

The KaTzpit (v_Alpha 2015-11)

Introduction and installation

By : 3rd Wing – KaTZe

Présentation :

The KaTzpit was introduced since the early days of Lock-On in order to display Cockpit informations on a second screen. Through FC2 and DCS-FC3, it has evolved in a fully interactive interface with the simulation with remote internet capabilities.

While there are several systems designed to export and display DCS information on additional screen, the KaTZ-Pit and KaTZ-Link have been design to allow a fully flexible configuration. It is compatible with Hard Simpiti (via SIOC), it can export to a second computer, even if this computer is located 1000's of kilometers away from the simulation machine, thus making it possible to conduct for instance a training session at distance, or multi crew play.

The KaTZ-Pit : the deported cockpit is a "web page" that can be displayed via the traditional browsers (Firefox, Chrome, Opera), making it compatible with a whole range of OS like Windows, Linux, Android, Mac.

It can therefore be displayed on a computer, a tablet or even a smartphone.

It is fully interactive, and while displaying the flight data, it can send orders to DCS in returns, via mouse click or touch screen.



The efficiency of the web-socket protocol make it possible with almost no lag (0,1sec).

Here is a scheme of the KaTZ-Pit system



Installation :

The KaTZ-Pit installation has been design with the following objectives :

- Easy installation with minimal configuration operation
- Clean Export Coroutine in DCS, to minimize bug and provide compatibility with other addon
- Compact installation on the computer, in one single directory, or on a USB key
- No key in the windows registry base, desinstallation just via directory deletion.
- Automated Update

To simplify installation, a specific tool has been design by "3rd-wing Etcher", the EKPI (Etcher KaTZ-Pit Installer). Just download EKPI, unzip it and click on the feature you wish to install/start. Everytime you will start EKPI, it will inform you if update are available, and if you wish install them.

Step n°1 : Download EKPI_alpha31 on the 3rd wing website :

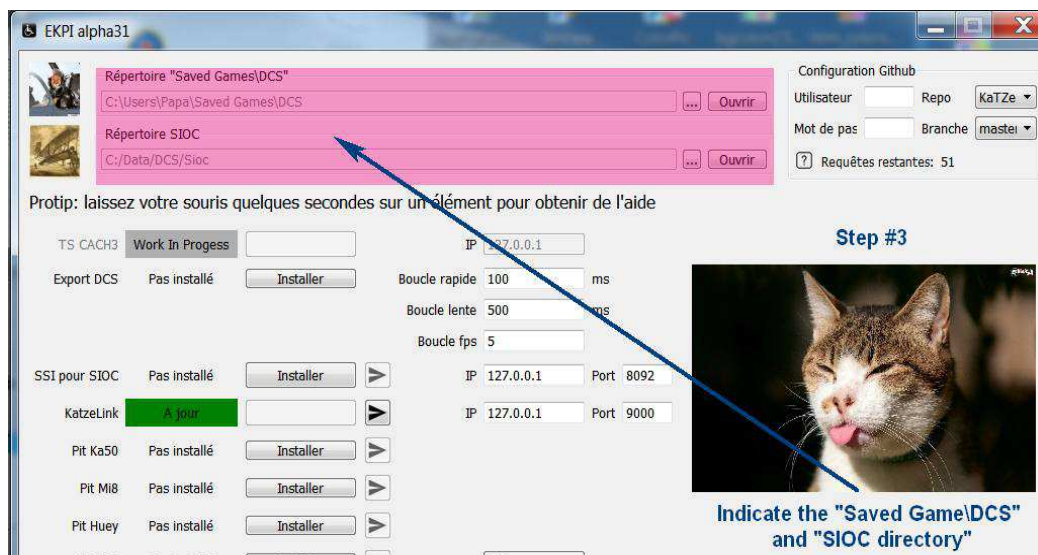
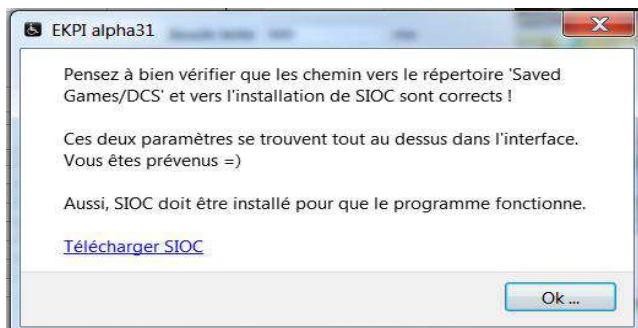
http://server.3rd-wing.net/public/KaTZe/KaTZ-Pit/0-EKPI/EKPI_alpha31.zip

Step n°2 : Dezip EKPI in the directory of your choice

(EKPI, will not impact the windows registry base, and can be located on a USB key)
(Please Use "7Zip" for unzipping)

Step n°3 : Start "ekpi.exe" , if not present on your computer, download SIOC and Install it

Ekpi is requesting that you indicate the localisation of the DCS Saved Game directory, and the SIOC directory. If SIOC is not installed the link for downloading SIOC is provided, just install it, and indicate the Directory you have chosen to EKPI.

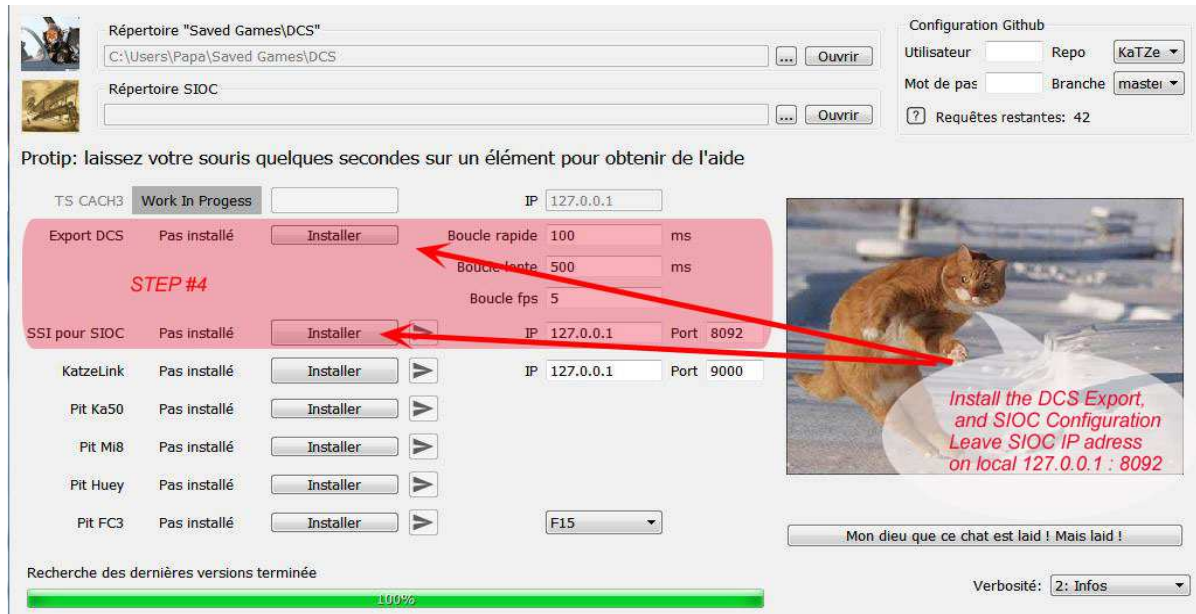


Step n°4 : Install Export, and SIOC configuration

Just click on "Installer"

Your current DCS export will be backed up, and a the KaTZ-Pit Coroutine will be added.
SIOC initialisation file will be copied to the SIOC directory

Do not change the IP Adress of SIOC, (local), since you have installed it on the game machine
The Boucle Rapide, Boucle Lente fields refers to the fast/slow export frequency (100-500 is optimal)

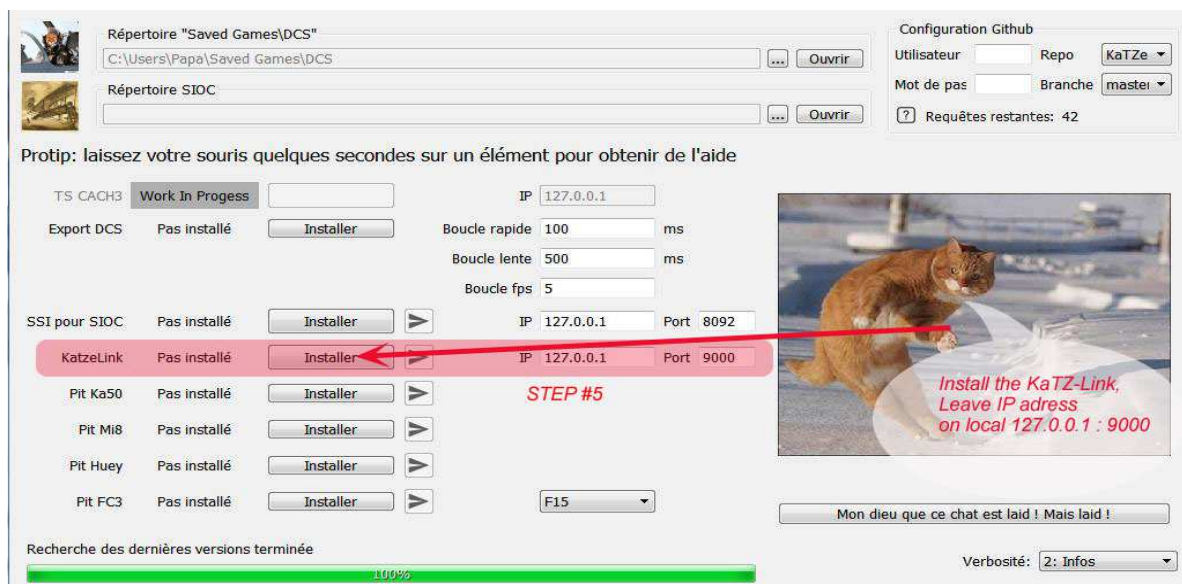


Upon installation the "Installer" button, becomes green

Step n°5 : Install the KaTZ-Link server

Just click on "Installer"

The KaTZ-Link server will be installed in your EKPI directory, no impact in the windows registry.



Step n°6 : KaTZ-Link IP configuration

If the KaTZ-Link and the KaTZ-Pit will be running on the same machine than DCS (on a second/third ... screen), leave the KaTZ-Link IP address local (127.0.0.1).

If you intend to run the KaTZ-Pit on a second machine in LAN
indicate the local IP address of the DCS/KaTZ-Link Machine (for instance 192.168.0.10)

If you intend to run the KaTZ-Pit on a machine at distance over internet (Crew, Teaching)
indicate the IP address of the DCS/KaTZ-Link Machine other the web (for instance 88.185.6.200)

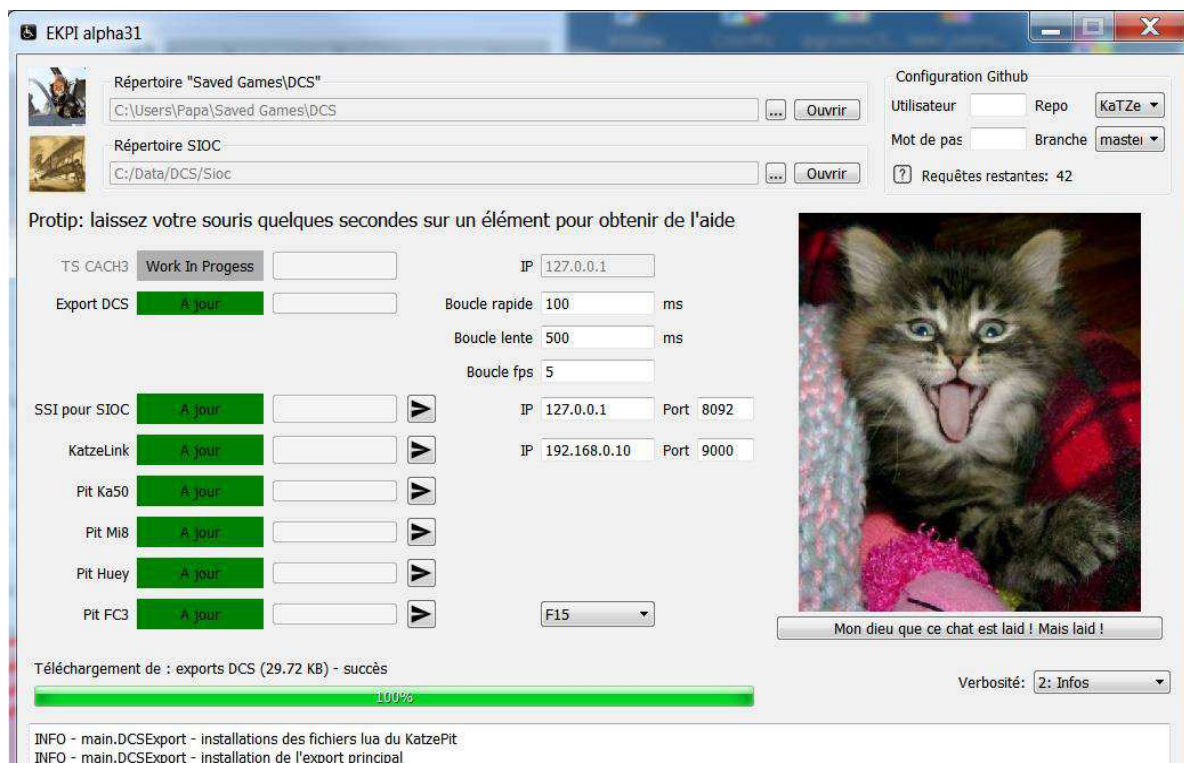
The host router, will have to reroute the 9000 Port (TCP) to the DCS machine.

Step n°7 : Install the KaTZ-Pit you intend to run

The Pit will be installed in your EKPI directory.

If you wish to run on a remote machine (PC, Tablet, SmartPhone), you just have to copy the EKPI/Pits directory to your machine, and open the html file of the pit with your favorite browser (Firefox, Chrome, Opera supported).

The Installation is finished, your EKPI interface should look like this



The ongoing development, is being uploaded on GitHub by the developpers.

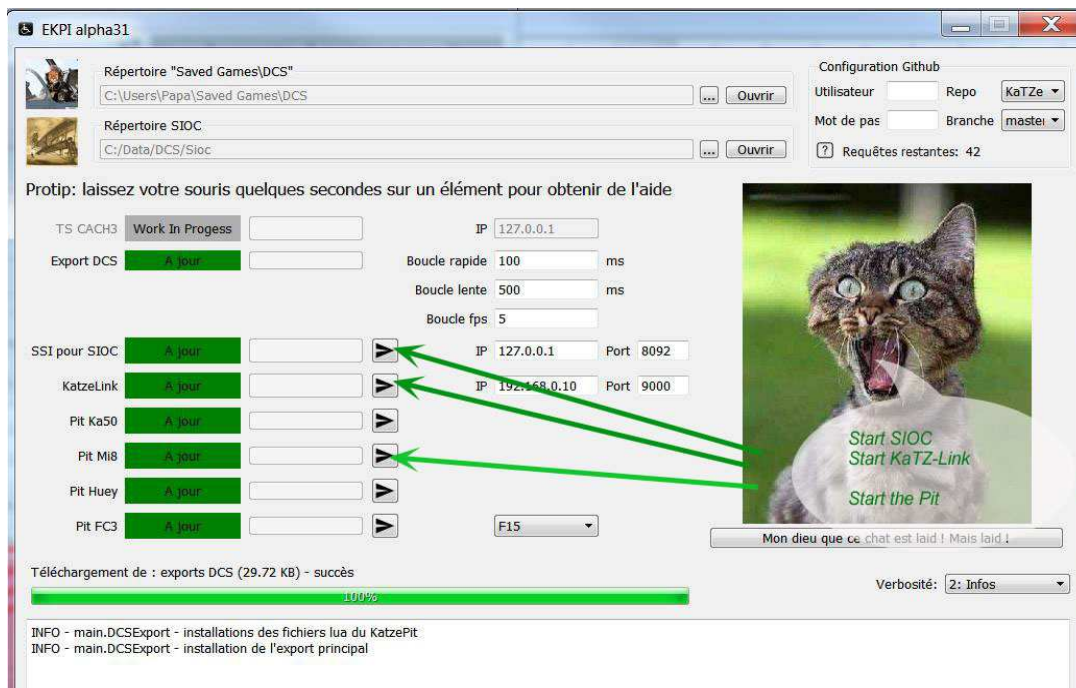
If a new release for Export, SIOC, Link or Pit is made, you will see the green block "A jour", becoming Orange with "Mise à Jour Disponible" (Update available), just click and the update will be automatically downloaded and installed.

File integrity is also checked.

If in some rare case, your file might be corrupted (indicated in red), simple repair is then proposed (in the install/update/repair zone).

RUNNING THE KaTZ-Pit

Step n°8 : Starting SIOC, KaTZ-Link, and the Pits



8-1 : Before starting your DCS mission, Start SIOC, by pressing on the SIOC arrow

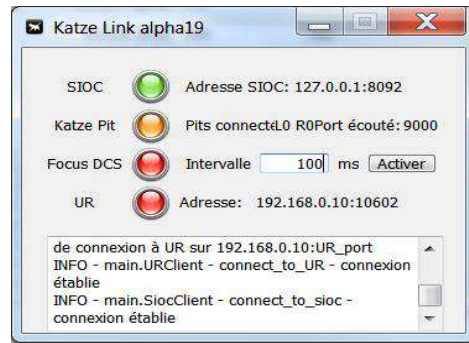
The SIOC window will open, that will allow you to verify the IP adress in IOCP server

The "Clients connected" indication will show the connection : +1 when starting the DCS mission, +1 when starting the KaTZ-Link, (Normal operation should indicate 2).



Once SIOC is open , you can start, close, restart DCS aso, the whole chain will remain stable
Just leave the SIOC window open (does not need to be visible), and close it at the end of your flights (clicking on "X").

8-2 : Start the KaTZ-Link



The popup window, will display the SIOC adress, and various light (red/orange/green) to monitor the connection to the KaTZ-Link server.

If you connect multiple pits, you will see the number, on this control window.

Note : The focus DCS, correspond to the function that will give the focus back to DCS in flight, when you click on the Pit Windows. To prevent from having to ckick again on the DCS window.

The timing indicated the delay in giving the focus back to DCS.

This function can be run from the pit itself, so it is suggested not to click on "Activer", at this stage.

8-3 : Open the pit window of your choice (by cliking on the pit arrow, in the EKPI interface).

You may also create a shortcut on your desktop, to directly launch the "pit-webpage"

(located in the "EKPI/Pits/... directory")

If you are running on a 2nd machine, or on a Tablet, you will just launch the pit by clicking on the html file, to open it with your browser.



Once the pit is open, you can launch the connection, by pressing the start button, the indication light will move to green.

The DCS Focus button, should be pressed , if you intend to run the pit on the same machine than DCS, thus to prevent "stealing focus from the game" ... and crashing because your joystick will not respond any more.

If you display the pits on a second machine, do not use DCS Focus (since there is no DCS on it :D)

Step n°9 : After the flight

You close, or open the web page as you like, the KaTZ-Link guarantees the stability of the system. After your flight, just close the pit, the KaTZ-Link, and SIOC.

You will find in "Saved Games/DCS/Logs/KaTZPit", short post flight reports.

They are summarizing, the mission duration, the export timing used :

- fast loop export for flight data
- slow loop export for switches, and slow evolving data
(thus to optimize data transfer over the net)

The average fps through the mission, is calculated, but also the histogram of Fps distribution.

Each sample taken during a 5 seconds period (as indicated in "Boucle FPS").

This sampling frequency, can be modified in the EKPI interface.

```
3432.891 ; --- Rapport de Vol ---
3432.891 ; Début de la mission : 43200 secondes
3432.891 ; Boucle rapide      : 0.1 secondes
3432.891 ; Boucle lente       : 0.5 secondes
3432.891 ; Boucle FPS         : 5.0 secondes
3432.891 ; Total Number of Frames = 98405
3432.891 ; Flight Duration = 3376 secondes
3432.891 ;

3432.892 ; *** Average FPS = 29.1
3432.892 ;

3432.892 ; ***      FPS < 10 = 0.0 percent
3432.892 ; *** 10 < FPS < 20 = 0.0 percent
3432.892 ; *** 20 < FPS < 30 = 53.4 percent
3432.892 ; *** 30 < FPS < 40 = 46.6 percent
3432.892 ; *** 40 < FPS < 50 = 0.0 percent
3432.892 ; *** 50 < FPS < 60 = 0.0 percent
3432.892 ; *** 60 < FPS      = 0.0 percent
3432.892 ;
```

Step n°10 : Next Flights ...

Every time you open EKPI, it will indicate all updates done by the dev. team.

You may elect to download them or not.

If you want to remove The KaTZ-Pit system from your machine, just delete the EKPI directory.

(For SIOC, you will need to use the Windows desinstallation tool)

Should you have any question, do not hesitate to contact us (even in English), on the 3rd-Wing Forum, in the specific topic :

<http://www.3rd-wing.net/index.php?showtopic=14836#>

Miaou !!!!!!!!!!!!!

