

FSI Check Screen Layout

V1.4 06 2023

This software checks, that each monitor has the same resolution and location than what it has been previously recorded.

If not, it can prevent the start sequence of your sim using [Soft launcher](#).

1 What for?

Sim builders have to manage multiple displays on the same computer



It may be important to verify, on startup, that each monitor has been recognized and is at the expected location.

Sometimes, Windows can lose a screen after boot. The cause could be a hardware issue (bad plugs or cables, a tired graphic card), human actions (forgetting to connect the power cable) ...

Some software is sensitive to the screen setup and should not be launched if all screens are correct.

For example, if you're using MSFS multiple screens, this application can reset the screens location if not all monitors are recognized during the boot sequence.

Add-ons like "*MSFS Pop Out Panel Manager*" expects to find every screen at the exact preceding location.

2 What is detected?

Our software checks:

- If a monitor is missing
- If a monitor has been added
- If the monitor desktop location has been changed (X, Y)
- Which screen is indicated as "the main" by Windows

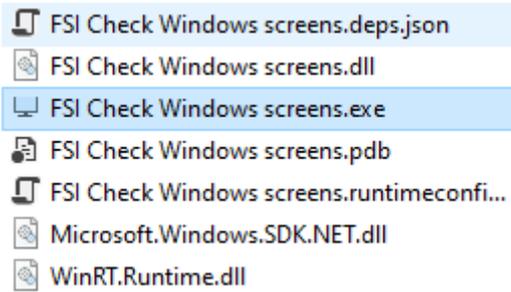
- If a screen resolution has been modified

3 Requirements

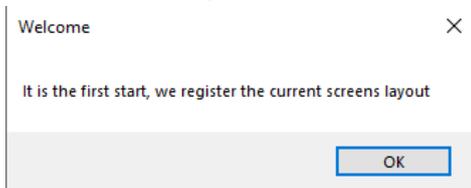
- Window 10 and higher
- [.NET desktop runtime 7.0.8](#)

4 First use

- Click on “FSI Check Windows screens.exe”

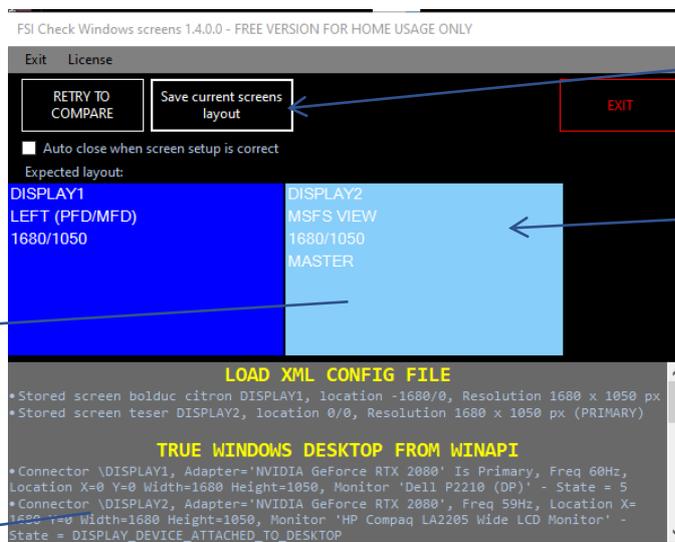


- For the first start, the software saves the current Windows screens layout.



This information is stored in a config.xml file

5 The interface



Controls

The expected screens layout stored in the config.xml file

The screens are filled with dark blue excepted the Master (MAIN) in light blue.

Log information for Debug purpose

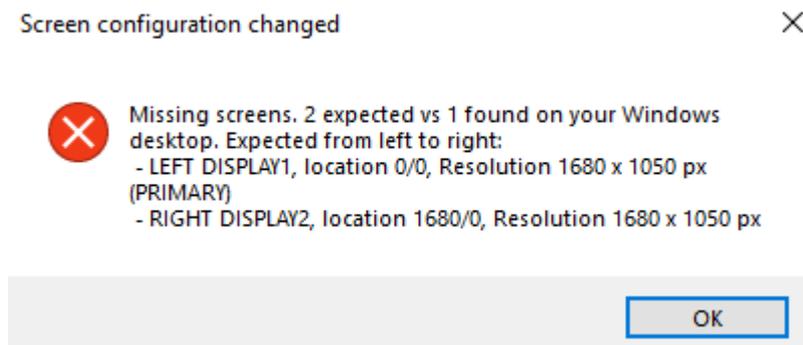
6 What happens if the display parameters have changed?

When you start the application, it checks that the current settings of the Windows screens are still the same (compared to the configuration stored in the config.xml file)

In our example, we expect two screens



If you unplug a display and launch again the software, it will find a missing monitor



If now, you want to save this new Windows screens layout as reference, click the "Save current screens layout" button.

Note: the software doesn't fix the screen layout to go back to the previous configuration. You have to modify it with your own.

7 How to automate screen detection when Windows is starting

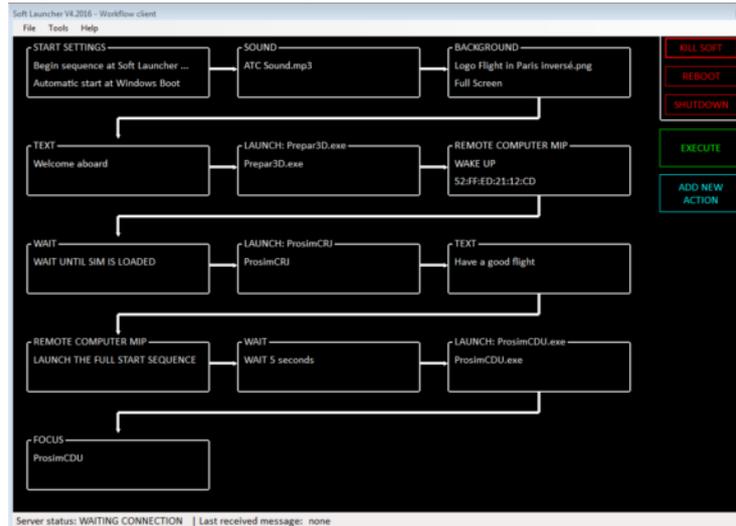
If you enable "Auto close when the layout is correct" checkbox, then, the next time the application starts:

- If everything is correct, the application is closed after a couple of seconds and sends a return code = 0
- If a mismatch is detected, the application sends a return code = 1. You can trap this error code in your own scripts or with [Soft Launcher](#).

7.1 Automate using Soft Launcher

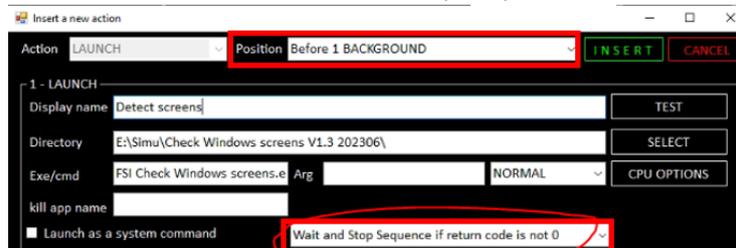
You need [Soft Launcher V4.8](#) or higher.

In your Soft Launcher sequence:

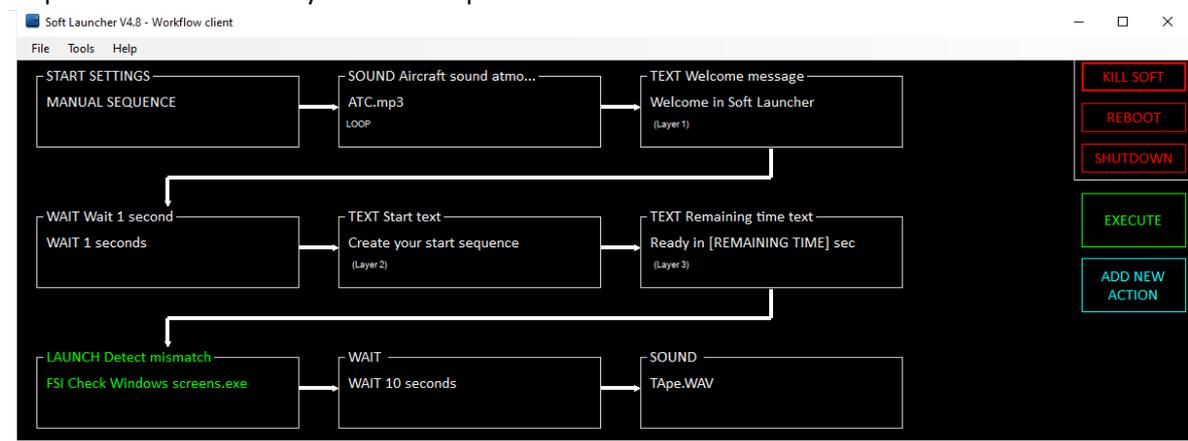


ADD NEW ACTION

- Click the “Add a new action” button
- Choose your “FSI Check Windows screens” application
- If you want to prevent MSFS from starting if the screen layout is wrong, you must move the start of “FSI Check Windows screens” before the MSFS start. (here, Position=1)
- From the list box, select “Wait & Stop Sequence if return code is not 0”



Now, when the soft launcher sequences start, it checks the screen configuration and stops the sequence if the screen layout is not expected.



7.2 Automate using your own script

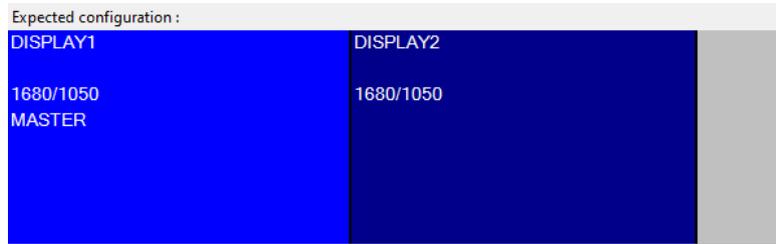
You can read the return code with this command: %errorlevel% contains:

- 0 if the monitor settings are correct
- 1 if something has changed

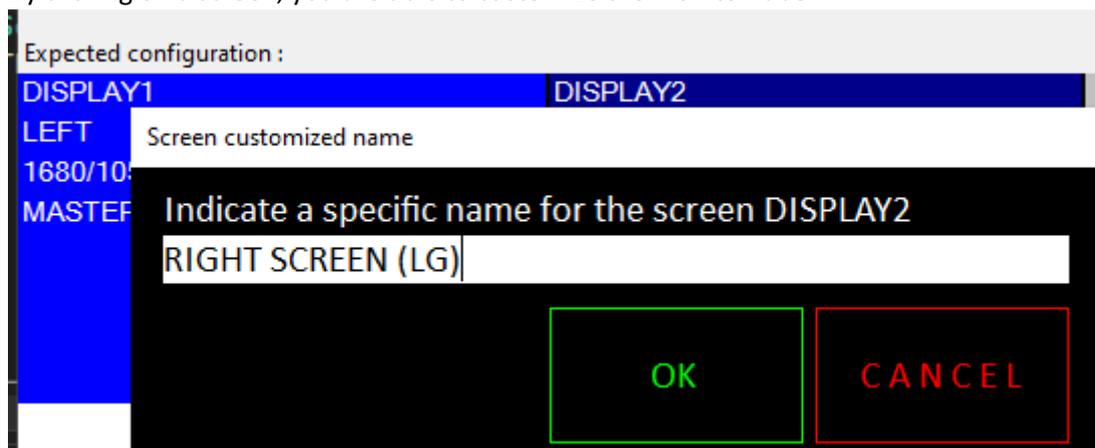
8 Tricks

8.1 How to rename the screens

This example shows two 2 screens (DISPLAY1 and DISPLAY2)



By clicking on a screen, you are able to customize the monitor label.



Now, DISPLAY1 has the custom label "LEFT SCREEN" and DISPLAY2 "RIGHT SCREEN (LG)"



Please note that this customization is lost each time to click on the "Save current screens layout" button.

9 License

This software is free for home use only and if you don't earn money with your devices. In any other case, a professional license is required: <https://fsinstructor.com/news/?product=check-screen-layout>

- Download this software https://fsinstructor.com/download/Check_Screen_Layout/Check_Screen_Layout.zip
- The free version:
 - Has no support.
 - Is dedicated for home use only and if you don't earn money with your devices

- The pay version:
 - Has support
 - Removes the splash screen.

1 – Install the software and test it

2 – Buy a professional license on our WebSite and send us the Installation ID



3 – We will generate your key. Just copy this key into the “Insert your key” field and click the “Register key” button

The free version has no support.

The professional license adds a support and remove the splash screen.

10 How to update?

It is automatic. When starting the software, it checks for a new version.

11 Package used for development

- AutoUpdater.NET : <https://github.com/ravibpatel/AutoUpdater.NET>
- System.Management : <https://dotnet.microsoft.com/en-us/>