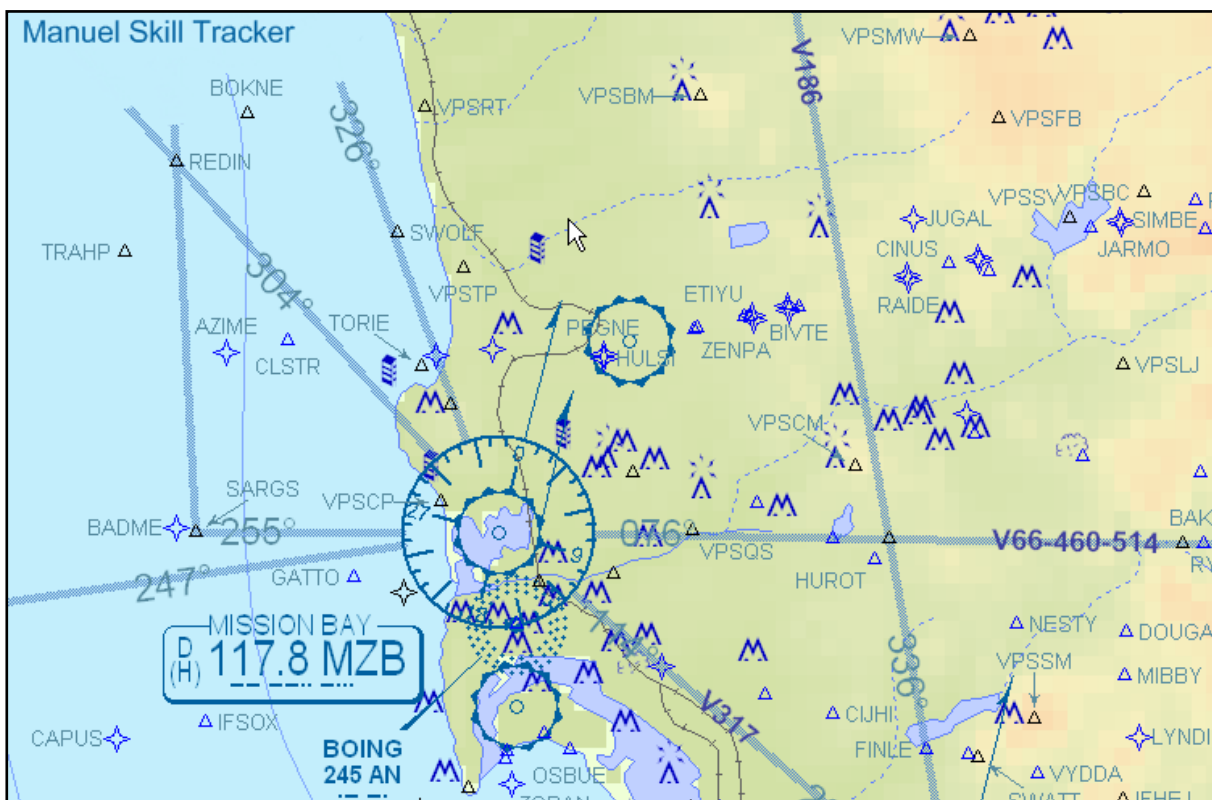


IVAO Skill Tracker Manual

English Version

Manual: version 3.21 – French Division



Note: Program version number that appears in the pictures of this document may not reflect the latest available release.

SKILL TRACKER

IVAO France, 2017

Skill Tracker is a tool that allows, via the FSUIPC or XPUIPC modules, an automated, precise and easy way of recording many flight parameters for IVAO organized tours. This does not require any user action. The recorded parameters may be handled in a text or graphical manner using a php web interface by the tour validators in order to analyze any tour leg. Skill Tracker is creating a new challenge on IVAO, since pilots must reach an unprecedented level of realism when flying any tour. The program contains sufficient help and information during the flight; nevertheless, we recommend that you read through the provided manual before using it.

1 – INSTALLATION

1.1 – Installable version

The install package ([SkillTracker_setup.exe](http://www.ivoa.fr/dep/SkillTracker2/SkillTracker_setup.exe)) can be downloaded at the following URL: http://www.ivoa.fr/dep/SkillTracker2/SkillTracker_setup.exe



This executable assistant will install the main program (SkillTracker.exe) in any folder you will choose, copy or update some required system files and create an uninstall key.

1.2 – Portable version

Portable version can be downloaded at the following URL:

http://www.iviao.fr/dep/SkillTracker2/SkillTracker_portable.zip

Archive content has to be uncompressed in any folder of your choice. The main recording executable program is **SkillTracker_portable.exe**.

1.3 – Flight reports

By default, all flight reports will be saved in the [reports] subfolder if this folder is not write-protected or in the [ProgramData\Skilltracker] folder otherwise; destination folder can be changed (see chapter 5).

1.4 – Pre-requisites

Skill Tracker works with **Windows XP, Vista, Windows 7,8 and 10** (x32 and x64).

Skill tracker works with **FS9, FSX, FSX-SE, P3Dv1-4 and X-Plane 9,10 and 11**.

For FS9, FSX and P3D, **FSUIPC** module must be installed on the system where Skill Tracker will be running (this is done automatically when Ivap for FS9 and FSX is installed although the FSUIPC version may differ). Skill tracker requires at least FSUIPC version **3.99** for FS9 and version **4.942** for FSX (P3Dv3-4 require more recent versions anyway). Latest FSUIPC versions are freely available on [Pete Dowson site](#). Using Skill Tracker with X-Plane requires XPUIPC module [version 2.0.0.0](#).

2 – SERVER COMMUNICATION

Skill Tracker picks up several pieces of information on different servers and requires an active Internet connection during the overall process (an Internet connection will be automatically established at program start-up if necessary).

The following data will be collected:

- *availability for a software update*, should the installed version be out of date, an upgrade will be proposed (the program will then restart),
- *available tour and leg information*,
- *real date and Zulu time* via a NTP time server access,
- departure and arrival *airport meteorological data* (METAR),
- some *IVAO data* (VID, flight plan).

3 – RECORDED PARAMETERS

Skill Tracker records selectively numerous parameters depending on the current flight phase:

- *General simulator parameters*: crash detection, use of slew or accelerated mode, pause, overspeed, fuel change during flight, IvAp parameters,

- *Aircraft parameters*: aircraft type and configuration,
- *Flight parameters*: sim and system time, flight plan, current altitude (AMSL and AGL), IAS, true and ground speeds, Vz, current gross weight, geographical position, headings, fuel quantity, altimeter setting, squawk mode, autopilot settings, cruise and approach profiles,
- *Meteorological parameters*: departure and arrival METAR, winds, visibility, temperature, cloud coverage, atmospheric pressure.

Sampling frequency depends on the flight phase (1 second to a few minutes). The time needed to process each sample does not exceed 10-20 ms and the program does not use more than 1% of the processor time and 3-4 Mo in memory, hence without significant impact on Flight Simulator frame rate.

Flight phase detection is automatic and data processing is adapted to each of them (taxiing, take-off, cruise, final approach, touchdown, taxi after landing).

4 – PRACTICAL USE

4.1 – Simulator and IvAp options (FS9, FSX and P3D only)

Skill tracker is designed to record flight parameters in a realistic simulation environment. Hence it requires that you configure your Ivap and simulator accordingly. These actions are required before any recording, the software will refuse to start recording if such options are not properly defined.

Any change after the recording has started will be detected and will invalidate the flight report.

FS/P3D parameters must be set as follows:

- ➔ *Aircraft menu / Realism Settings*: **Detect crashes and damage** **ticked**,
- ➔ *Aircraft menu / Realism Settings*: **Aircraft stress causes damage** **ticked** (we recommend that you untick the “Allow collisions with other aircrafts” check box),
- ➔ *Aircraft menu / Realism Settings*: **Unlimited fuel** **unticked**,
- ➔ *Aircraft menu / Realism Settings / Flight model*: **General: medium to realistic** (cursor above 50%),
- ➔ *Aircraft menu / Realism Settings / Flight model*: **Crash tolerance: full realistic** (cursor fully on the right),
- ➔ *Options / Settings / General*: **Pause on task switch** **unticked**.

Ivap/FSUIPC communication must also be activated via the Ivap configuration tool (Read/write panel/cockpit offsets ticked for FS9, 3rd Party Tools / Enable Ivap <-> FSUIPC SDK ticked for FSX).

If you change any of these options, you will have to close and restart Flight simulator before recording.

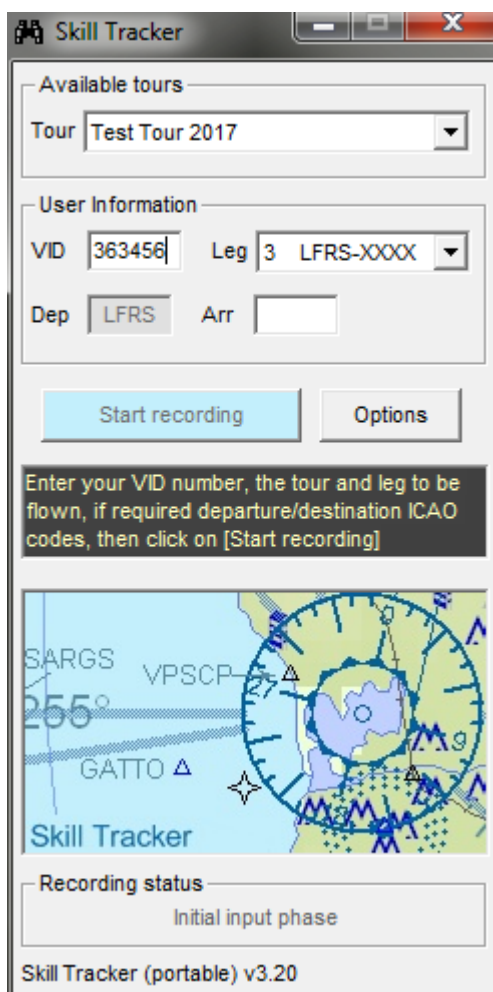
4.2 – Starting Skill Tracker

Once Flight simulator is started, start Skill Tracker (exe file).

When Skill Tracker starts it will do the following tasks. Should one of them fails, an error message will be provided:

- Check Internet connectivity,
- Software upgrade: should an updated version be detected, it will be installed automatically and the program will be restarted,
- System date and hour check and update,
- Download of available tours and legs that will be presented in the program main dialog boxes,

Once these actions are completed, Skill Tracker will wait until you provide the necessary information (VID number, tour and leg to be flown, departure/destination ICAO codes if required). The [Start Recording] button will become active after all the required information has been entered. Note that the VID number will be automatically stored for future use.



[This picture may not correspond to the last program version]

Before recording, please ensure the following:

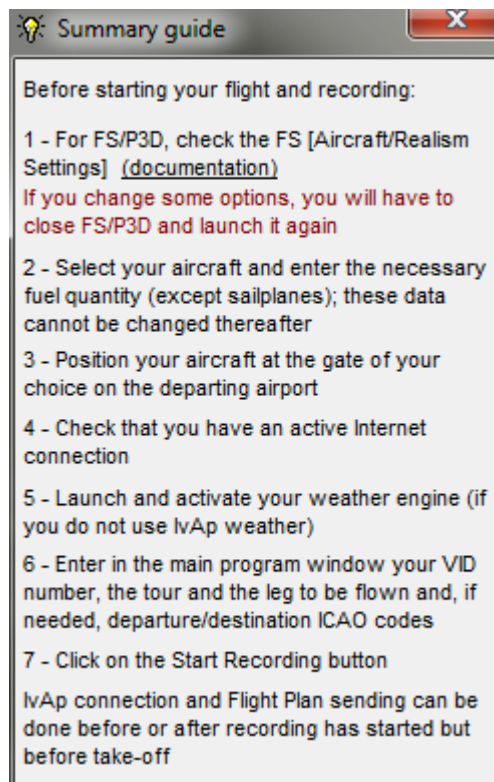
- you have selected the aircraft you want to use for this flight and you have sufficient fuel (except for sailplanes). You will not be able to modify, change and assess any of these information after the recording has started. Should you use a FMS or FMC, it will require fuel quantity and Zero Fuel Weight, hence do not forget to write down these values at due time,
- you must be at the stand or parking of the departure airfield (in practice, you must be located within 2.5 NM from the airport reference point),
- weather engine is active and latest meteorological data have been acquired (weather engine choice is up to you).

When you click on the [Start recording] button, the program will check the following elements in the following order ; should one of them fails it will stop and prompt you with a message:

- check of Internet connectivity,
- flight Simulator activity,
- FSUIPC/XPUIPC availability and version, sim version, valid data acquisition through the FSUIPC/XPUIPC interface,
- current sim realism options and IvAp configuration (FS,P3D),
- aircraft type and parameters,
- departure and arrival airfields and VID,
- departure position,
- meteorological data at departure airfield.

Until the [Start Recording] button has been pressed, the program will show you a **summary guide**, that is the list of actions to be performed before starting and recording your flight. As soon as the recording has been triggered, this screen will close. If needed, help display can be disabled (see Options, chapter 5)

Also note that you can refer to the full documentation of the software (this file) by clicking the underlined link [see documentation].



Skill Tracker is automatically recording the take-off and landing times as well as at close intervals during cruise (both system and simulator times) ; some of the meteorological parameters also refer to current date/time.

Therefore, we do recommend that *you check your system time* before starting a leg with this tool. Skill Tracker will check your system time against a NTP server at start-up and will synchronize if he detects a significant difference (more than one minute). You are obviously free to use a different simulator time (for example if you want to fly at daytime) but this data will be recorded.

Realistic meteorological conditions are a key element of the events. Skill Tracker will automatically record the current real and simulated environmental conditions for both departure and arrival whatever the weather tool you are using (IvAp, sim, etc).

You will be able to change the current interface language (see Options, chapter 5); upon start-up, the active language will be selected based on your Windows parameters.

4.3 – Flight progress and recording

When the recording has started, Skill Tracker will work in the background and will not influence your flying and the way you use to do it. You can, if you want, minimize the application in the taskbar; this will have no effect on the recording process.

IvAp connection and flight plan sending may be done before or after the recording has started.

During the flight, **some actions or events may stop the recording process** with or without creating a log file. Please read carefully the following:

- ✈ Closing the program before the end of recording ; a confirmation will be required (no report generated),
- ✈ Closing simulator before the end of the recording,
- ✈ Use of **slew mode**; please note that you can still use Slew mode before takeoff as well as on departure for sailplanes,
- ✈ Use of **accelerated or slow down mode** (different from x1),
- ✈ **Fuel change** (after recording has started, except for sailplanes or if inactivated in program options),
- ✈ **Simulator crash**,
- ✈ **Landing outside destination airport** (diversion or off runway landing) ; in such a case a report will still be generated.

Use of pause mode (sometimes triggered by 3rd party tools) is allowed but will be notified by the program.

4.4 – Arrival and end of recording

One minute after landing on the destination airfield, and if no specific event has occurred, the recording process will stop. In case a missed approach is executed, the software will keep the recording process active and the recording will stop after the last approach phase.

The program will notify the end of the recording process and will *display the name of the report file in the frame below the main window*.

4.5 – Flight report

After the recording process has ended, the leg report will be stored in **the directory you specified in the program options** (by default, it is the [reports] subfolder of the program installation directory).

The filename will be based on your VID, the tour name and the recorded leg: **VID_Tour name_Leg.rpt.gz** (ex 141440_PilotSkill2017_Leg01.rpt.gz)

The report file will be compressed by the Gzip.exe utility.

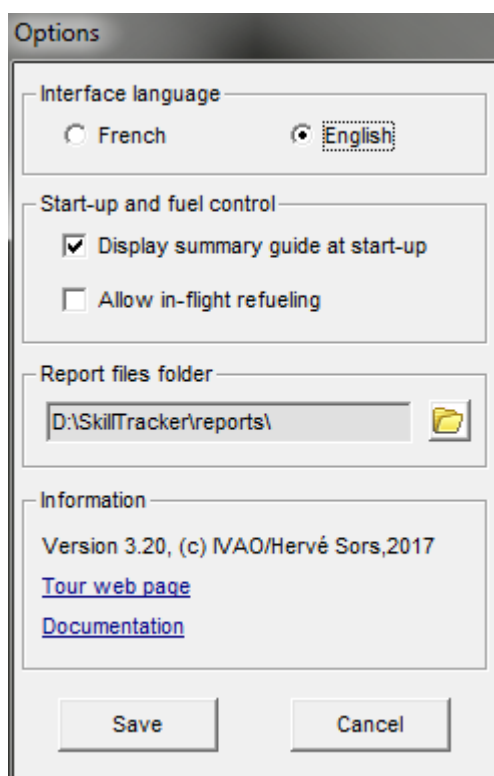
Please note that should an existing report with the same name be found in the destination directory, it will be automatically overwritten.

4.6 – Flight report forwarding

Fill in all the fields as for any tour, add the report file to be uploaded and the report will be spawned for validation. **Do not uncompress or modify the report file.**

5 – OPTIONS

You can change some Skill Tracker options:



[This picture may not correspond to the last program version]

- ✈ *Interface language (French or English),*
- ✈ *Summary guide display at start-up,*
- ✈ *Allow in-flight refueling (only valid for current session)*
- ✈ *Flight reports destination folder you must set with the explorer (folder button).*

These options are saved (except in-flight refueling) and will be restored at next program start-up.

The [Information] frame gives you access to the information web page of the selected tour as well as to the software documentation (this file).

6 – DEBUG MODE

6.1 – Anomaly during or at the end of the recording process

In case you experience an anomaly in the connection or recording processes, the software author or the tour organizers may ask you to run the Skill Tracker software in “simple debug mode”. **Do not use this mode for normal use.**

So as to activate the debug mode, you must:

- ✈ Either launch the SkillTracker executable from a command line or a shortcut using the /debug modifier [e.g. entering SkillTracker.exe /debug or SkillTracker_portable.exe /debug],
- ✈ Or, before executing the program, edit the [SkillTracker.cfg] file (that is located in the install directory for the portable software or in the C:\Users\[Yourname]\AppData\Roaming\SkillTracker folder for the installable version) and change the [debug=0] line to [debug=1].

This “simple debug mode” will only be activated once and will be reset at the next program execution.

A *SkillTracker.log* file will be generated in your reports folder.

After the Skill Tracker program has been closed, you will have to send the *SkillTracker.log* and *SkillTracker.cfg* files as well as your *last leg report file* if it has been generated.

6.2 – Crash or error at program start

In case the program crashes at load time or if you experience a non explicit fatal error (error message with an error number), we will ask you to launch the program using load time debug model.

For doing so, launch the SkillTracker executable from a command line or a shortcut using the /loaddebug modifier [e.g. SkillTracker.exe /loaddebug or SkillTracker_portable.exe /loaddebug],

At the end of initial program load, a text file will be displayed in Notepad. Save this text file or make a screenshot of it and send it to the program author.