

Tutorial

1

THE SCRUFFYDUCK SOFTWARE COMPANY

Airport Design Editor Home Edition

Installation & Configuration

AIRPORT DESIGN EDITOR HOME EDITION

ADE Installation & Configuration

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written by Bob Keeshan

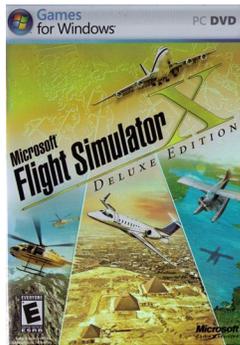
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Installing & Configuring Airport Design Editor

“A journey of a thousand miles begins with a single step.”

Welcome to Airport Design Editor Home Edition (ADE). ADE is an airport design tool for Microsoft Flight Simulator X (FSX) developed by The ScruffyDuck Software Company. ADE Home Edition was created with the beginner in mind because it allows new designers and enthusiasts to make significant changes to their local airports without the risk of making significant mistakes. Home Edition reduces the learning curve and makes airport design almost addictive. Soon you will find yourself spending countless hours creating, tweaking, and testing features at your favorite airports.



In this tutorial, you will learn how to properly install ADE Home Edition on your computer and how to configure it with your installation of the FSX Software Development Kit (SDK). Airport Design Editor will not work properly without the SDK. To obtain the SDK, you must purchase the Deluxe Edition of FSX because Microsoft does not make the SDK available via download. Once you purchase FSX Deluxe Edition, you will need to upgrade to the latest SDK version by visiting fsinsider.com. Another great resource for SDK-related information is fsdeveloper.com.

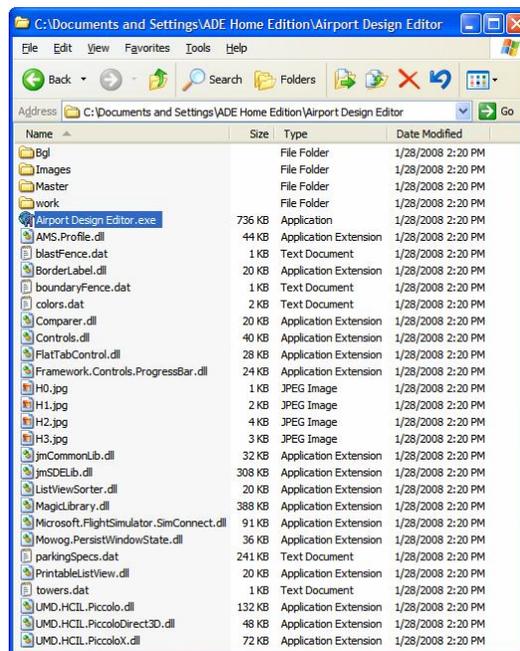
ADE also requires Microsoft .NET Framework version 2.0. Without .NET 2.0, ADE will not open. To obtain .NET 2.0, visit the Microsoft Download Center.

Once you have the latest version of the SDK and .NET 2.0 installed on your computer, you are ready to install Airport Design Editor Home Edition.

How to Install ADE

While ADE Home Edition does not have an installer, installing the program is straight-forward. To install the latest version of Home Edition follow the steps below:

1. Download the latest version of ADE Home from airportdesigneditor.co.uk, avsim.net, scenery.org, flightsim.com, or simviation.net. The download consists of a zipped file folder.
2. Once the download is complete, copy the contents of the zipped file, including sub-directories, to a new folder.
3. Open your newly created folder and double-click on Airport Design Editor executable located inside of the Airport Design Editor folder. For easier access, you can make a shortcut to `airport design editor.exe` and copy it to your desk top.



Windows XP 64-Bit / Vista Users: You may need to right-click on the ADE icon and select "Run as Administrator" for ADE to work properly on your computer. On some systems, Vista will not allow the user to access certain files/folders without first starting the program using "Run as Administrator."

How to Setup ADE

New User Wizard

For Airport Design Editor to work properly, you will need to configure the program using the *New User Wizard*. The *New User Wizard* will automatically start when you first load ADE, but you can access the wizard anytime afterward by selecting *New User Wizard* from the *Tools* Menu.

It is strongly recommended that you run through the *New User Wizard* to the end. You may cancel at any time, but ADE will not have all the information it needs to work correctly. If you do decide to cancel the wizard before finishing, then you can start the wizard again by following the procedures described above.

The *New User Wizard* begins with the *Welcome* Screen.

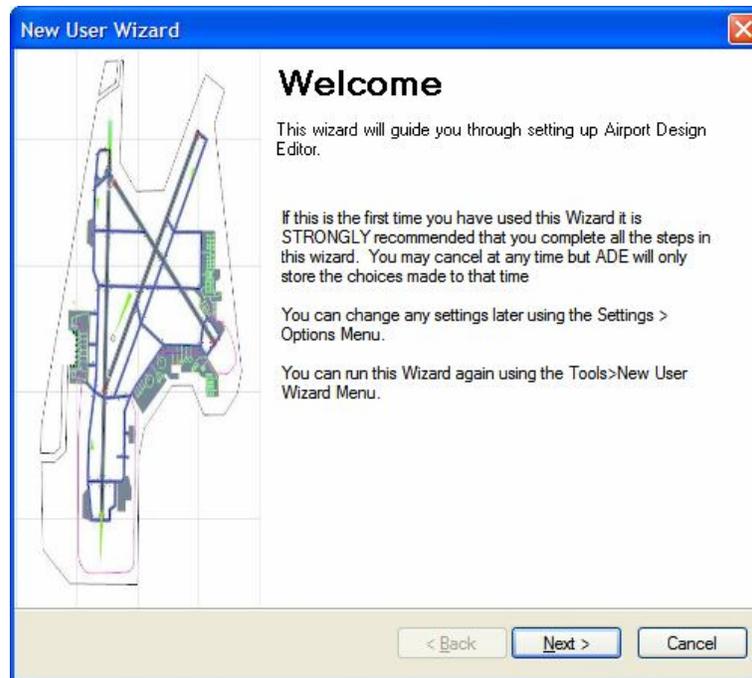


Figure 1 - ADE New User Wizard Welcome Screen

This screen reminds you that it is important to completely configure ADE. Move to the *General Options* Screen by clicking *Next*. You can go back at any time and change or check things by clicking *Back*

The next screen is the General Options screen.

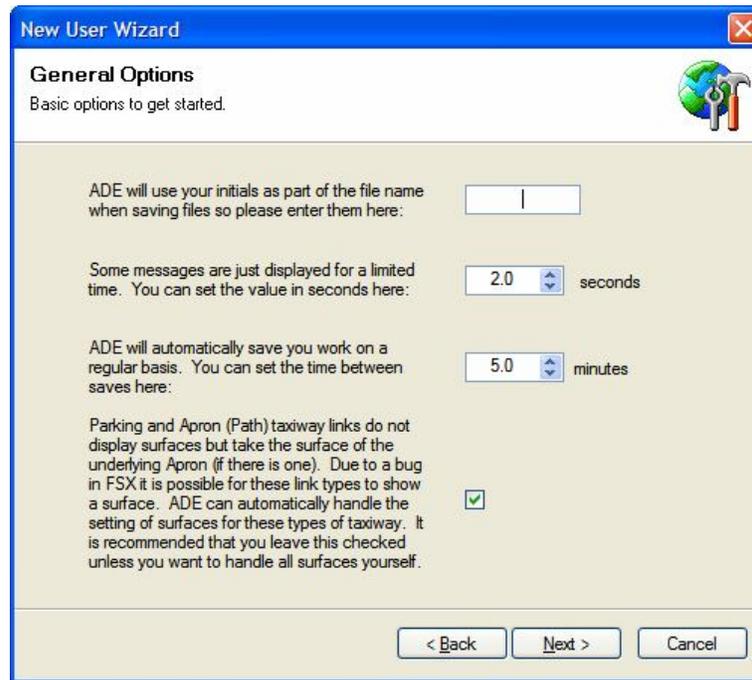


Figure 2 - ADE New User Wizard General Options

There are four options to configure on this screen:

1. Enter your initials – ADE uses your initials when constructing file names for your airport projects.
2. Message Timing – Select a time in seconds to display temporary messages. The standard is one or two seconds. Messages like File Saved etc. will then display for this time and close without you needing to do anything. You can set any time between one and five seconds in half second intervals.
3. Auto Save – Select a time in minutes as the interval between auto-saves. Five minutes is a good starting point, but you can set it to any time between one and 30 minutes in 30 second intervals.
4. Parking & Apron Links – Parking & Apron Links should not show a surface type, but there is a bug in FSX that will allow this to happen. By selecting this option, ADE will manage Parking and Apron Link surfaces to ensure that the surface type for these links matches the underlying aprons. Unless you want to handle these surface assignments yourself, you should leave this checked.

The Paths and Database configuration screen is next, and is the most important section in the Wizard, so please take time to enter the correct information.

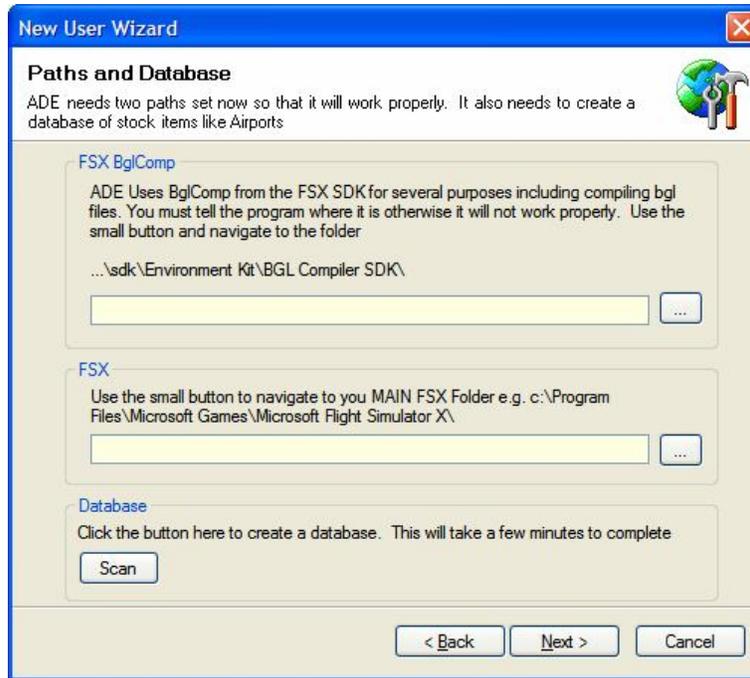


Figure 3 - ADE New User Wizard Path & Database Configuration Screen

ADE uses the latest version BglComp.exe from the FSX SDK. Please Note: For ADE to work properly, you will need the updated SDK from either the Service Packs (SP1 or SP2) or the FSX Acceleration DVD.



To select the location of BglComp, use the small button to the right of the FSX BglComp field. BglComp will be in the SDK folder under the Environment Kit sub-folder.

In addition to BglComp, Airport Design Editor needs to know the location of your main FSX installation. ADE uses this to gather and compile information about airports, navigational aids, and other objects near your airport.



Use the small button to the right of the FSX field to get this location. It is the main FSX Folder – do not select any sub folder. Future versions of ADE may search the registry for the path but that is not yet implemented.

Once you have properly configured the locations for BglComp and FSX, click the Scan button under the Database section. ADE will then create several databases of information from FSX. It does not search Add-on Scenery at this time. After a few moments you should see a progress bar and file names being listed. If this does not happen, then please check the FSX Folder location setting.

Please be patient as this process may take a while. Depending on the speed of your PC the scan can take up to ten minutes to complete, but it usually only needs to be done once. Make sure that you wait until the Scan button becomes active again before moving on to the next page.

The final configuration screen is for Measurement Units.

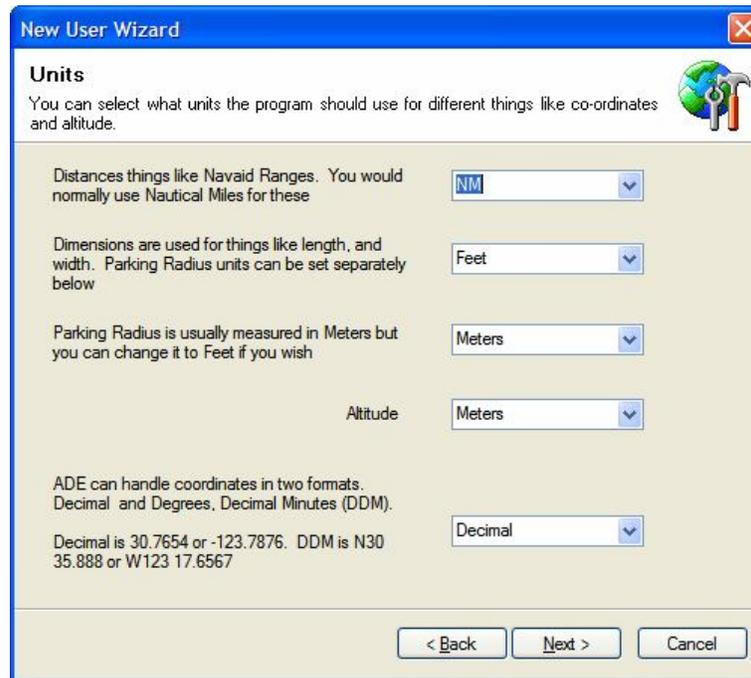


Figure 4 - ADE New User Wizard Measurement Configuration Screen

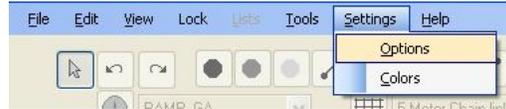
There are five different units of measure that you will need to set based on your preferences:

1. Distance – Refers to things that may be some way off or large. Navaid Ranges are a good example. The distance options are nautical miles (NM), feet, or meters.
2. Dimension – Refers to smaller measurements like runway lengths and widths, guideline lengths, etc. You can choose either metric units (meters) or U.S. customary units (feet).
3. Parking Radius – Parking Radius units are set separately. Most experienced airport designers use metric parking radius values even if other dimensions are set in feet.
4. Altitude – Altitude can be set in meters or feet and is independent of Dimension units. Consequently, you can have altitude in feet, while runway lengths are in meters.
5. Co-ordinates – There are several ways to describe geographical co-ordinates today. At the moment, ADE only allows two formats:

Decimal (e.g. 23.4567, -125.789) and Degrees Decimal Minutes (e.g. N23 28.556, W125 47.223).

Beyond the basic settings in the New User Wizard, there are other configuration settings found throughout ADE.

Program Options



The Program Options section under the Settings Menu contains several advanced ADE settings.

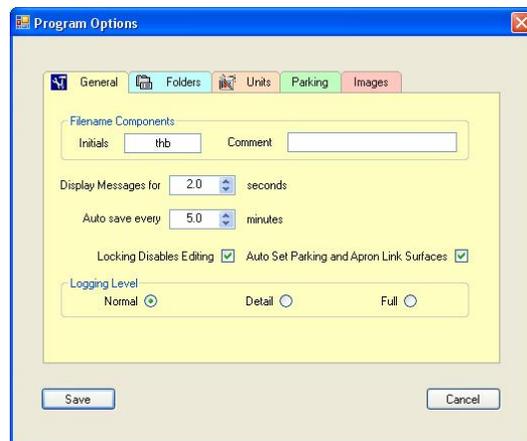


Figure 5 - ADE Program General Options

The first tab of options is similar to the wizard. The comments field should be left blank. The other fields should be familiar except the Locking Disables Editing check box and the Logging Level Selection Buttons.

If the Locking Disables Editing Check Box is selected, then you will not be able to edit airport elements you have locked yourself.

As of version 1.05, ADE now generates Logging Information to help diagnose problems. There are three levels of logging that can be set by the user. The default is Normal and should be used unless a problem is encountered. Levels of Detail and Full can be set if required. Full will generate a lot of information and should only be used when requested by ADE developers.

ADE will remember the log level you have set from session to session. A log will be created in the application folder for each calendar month, using the name format ade_YYYYMM.log. This will roll over when 15,000 entries are reached.

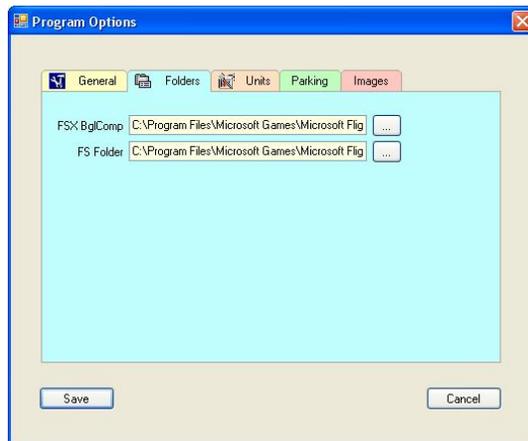


Figure 6 – ADE Program Folder Options

The Folders Options are those that you set in the New User Wizard. If you want to change these for any reason you can do so here or by using the New User Wizard again.

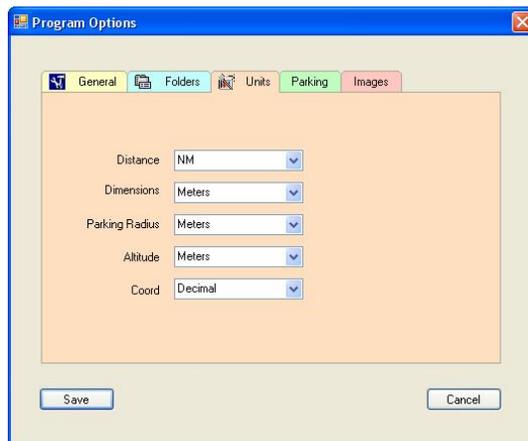


Figure 7 - ADE Program Units Options

The Units Options are the same settings you entered in the New User Wizard.



Figure 8 - ADE Program Parking Options

The Parking Options Tab allows you to change the values that ADE will use for the default radius of parking spots. The values used by ADE are based on the FSX defaults. You should not change these radius values unless you understand how FSX uses them to assign aircraft parking.

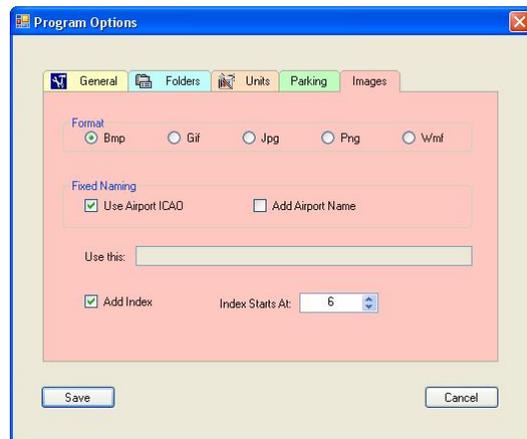


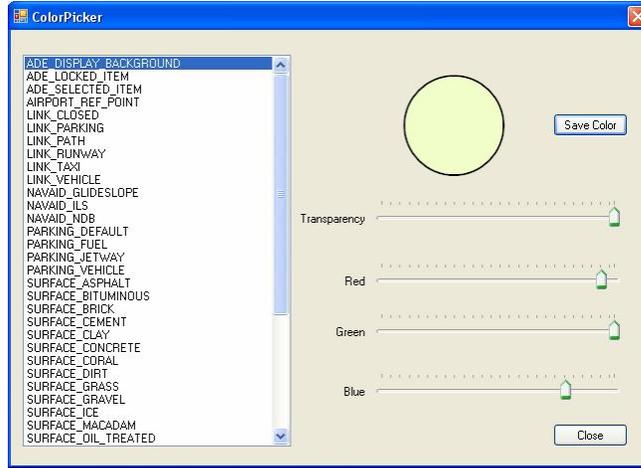
Figure 9 - ADE Program Image Options

ADE can generate its own screen shot by selecting Save Image under the File Menu. The Image Options tab allows you to set the screen shot's image format and to define how the file name should be constructed. You can either use the airport ICAO with or without the airport name or you can choose your own name. In both cases, you can set whether ADE will add an index at the end of the file name and what starting index to use.

Once you have completed your changes, remember to click Save.

Color Options

Color Options are also available under the Settings Menu. Using ADE's Color Picker, you can customize how ADE displays each airport element.

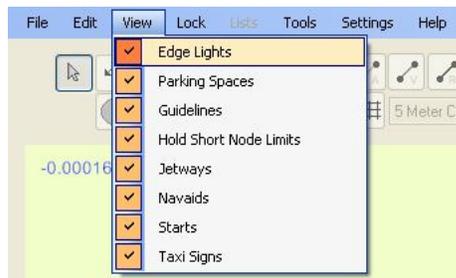


Lock Menu



Under the Lock Menu, you can choose to enable Program-Level Locking for Aprons and/or Runways. Once either is selected, you will not be able to move, delete, or edit the element until you unlock it using the Lock Menu. ADE saves these program-level lock settings and will keep them from session to session.

View Menu



Using the View Menu, you can select what airport elements you want ADE to display. By default, Hold Short Node Limits are not displayed. If you want them to appear, you will need to select them using the View Menu.

Common ADE Error Messages

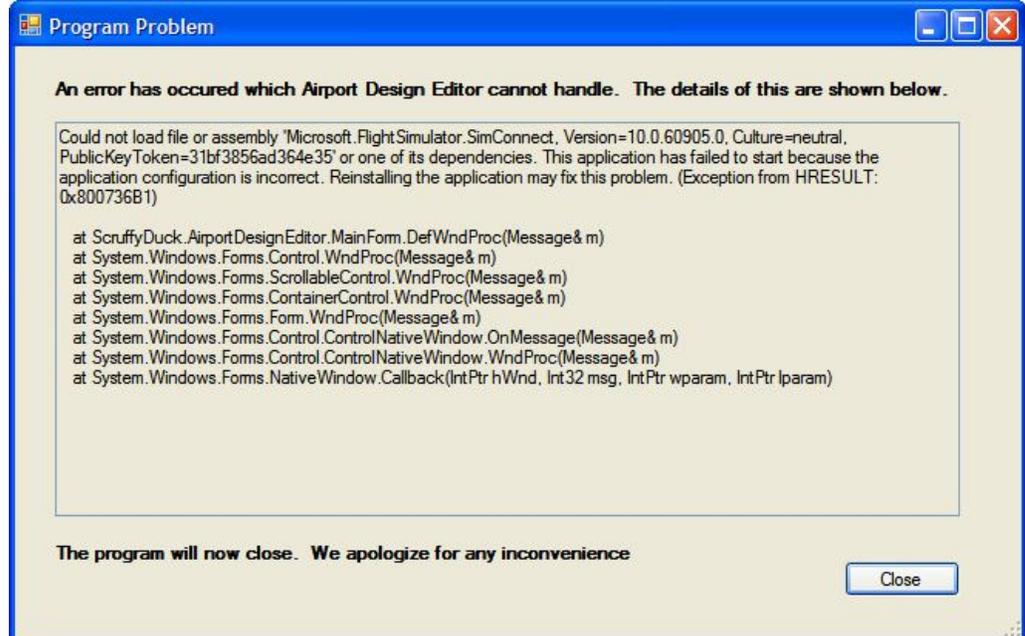
The following are common error messages that users may encounter when installing and/or configuring Airport Design Editor. If you receive an error message and the solution either is not found below or does not correct the problem, please report the error to The ScruffyDuck Software Company or on the ADE Forum at fsdeveloper.com. Be sure to attach your log file along with your error message.

.NET Framework
Initialization Error



- Problem – ADE did not detect .NET Framework 2.0 on your system.
- Solution – You need to either install .NET 2.0 from the Microsoft Download Center or confirm that it is installed correctly on your system. .NET frameworks are not backward compatible; therefore, ADE will not work on your system if you have .NET 3.0 or 3.5, but not 2.0.

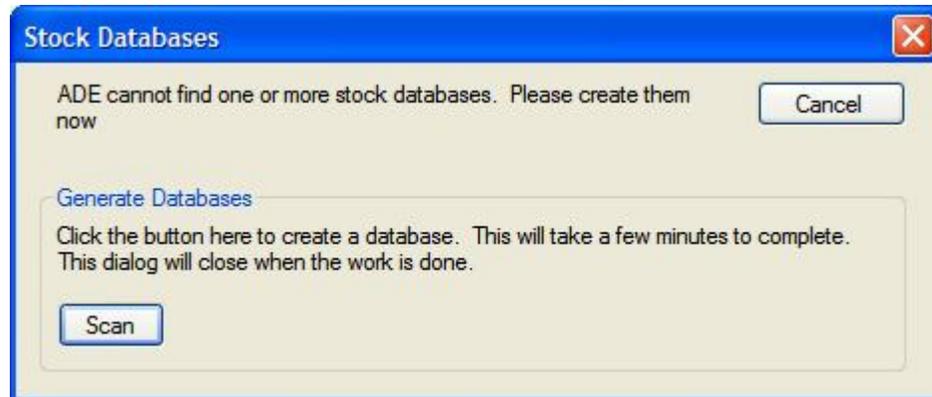
Could not load file
or assembly
'Microsoft.Flight
Simulator.Simconn
ect'



- Problem – ADE did not find SimConnect (located in the FSX SDK). SimConnect allows ADE to connect directly to FSX while the simulator is running.

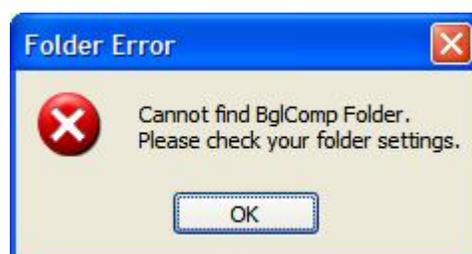
- Solution – You need to install the latest SDK version from either fsinsider.com or from the FSX Acceleration DVD.

Missing Stock Database Files



- Problem – Either ADE did not find your main FSX installation and could not locate any stock information or one or more of the ADE database files are corrupted.
- Solution – The FSX installation path is usually set within the New User Wizard the first time you run ADE. If you receive this error after completing the New User Wizard, you will need to go back and confirm you entered the right location for FSX. You can do so by either selecting New User Wizard under the Tools Menu or by using the Folders Options Tab in Program Options under the Settings Menu. Make sure you follow the New User Wizard instructions given on page 6 of this tutorial. Once you confirm the correct path, select Scan, and ADE will create the databases.

BglComp Folder Error



- Problem – ADE did not find BglComp in your FSX SDK installation. Either you do not have the FSX SDK installed or you entered the wrong location in the New User Wizard.
- Solution – The BglComp path is usually set within the New User Wizard the first time you run ADE. If you receive this error after completing the New User Wizard, you will need to go back and confirm you entered the right

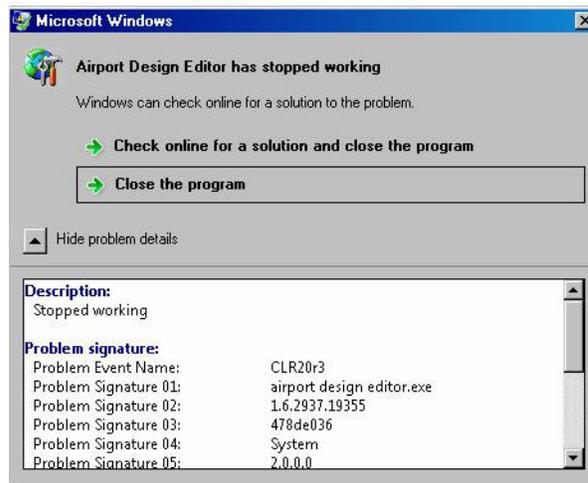
location for the BglComp Folder. You can do so by either selecting New User Wizard under the Tools Menu or by using the Folders Options Tab in Program Options under the Settings Menu. Make sure you follow the New User Wizard instructions given on page 5 of this tutorial.

FS Folder Error



- Problem – ADE did not find your main FSX installation.
- Solution – The FSX installation path is usually set within the New User Wizard the first time you run ADE. If you receive this error after completing the New User Wizard, you will need to go back and confirm you entered the right location for FSX. You can do so by either selecting New User Wizard under the Tools Menu or by using the Folders Options Tab in Program Options under the Settings Menu. Make sure you follow the New User Wizard instructions given on page 6 of this tutorial.

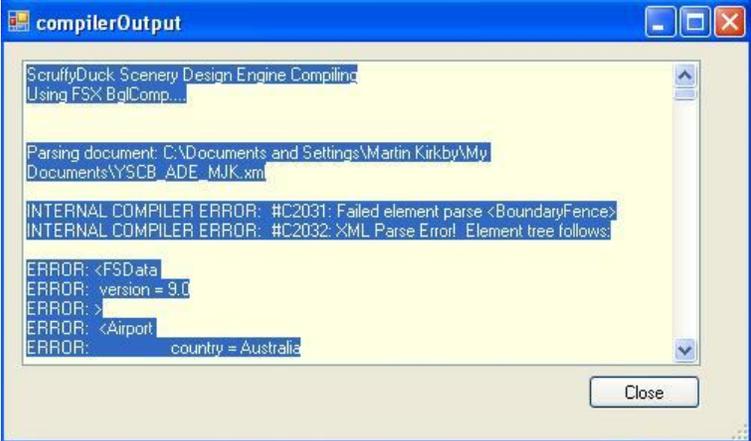
Various CLR20r3 Errors



- Problem – These errors appear to only impact XP 64-Bit and Vista operating systems. The error occurs when ADE is not able to access certain files/folders that are needed because the user does not have the proper rights.
- Solution – So far the only solution has been to either grant yourself global admin rights by editing your registry or by selecting “Run as administrator”

when loading ADE. If you encounter this error, please report it to The ScruffyDuck Software Company or on the ADE Forum at fsdeveloper.com.

Compiler Output Error



The screenshot shows a window titled 'compilerOutput' with a yellow background. The text inside the window is as follows:

```
ScruffyDuck Scenery Design Engine Compiling  
Using FSX BglComp...  
  
Parsing document: C:\Documents and Settings\Martin Kirkby\My  
Documents\YSCB_ADE_MJK.xml  
  
INTERNAL COMPILER ERROR: #C2031: Failed element parse <BoundaryFence>  
INTERNAL COMPILER ERROR: #C2032: XML Parse Error! Element tree follows:  
  
ERROR: <FSData  
ERROR: version = 9.0  
ERROR: >  
ERROR: <Airport  
ERROR: country = Australia
```

A 'Close' button is visible at the bottom right of the window.

- Problem – You are using the original FSX SDK BglComp executable, which does not allow you to compile fence objects.
- Solution – Upgrade to the latest SDK version by visiting fsinsider.com, or by purchasing the FSX Acceleration DVD. See page 1 for more details.