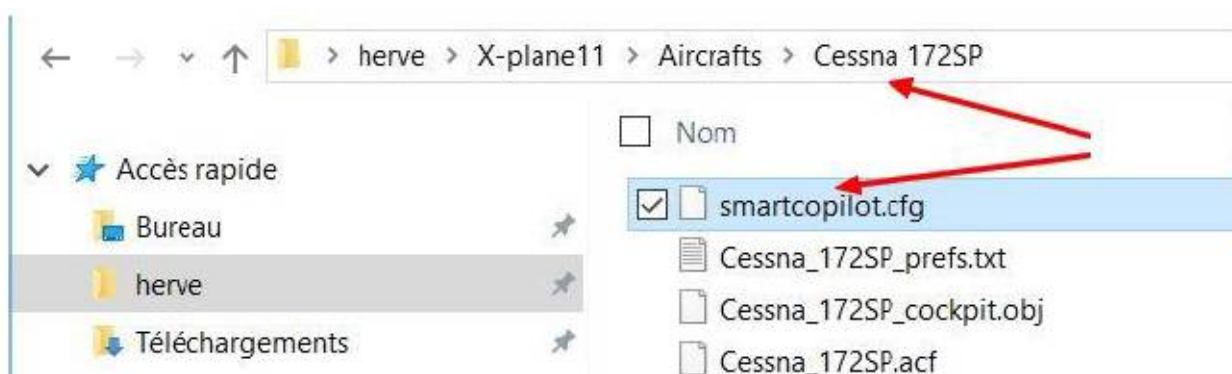
### Installation of the licence :

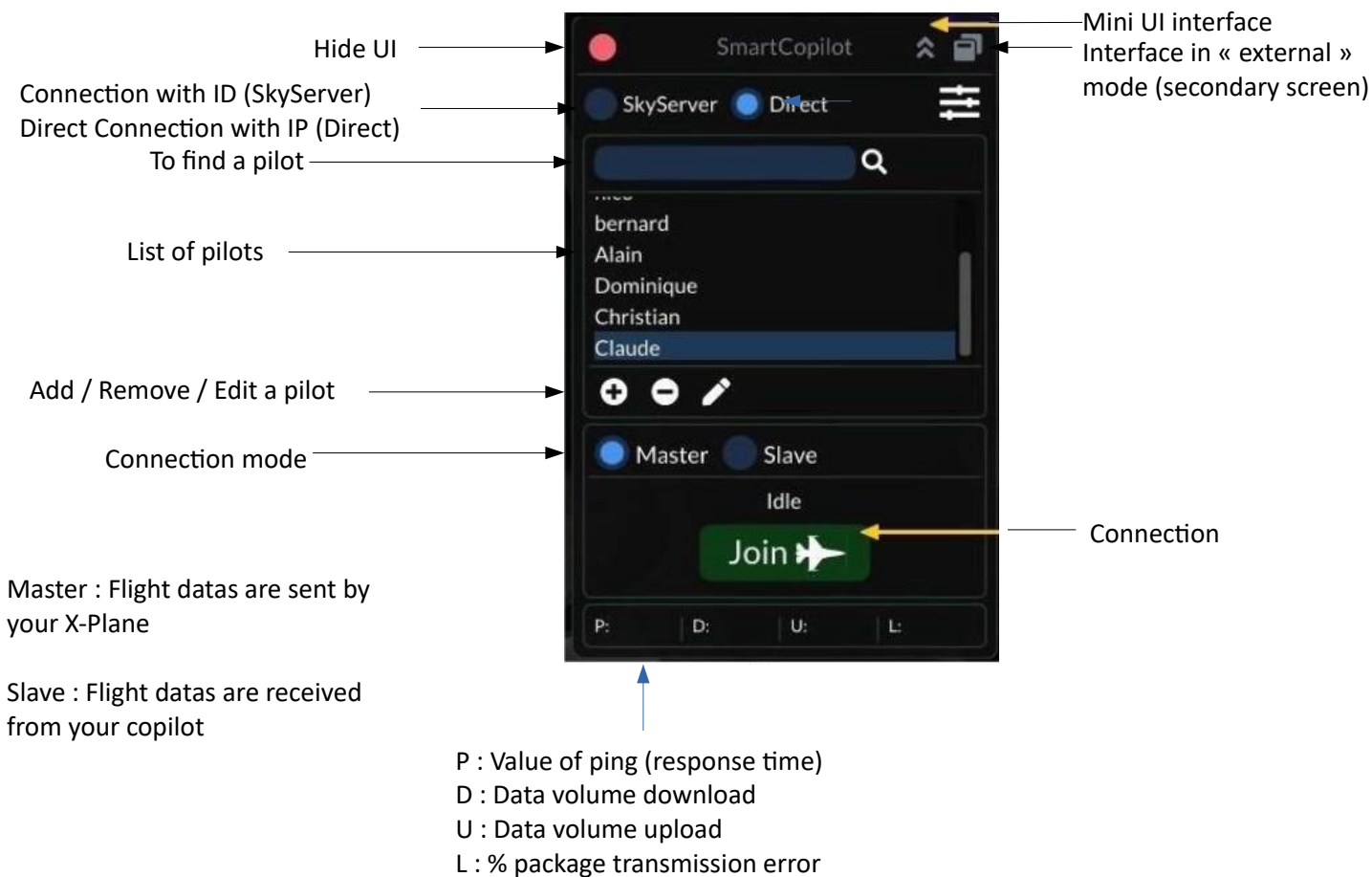
After purchasing the license you get a **Smartcopilot2.key**. You will copy it in the **Smartcopilot** folder.



**Aircraft configuration** available here >>>: <https://sky4crew.com/download/>

Just copy the aircraft's config file into the root of the plan, for example for the C172:





## Connection type :

- SkyServer: All you need is to get your partner connection ID, paste it in the field, and press Join.

Connection ID is generated randomly on every X-Plane start

- Direct: The "Slave" pilot must give his external IP to the Master, it can be retrieved for example on this site

<http://www.mon-ip.com/>

## Connection mode :

- Master: The pilot sends the flight datas. The pilot who has the best upload will be the master. The value of the upload can be retrieved for example on this site <https://www.speedtest.net/>

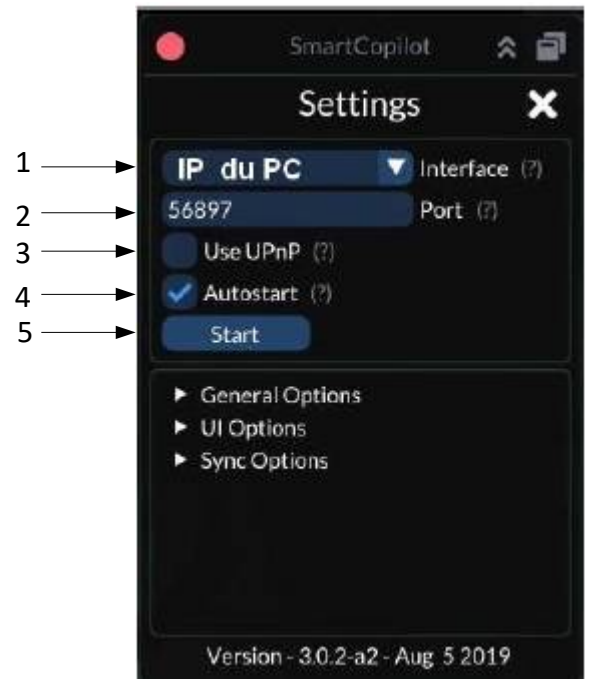
- Slave: the pilot receives the datas of the flight.

**Note: Master and Slave modes do not define who plays the role of flying pilot (PF) and who plays the role of pilot monitoring (PM). Roles can be swapped at any time during the flight.**

## Configuration and start :

- 1- LAN IP of the PC, the drop-down menu offers you this IP
- 2- Port used to communicate on the internet, the port must be forwarding in the NAT / PAT table of the box.
- 3- Use UPnP option allows, if the box manages it, to do without port forwarding. Useful if you don't know what the NAT / PAT table is.
- 4- Autostart: if checked active Smartcopilot when starting X-plane.
- 5- Start : start SmartCopilot.

After started the button displays "Stop"



## Settings :

1: Sending data to the Sky4crew server 'for more info click on 'Read more'.

### UI options :

2: Display the interface when X-Plane starts.

3: Leave unchecked. Hide smartocpilot Window.

4: Transparency effect of the mini UI.

## Sync Options :

1- Sync sqwak : Enable transponder synchronisation

2- Weather data:

Checked = The master sends the weather to the slave

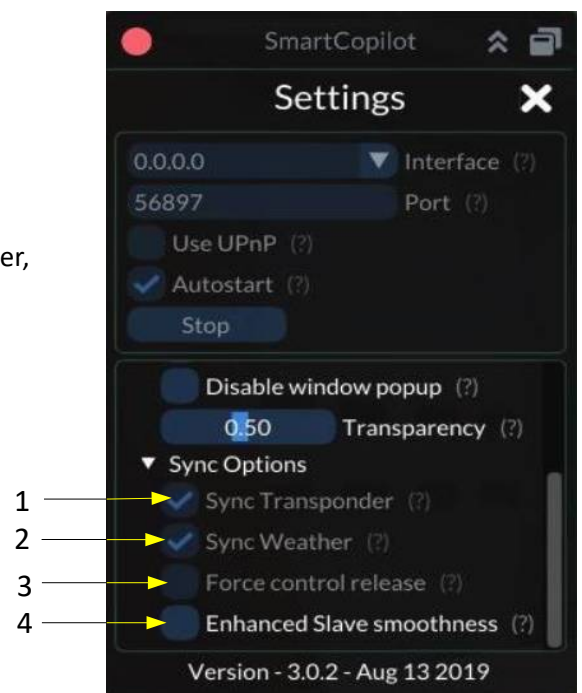
Unchecked = The master and the slave generate their own weather, they will use the same weather injector, useful in case of low bandwidth.

3- Force control release:

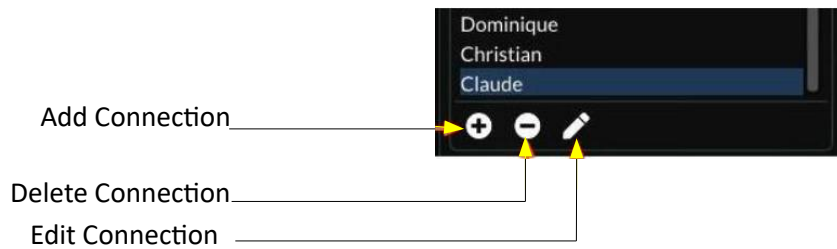
Checked = switch of the controls between pilots does not require the permission of the pilot who has them.

Unchecked = the switch of controls between pilots requires the authorisation of the pilot who has them.

4- Don't check, not recommended (read the info).

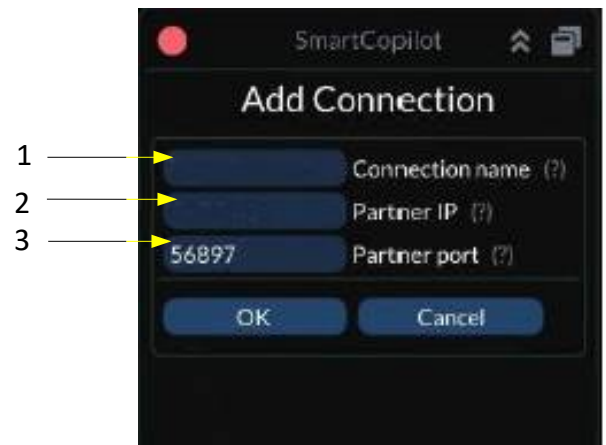


## Creating/modifying pilot connection :

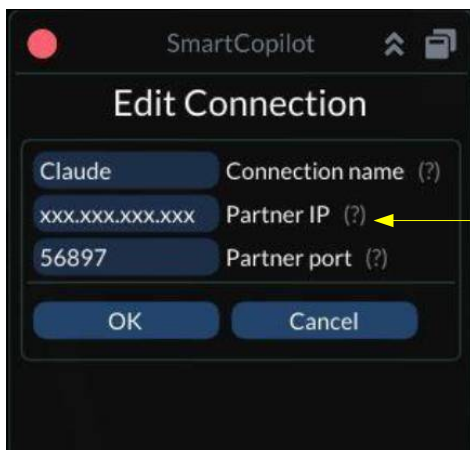


## Add Connection :

- 1- Connection name : Name / first name / Callsign...
- 2- Pilot's IP Wan address
- 3- Port used, only change knowingly.



## Edit Connection :



Check IP and modify if necessary of your partner.

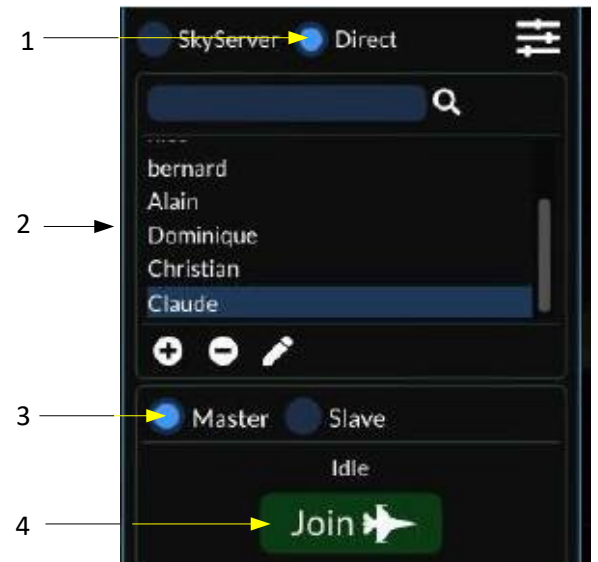
## Delete Connection :

the deletion is **IMMEDIATE** without confirmation.

## Connection :

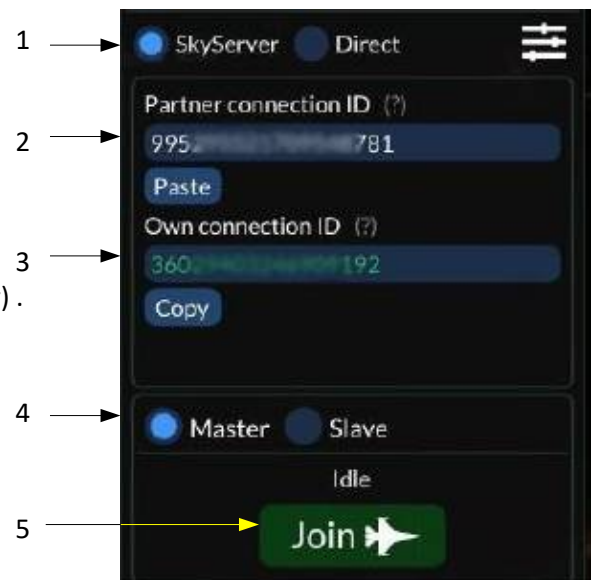
**Direct** (with the pilto's IP WAN adress) :

- 1- Tick Direct
- 2- Select your copilot
- 3- Tick Master (recommanded)
- 4- Click on Join



**SkyServer** (with ID) :

- 1- Tick SkyServer
- 2- Paste the ID given by your co-pilot with the paste button.
- 3- Contains your ID. Copy allows you to copy / paste to send it via Teamspeak 3 for example (Only the slave give his ID to the Master) .
- 4- Check Master (recommanded)
- 5- Click on Join.



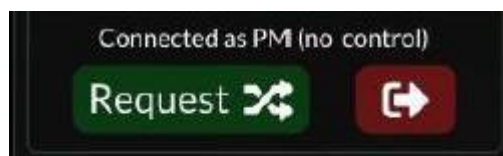
The copilot must accept the connection.


## Take controls / disconnection :

The Request button indicates that you don't have the commands. Clicking on « Request » allows you to ask them.

- If the "Force control release" option, in settings, is not ticked, the request must be validated by the pilot flying by clicking on « Release ».

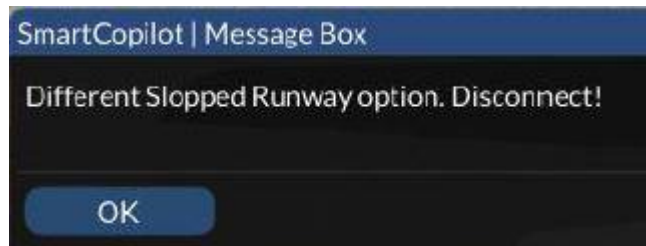
- If the "Force control release" option, in settings, is ticked, the flight controls are immediately released.



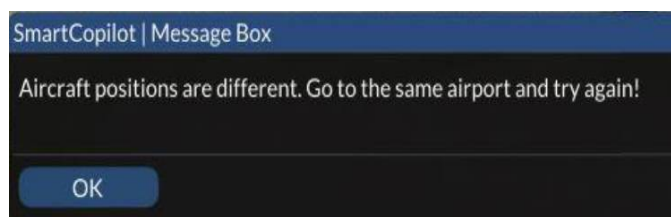
The button  disconnect smartcopilot.

## Error messages at connection :

The box "Runways follow terrain contours" is tick in one side but not in the other one. In this case one of the two pilots changes this settings (general tab in X-Plane Settings) to take effect X-Plane must be restarted.



The position of the aircrafts is different.



## Specific configuration :

### The smartcopilot.cfg file :

It is essential for the operation of Smartcopilot.

Only the Master needs it.

Depending on the aircraft, a read me is inside the configuration file archive, read it, otherwise you expose yourself to malfunctions.

The configuration file will copied in the root of the aircraft.

### Flight on the IVAO network :

In shared cockpit mode, on IVAO connection, the two aircrafts are superimposed.

To avoid this, you need to change the X-IvAp.conf file in the directory of the X-IvAp Resources (Resources\plugins\X-IvAp Resources) as show below.

Example of VP7 and VP07 x-ivap.conf flies flying in shared cockpit :

VP7 pilot	VP07 pilot
CALLSIGN=VP7	CALLSIGN=VP07
[CSL] PILOT1=VP07	[CSL] PILOT1=VP7

In the case of two crews using two planes in a shared cockpit. It is possible to "hide" one aircraft to other crew, each pilot must add PILOT2 line with the callsign of one of the two pilots of the other crew.  
 For example the crew VP7/VP07 flying beside the crew ARF6/ARF06. The x-ivap.conf file should look like this :

VP7 pilot	VP07 pilot	ARF6 pilot	ARF06 pilot
CALLSIGN=VP7	CALLSIGN=VP07	CALLSIGN=ARF6	CALLSIGN=ARF06
[CSL] PILOT1=VP07	[CSL] PILOT1=VP7	[CSL] PILOT1=ARF06	[CSL] PILOT1=ARF6
PILOT2=ARF6	PILOT2=ARF6	PILOT2=VP7	PILOT2=VP7

**Flight on the VATSIM network :**

The Swift app natively manages shared cockpit, so there is no file change to make.

**Checks to be done before starting X-plane and connecting to Smartcopilot :**

Action	Informations	Check
<b>CONFIGURATION REQUIRED BEFORE START X-PLANE</b>		
X-PLANE VERSION	Latest stable version	
ADDITIONAL SCENERIES ACTIVATED	Same sceneries on the both side	
INSTALLED PLUGINS	Stable version of smartcopilot	
	Better Pushback	
	Avoid eye candy plugins	
Runways follow terrain contours	In agreement between the pilots	
PLANE USED	Same version	
	Check if additional aircraft's addon is similar (sound, texture, ..)	
	Check smartcopilot.cfg file on the master	
<b>OPTIONAL CONFIGURATION BEFORE START X-PLANE</b>		
IVA0 flight	Set Callsigns	
	Edit X-ivap.conf file (see above)	
If using a flight plan file	The content of the FMS directory must be the same	
	For the FF A320 same file cort.in	
<b>X-PLANE SETTINGS</b>		
Cold and dark engine or started	Common choice between pilots	
Time	Will be the Master time	
Same airport, same place	Defined jointly by the pilots	
<b>CONFIGURATION BEFORE CONNECTING SMARTCOPILOT</b>		
Checking controls	No axis for spoilers, choose buttons	

	Specific configurations (read the read me file contained in the Smartcopilot.zip)	
Specific configuration	For the 737 ZIBO set your tablet in a similar way.	
FUEL, PAX, CARGO	Depend of the aircraft	
<b>IVAO CONFIGURATION</b>		
Is your X-lvap.conf file modified with different callsigns?	If this has not been done, quit X-Plane, modify the file and restart X-Plane.	
Before IVAO connection	Check the flight plan with your partner	
	Write in RMK/ shared cockpit callsign pilot / callsign radio	
	Send flight plan	
	Verify sqwak in standby position	
IVAO connection		
Taxi holding before line up	ONLY the pilot "radio" switches his sqwak in Charlie mode	
	The PF stay the sqwak in standby	