

ADE9x Environment Checker 1.3.x

Program Description

Document Version 1.2

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1. Purpose of this tool

ADE Environment Checker is a tool that helps to diagnose issues preventing Airport Design Editor 9x from working. Don't forget: whenever you have problems with ADE, your first point of support is the [Airport Design Editor Forum](http://www.fsddeveloper.com/forums/) at FSDDeveloper.Com.

But if you feel like investigating the background of your issue yourself, this tool gives you a start. And if you ask for help in the forum, the report you can generate with ADE Environment Checker contains valuable information which can make it much easier to support you.

2. Precautions & Warnings

If you choose to use this tool, you do so at your own risk. There is no warranty, implied or otherwise, of any kind. Having said this, I have tested the tool thoroughly as have the team of beta testers.

With one exception this tool makes absolutely no change to your system. This change will never be made without your confirmation and only if your configuration shows a specific fault. We are talking about editing the path information for Microsoft Flight Simulator 9, X and the X SDK.

So there is nothing to be concerned about. Still there is no guarantee that this software is able to fulfill your expectations. Further I take no responsibility and no liability for issues that might or might not be connected to the execution of ADE Checker on your system.

3. Usage

The program is started with the shortcut from the 'Airport Design Editor' program group or in the 'Airport Design Editor' installation folder from the Windows File Explorer.

While it is starting the program will check the computer registry for several keys and files. Specifically this is:

- For the installation of Airport Design Editor
- For the installation of Microsoft Flight Simulator X
- For the installation of Microsoft Flight Simulator 9
- For the installation of the Microsoft Flight Simulator X SDK
- For the installation of the Flight Simulator SimConnect component
- For Peter Dowson's FSUIPC ([The official Peter Dowson Page](http://www.fsddeveloper.com/forums/))
- For various .NET and MSXML Installations
- For the regional settings of the Operating System
- For one specific error in the registry

Let's start with the description of the specific error. The installation path of Microsoft FS9, FSX and the FSX SDK is registered in the registry. This path should always end with a backslash (→ \) character. For unknown reasons sometimes it does not. Now if an application trusts that the path ends with a backslash without checking, and uses the path to interact with the Flight Simulator, this will fail. There is a good chance that beyond that the functionality of the flight simulator might be affected.

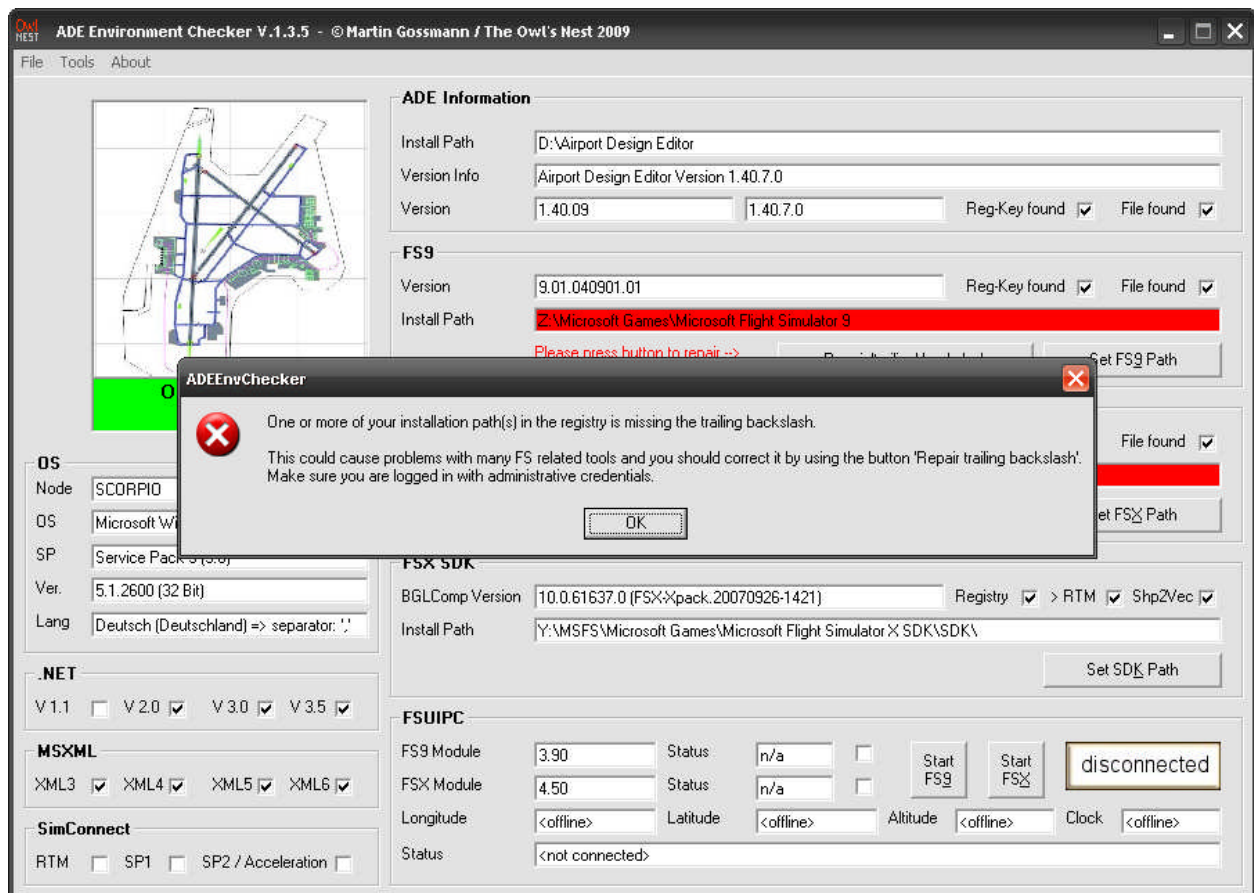
ADE Environment Checker tests the path for all three installations and if the trailing backslash is missing, offers to correct this problem for you. If you answer 'no' nothing will be changed on your system. If you answer 'yes', the backslash will be added to the path.



NOTE: Because the path is stored in the part of the registry where only administrative accounts have access, you need to make sure that your account has such privileges.

But there is no danger of messing up things. ADE Environment Checker will notice if your account is not privileged and tell you so.

This is what you see if the trailing backslash is missing for any combination of the FS9 path, the FSX path or the SDK path.

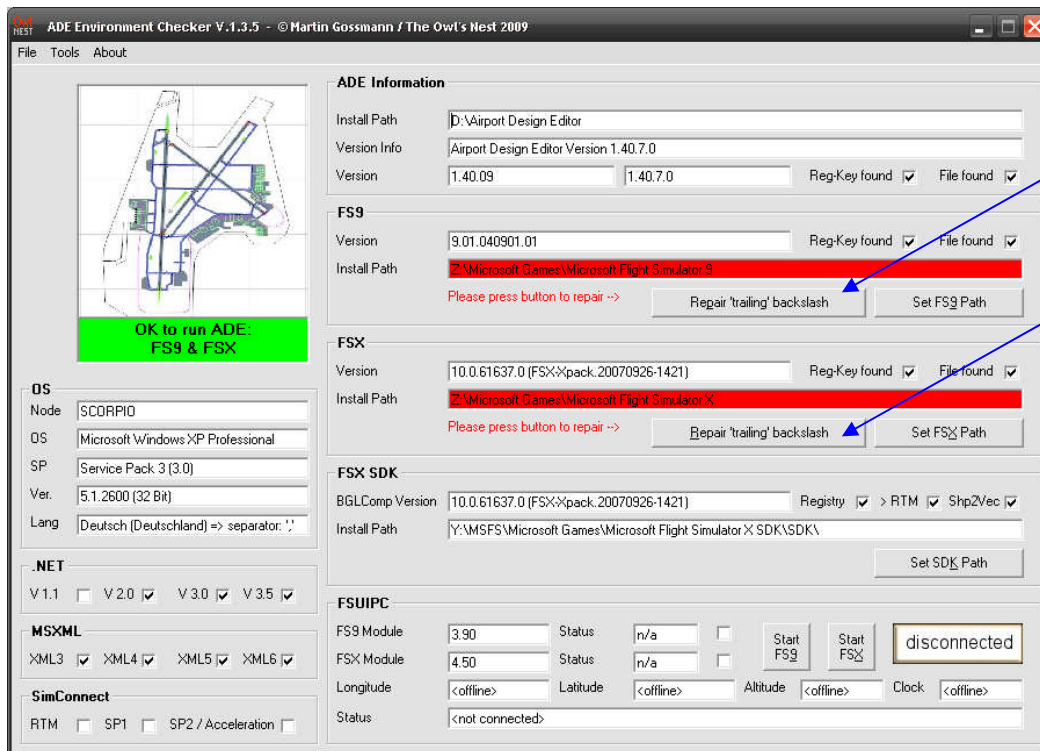


The erroneous setting is made visible by the respective path textbox which is highlighted red.

NOTE: Neither ADE nor the Environment Checker are impacted by the missing backslash and can function normally and perform all checks. Still you are strongly advised to correct this issue, since we have heard reports of several add-ons failing to install or work correctly due to this issue.

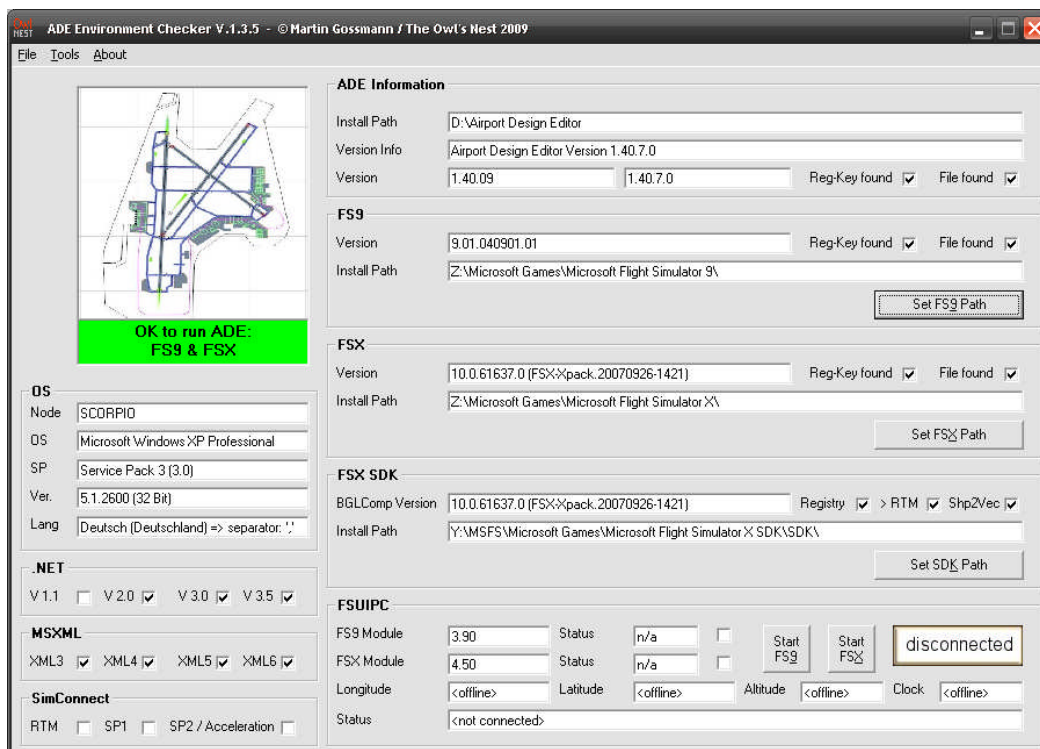


To correct this problem you need to press the button 'Repair trailing backslash'. This button is only visible if your system has this specific error. If your system is missing both the FS9 and FSX trailing backslashes, you would see one button in each section and would press each one.



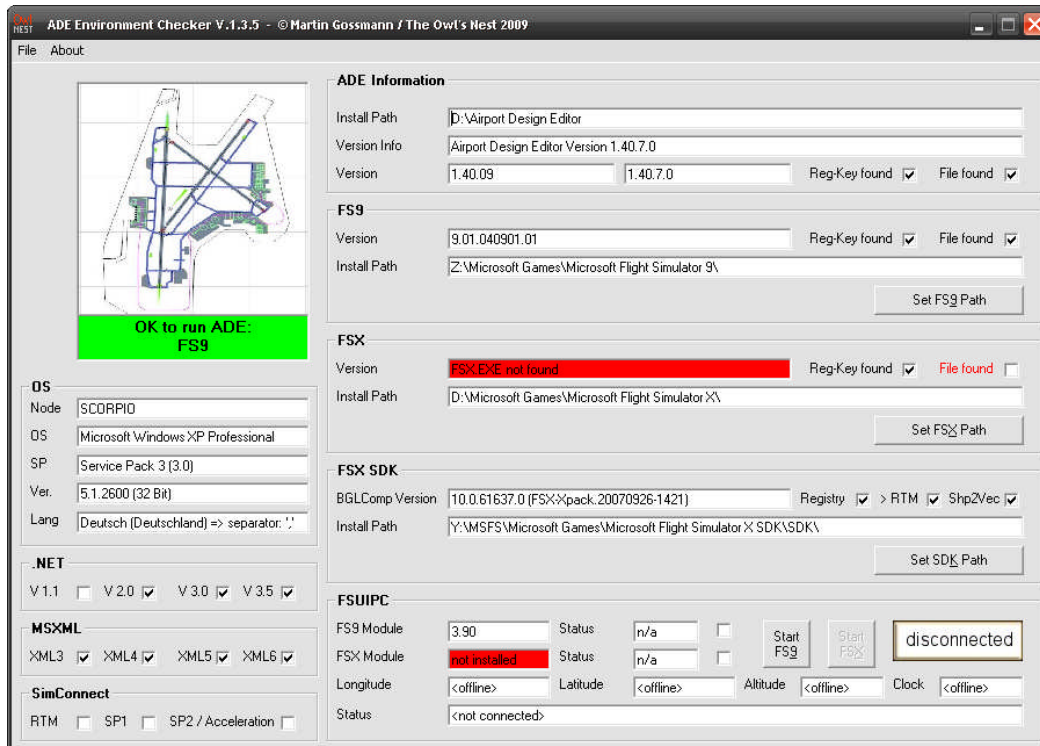
After you have clicked on the 'Repair trailing backslash' button you will see a notification if the repair was successful or not. Further the 'Repair trailing backslash' button(s) will vanish from sight and the red highlight text background will be replaced with the default normal white.

NOTE: on the left you see the green OK to run ADE because ADE does work correctly no matter if the backslash is missing or not.

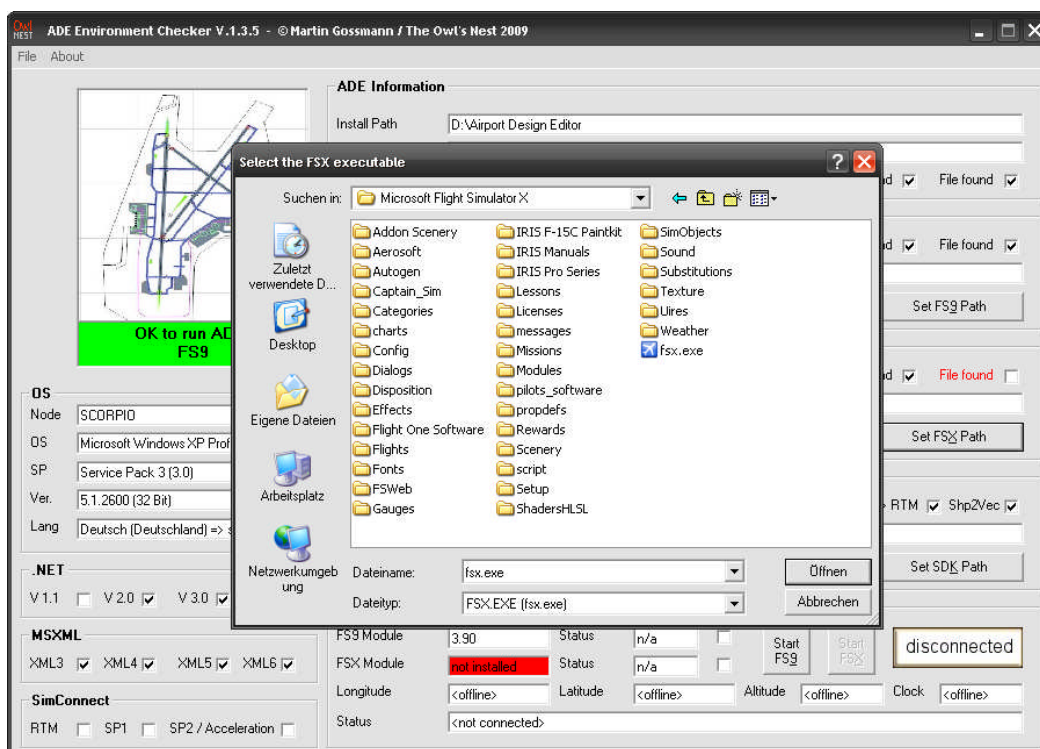




You can see version reports for FS9, FSX and the SDK installation. The version indicates if the installation is the original RTM, SP1, SP2 or Acceleration. We can see any mismatch between the installed FSX and SDK version (which must match!). Another potential problem (e.g. due to failed new installations to another folder) can be that a path in the registry is not pointing to the correct installation folder.

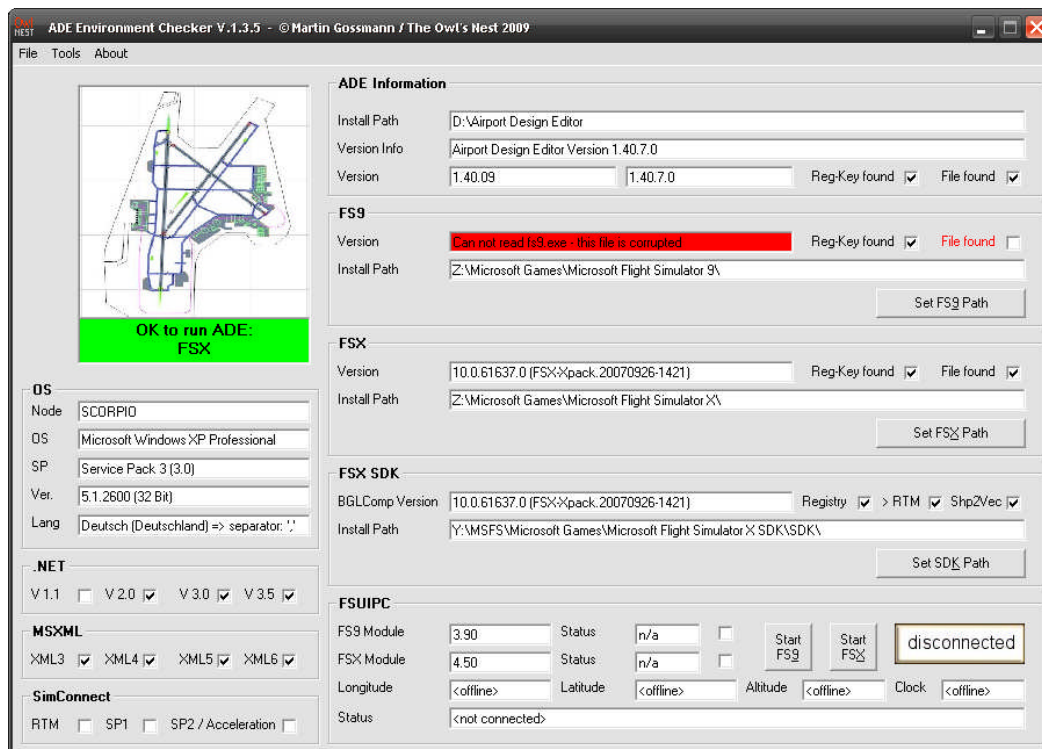


In this case you can correct the path by clicking on the respective button 'Set FS9 path', 'Set FSX path' or 'Set SDK path' and select the correct folder easily.

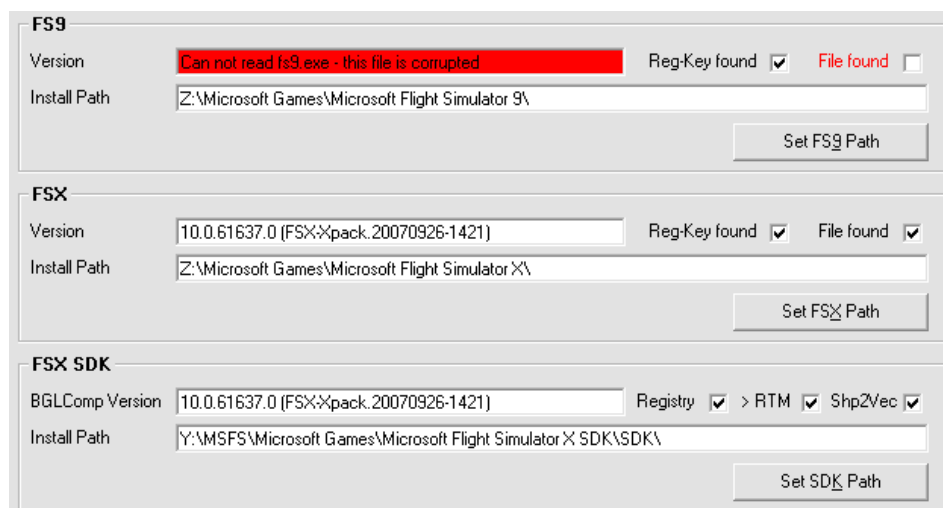




Another check is done with FS9.exe, FSX.exe and bglcomp.exe (FSX-SDK) to ensure that the files are not corrupted due to whatever reason. In such a case you would see this:



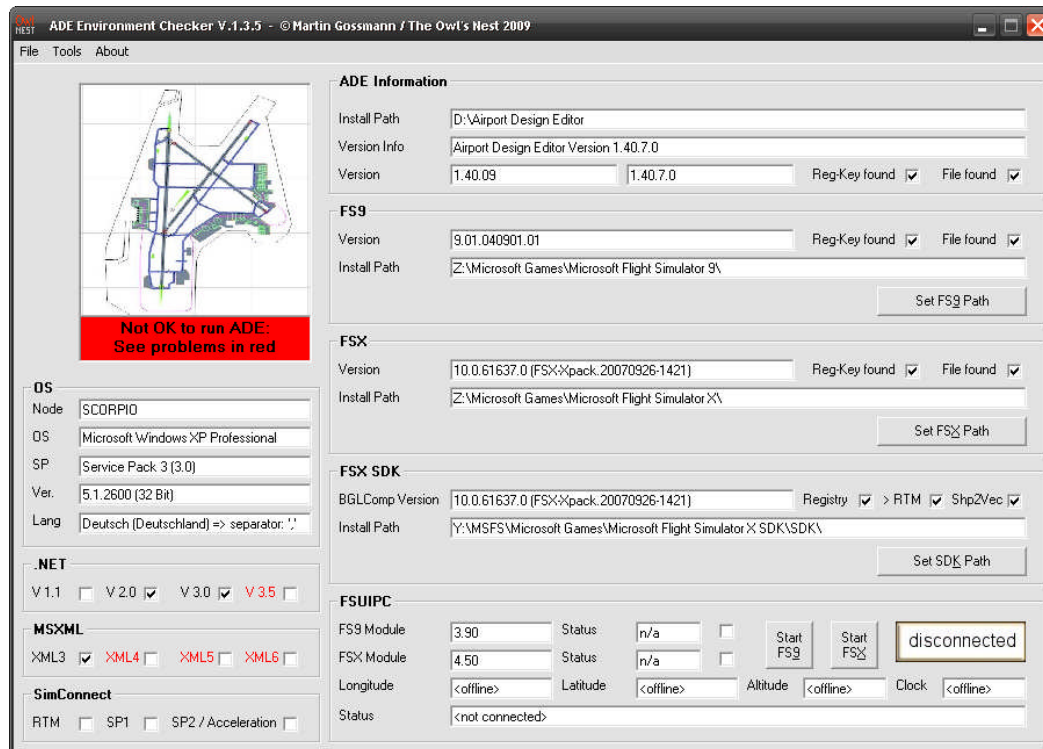
Details:



- Version field → File version, if not found or readable status
- Install Path → Path according to registry
- Reg-Key found → checked if respective key found in the registry
- Set Path button → allows to change the path information in the registry
- File found → checked if respective file found on system
- > RTM → BGLComp must at least be of version SP1, not the RTM version
- Shp2Vec → additional test for needed SDK file

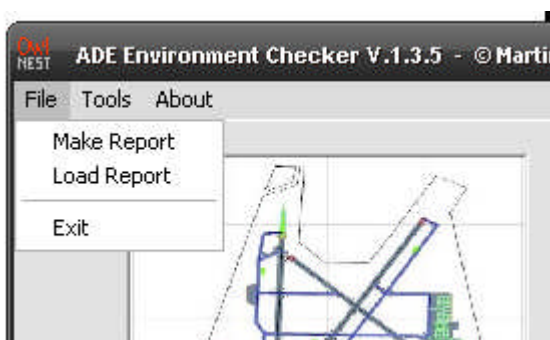


We have discussed the checking for FSX and SDK above. Here you see that ADE Environment Checker indicates a problem with the .NET version and the MSXML component by changing the label color to red.



The SimConnect information is still displayed, but ADE9x now relies completely on FSUIPC as the interface to both FS9 and FSX.

A complete system report can be generated via the menu File and the menu item 'Make Report'. The report is stored in the folder defined as your %temp% path and is opened in notepad after creation. Each report overwrites the last report. The last report can be loaded into a notepad session with the option 'Load Report'.





This is the information contained in the report.

```
*****
Date of Report:      25.08.2009 00:18:02
Operating System:    Microsoft Windows XP Professional
OS Service Pack:     Service Pack 3 (3.0)
OS Version:          5.1.2600 (32 Bit)
OS Language:         Deutsch (Deutschland) => separator: ','
Nodename:            SCORPIO
ADE installed:        yes
ADE Path:            D:\Airport Design Editor
ADE Install Version:  1.40.7.0
ADE File Version:     1.40.09
ADE Info:            Airport Design Editor Version 1.40.7.0
FXS installed:        yes
FSX Path:            Z:\Microsoft Games\Microsoft Flight Simulator X\
FSX Version:          10.0.61637.0 (FSX-Xpack.20070926-1421)
FSX Trailing '\ Error: False
FX9 installed:        yes
FS9 Path:            Z:\Microsoft Games\Microsoft Flight Simulator 9\
FS9 Version:          9.01.040901.01
FS9 Trailing '\ Error: False
RTM Simconnect:       no
SP1 Simconnect:       no
SP2 Simconnect:       no
FSX SDK installed:    yes
FSX SDK Path:         Y:\MSFS\Microsoft Games\Microsoft Flight Simulator X SDK\SDK\
FSX SDK Trailing '\ Error: False
BGLComp Version:     10.0.61637.0 (FSX-Xpack.20070926-1421)
BGLComp >= SP1:       yes
Shp2Vec found:        yes
.NET 1.1 installed:   no
.NET 2.0 installed:   yes
.NET 3.0 installed:   yes
.NET 3.5 installed:   no
XML3 installed:       yes
XML4 installed:       no
XML5 installed:       no
XML6 installed:       no
FSUIPC/FS9 installed: 3.90
FSUIPC/FSX installed: 4.50
Connected to FS9 ok:  no
Connected to FSX ok:  no
```

Posting your system report in case you have trouble running Airport Design Editor is a good idea.



The final features to describe are the ability of the Environment Checker to test the connection to FSX and FS9.

The screenshot shows the FSUIPC interface with the following fields:

FSUIPC	
FS9 Module	3.90
Status	n/a
FSX Module	4.50
Status	n/a
Longitude	<offline>
Latitude	<offline>
Altitude	<offline>
Clock	<offline>
Status Msg.	<not connected>

Buttons: Start FS9, Start FSX, disconnected

For each simulator identified we check if the FSUIPC DLL can be found at the correct location. If so, you can see the installed version in the FS9 Module and FSX Module field.

The status fields (right of the FS Module fields) show the current connection status. They may indicate:

- n/a (if the simulator is not running)
- 'NOK' (if the simulator is running but the connection is not established)
- 'OK' if the connection is ok.

The checkboxes (right of the Status fields) will be tick marked after a successful connection to the respective simulator has been made in the current session. The next screen shot shows the situation when you close FS9. The checkmark is set because the connection was established. Now it is gone, therefore the status is 'NOK'.

The screenshot shows the FSUIPC interface with the following fields:

FSUIPC	
FS9 Module	3.90
Status	NOK
FSX Module	4.50
Status	n/a
Longitude	E0° 00.00'
Latitude	N0° 00.00'
Altitude	0.00
Clock	18:28:14
Status Msg.	Processing: IPC request contains bad data

Buttons: Start FS9, Start FSX, Microsoft Flight Simulator 2004

The 'Start FS9' and 'Start FSX' buttons start the respective simulator.

The longitude, latitude, altitude and clock fields show the specific values from the running simulator. The clock value is providing data as soon as the simulator is fully loaded. The other fields require that the simulator is in flight mode.

The screenshot shows the FSUIPC interface with the following fields:

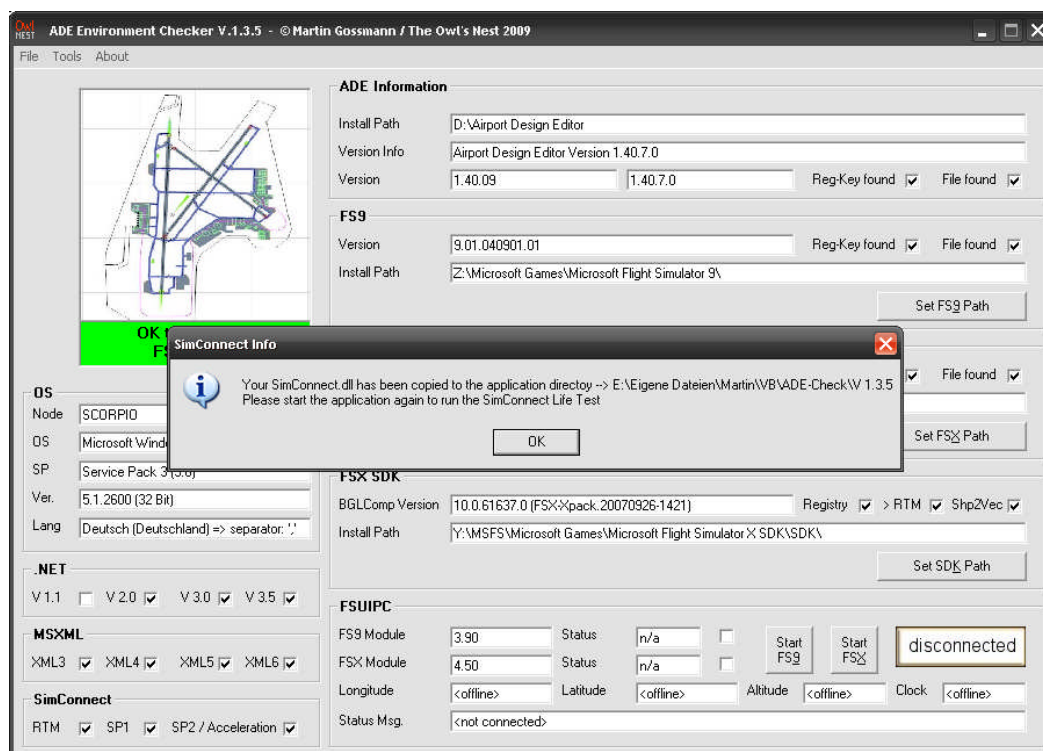
FSUIPC	
FS9 Module	3.90
Status	OK
FSX Module	4.50
Status	n/a
Longitude	W122° 18.29'
Latitude	N47° 26.54'
Altitude	432.74
Clock	18:25:20
Status Msg.	Successfully connected

Buttons: Start FS9, Start FSX, Microsoft Flight Simulator 2004

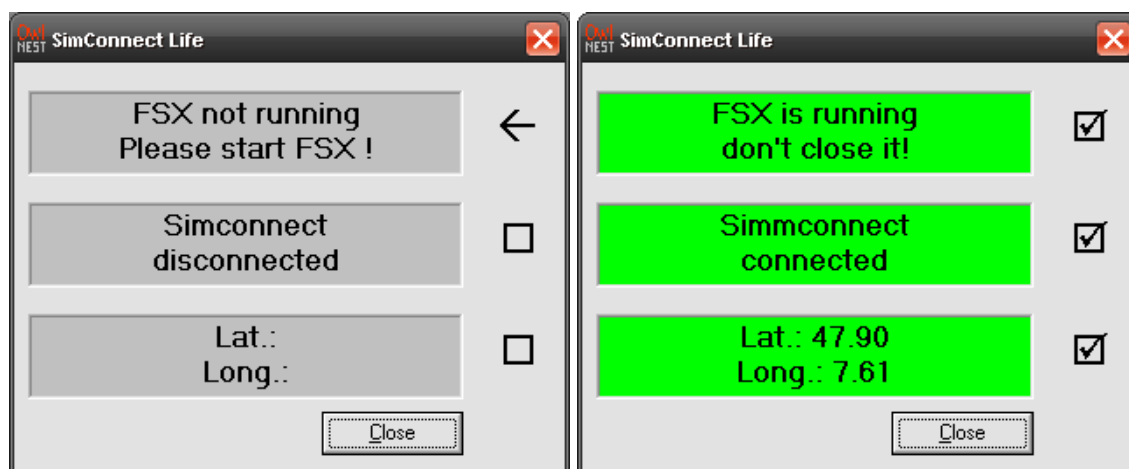
In the Status field you will see the error and success messages provided by FSUIPC.

The old SimConnect test for FSX is still available; you invoke it via the menu Tools by selecting the item 'Connect to FSX via SimConnect...'.

NOTE: ADE Aircraft Checker is created in VB6 which has some limitations in this modern world. To realize this test I have to copy the file `simconnect.dll` into the folder where ADE Environment Checker is installed. After you select this check, you see a message informing if `simconnect.dll` was successfully copied to the ADE program folder. Confirming this message will automatically close ADE Environment Checker. When you start it again, it is ready for the connection.



Please re-select the menu entry 'Connect to FSX via SimConnect...'. You will see this window.



Start FSX and begin a flight to see the status change. While you move your aircraft in the sim, the position information changes accordingly.