

AdvDisplay.dll (Adventure Text Display module for Microsoft Flight Simulator

Freeware by Pete Dowson, 6th November 2005

Version 2.14 of AdvDisplay

Note: All my Windows based FS software is always available in the latest versions from <http://www.schiratti.com/dowson>

This package contains just the following parts:

AdvDisplay.dll	The module itself, for the FS2k Modules folder
AdvDisplay.doc	This document, in Word 97 format
AdvDisplay.pdf	This document, in Acrobat format
ShowText 1.10.zip	An application for displaying adventure text elsewhere

The ShowText package is by Rob van der Wiele and is provided bundled with AdvDisplay with his kind permission. Please read the documentation enclosed with that Zip for more details. This 1.10 version contains a facility for making a sound when a fresh message arrives, and is fully accredited for use with FSUIPC version 3.

Introduction: What is AdvDisplay?

This is a small module which runs inside Microsoft Flight Simulator capturing text output from Adventures (when they existed, before FS2004), and optionally ATIS, which normally appears in the outside view screen, at the top, and diverting it to its own window. This window can be positioned anywhere on the FS screen, or even outside it. It looks like a normal Window unless “docked”, which attaches it to a specific position inside the Flight Simulator window, normally some place useful such as on the cockpit panel.

WARNING: The Window provided by this module does *not* work properly in full screen mode with 3D-only video cards, nor on Voodoo cards when FS’s “PageFlip” is enabled. It have also received a few reports of other display problems such as flashing and cursor oddities, but I’ve not been able to reproduce any of these either on Windows 98 or XP. I am using DirectX9.

Changes in Version 2.14

This just includes a minor change to make AdvDisplay work with the “white message” option in FSUIPC versions 3.51 and later (offset 32FA, adding 16384 to the timing parameter).

Changes in Version 2.133

The AdvDisplay window is now made “topmost” so it doesn’t disappear under undocked FS windows or other programs (unless they are also “topmost”).

Changes in Version 2.131

Panel loading in FS is speeded up by making sure AdvDisplay only checks for the same panel being reloaded at most once every 10 seconds.

Changes in Version 2.13

The only change is to make the docked window reinstate itself when the *same* panel is reloaded. Previously the module lost track and simply disappeared—until a different aircraft panel was loaded.

Changes in version 2.12–2.123

The pop up menu now has two extra selections: **Slow Scroll** and **Fast Scroll**. These options make the message scrolling speed twice as slow or twice as fast, respectively. Like the other options, this choice is stored with the panel data if AdvDisplay is docked, or in AdvDisplay’s own parameter file if it is Locked. If neither choice is made, the scroll speed is similar to FS’s own.

It also contains a small change to eliminate any delay before it subclasses the FS2004 window. Apparently any sub-classing done later increases the probability of FS2004 getting an apparent freeze with a black screen when changing between windowed and full screen modes. This only applies to some systems, but it can be quite consistent on those.

Version **2.121** and **2.122** were rushed out within two days of 2.12 because the latter change actually stopped “Locked” settings from being remembered, and prevented docking for panels in which it was not already docked! Do **NOT** use 2.12 at all! Version 2.121 then did not work correctly on FS2002 or before. Apologies for these mishaps.

Version **2.123** fixed an odd timing problem with some panels which only affected the initialisation, i.e. when FS is first started. Occasionally a docked window would not come up initially, not until the panel was reloaded or re-drawn.

Changes in version 2.11

A facility for displaying FS white-on-green messages is added, in conjunction with a user option in FSUIPC 3.00. This only operates on non-scrolling messages forwarded from applications to FS, for its message window..

Changes in version 2.10

AdvDisplay.dll is made compatible with FS2004.

Changes in version 2.02

1. Additional and unwanted development and diagnostic code has been removed.

2. The display is now automatically undocked if it is closed or disabled (e.g. by unticking it in the Modules menu). This means that it can be more easily disabled on panels with which it has previously been docked.

Changes in version 2 [IMPORTANT—PLEASE READ]

1. An option is provided to capture “multi-line” messages only—that is those messages that deliberately contain “new line” codes (ASCII 10 or 13) in order to format text onto more than one line. Other messages which do not contain such formatting are left to be displayed by FS in its normal on-screen bar. This facility is primarily intended for use with Radar Contact Version 3 (RCV3), and allows RCV3 to be used with other programs also providing messages—providing that those other programs use single-line messages only, theirs will go to the normal FS screen instead of to AdvDisplay’s window.
2. The window can now be “docked” *anywhere* on the FS screen, provided there is a docked 2D panel part showing. In fact the only real difference now between docking and undocking is that a “docked” window will automatically hide itself when any view is selected which doesn’t display the 2D panel part to which it is docked.
3. Precautions are taken to prevent attempts to dock when no suitable 2D panel parts are docked and displayed, or when the AdvDisplay window is in an unsuitable partition. In these cases the Dock option is disabled (grayed out).
4. If an attempt is made to dock to a panel whose PANEL.CFG file is read-only, a warning is given and the user is afforded an opportunity to remove the protection. The full path for the CFG file is given to make this easier.
5. The undocked window can instead be “locked” in position and size, in which case it looks just like the docked window, with no title bar, but stays in place anywhere within or without the FS window, including positions on second monitors if desired.
6. Almost all options are now available in both docked and undocked mode so that either can be used as desired. A separate INI file (AdvDisplay.ini) is used for the undocked option settings—this will be found in the Modules folder after AdvDisplay has been run. Furthermore, the options stored in a panel’s CFG file are now removed if the panel is changed from Docked to Undocked, so that the older options don’t persist next time that panel is used.
7. After initial installation (with no INI file) AdvDisplay starts off disabled by default, provided that the initial panel loaded contains no docking facilities. Enabling and disabling can be performed in the FS Modules Menu, and this is remembered in the INI file for undocked use. Naturally AdvDisplay is still auto-activated for all panels with which it has been docked.
8. Background colour matching now operates much more reliably. Attempts have been made to introduce transparency and translucency, which should be possible in Win2000 and WinXP installations, but so this has not been successful. It may be added later if it can be made to work.
9. When the window is not actually hidden for other reasons (docked and no panel, auto-hiding enabled, or hidden always selected), it can be toggled on/off using a Hot Key. This hot key is assigned in FSUIPC (version 2.96 or later needed)—in its Hot Keys page—not in AdvDisplay.
10. The problems whereby sometimes the AdvDisplay window retained the focus after access to its options have been fixed by automatically always re-activating the FS window and transferring focus to it.
11. The Save option in the menu is removed. AdvDisplay now saves changes automatically. These go to the AdvDisplay.ini file in undocked mode, or to the current PANEL.CFG file in docked mode. Note that there's no check made for "read only" status in this case. The only time such a check is done is when you actually use the Dock option in the menu.
12. Docking can be accomplished when any 2D panel part is showing and docked in FS, but the docking will be associated with the first valid panel part found. It is best to make sure that this is the "main panel" but you can have it associated with the "radio" or the "GPS" or other parts. The part name used for this is from the list in the PANEL.CFG file, and it is recorded in the [AdvDisplay] section of the CFG file under the key "PanelPart". You can change this manually if you like (but not when that panel is in use!) AdvDisplay cannot be docked to panel parts which have been undocked from FS, nor to any 3D/virtual cockpit parts.

Installation and Use

1. Copy the AdvDisplay.dll module into your Flight Simulator ‘modules’ folder.

NOTE: If you cannot *see* the DLL, please go to the Explorer’s View menu. Select “Folder Options” and then the “View” Tab. Then choose either the “Show all files” button or the “Do not show hidden files”—anything *but* the “Do not show hidden or system files” button! (Windows 98 now seems to regard all DLLs as system files and not the “application extensions” they usually are!).

2. Run Flight Simulator.
3. Go to the Modules menu and check the AdvDisplay entry. This enables the module and all of its options. Normally, you will position its window and then “dock” it with the current panel. [**Note:** If you dock it and lose it, you can either come back here and disable it then re-enable it, or use the Undock AdvDisp menu entry to undock it in position].
4. You will see a new window, near top left, with a title bar exclaiming “Adventure text Window ...”. This will contain the diverted text output from Adventures. However, read on, as you’ll really want a tidier result than that!
5. Using the title bar, drag the window to a better place, size and position the message area (that is the bit below the title bar) to suit your cockpit or display, then right-click in the message area and choose “dock”. This will fix the message part of the window on that panel, losing the title bar. When docked the window will disappear when the panel isn’t showing, such as when looking at side views, or switching to virtual cockpit, spot plane or tower views. If you want the window visible at all times, don’t dock it but use “lock position” instead. With this facility you can lock the window on a separate monitor if you have one.

Note that, with some video drivers, dragging the window to position it may leave spurious copies of itself. These do no harm and will be painted over when you’ve done, but you may find it better to disable the Windows display properties option to “Show window content when dragging”. Then when you drag the window it merely drags a frame, leaving the previous image in its original place until you release the mouse button.

Then it snaps to the new location. (If you do switch this option off you will also find that the FSUIPC facility to lock FS panel windows in position works).

6. The text defaults to red, the background to a dark gray. If you want different colours, select Text or Back colour when you right-click on the message window. You'll get a standard colour choice dialogue. OR, for the background colour you can make this match your panel by selecting "Match background". This chooses the colour immediately below the centre of the AdvDisplay window. If you want to pick a colour from elsewhere on the screen you'll need to first undock or unlock the window, move it so that the required colour is immediately below the centre, then right click and select "Match background". Then, of course, re-position and re-dock.
7. You can also select a different font and/or font size if you like, again by right-clicking with the mouse. For some applications a fixed pitch font might be more appropriate than the default.
8. When it looks good, right-click yet again and choose 'Save'. This saves the position, colours and font (if selected), for that panel.
9. If you are using the panel docking facilities, repeat steps 3 to 8 for each panel you load. The positions, colours and fonts are saved separately for each panel. If you do not select a new font for each panel, the same font set in the last panel will be used.

If at any time you lose the Window, or want to disable it in favour of the default FS text display system, look in the Modules menu which should appear at the right-hand end of the regular FS menu bar. In that menu, find "ADV Display". This is checked when the window is enabled (even if you can't see it) and unchecked otherwise. Simply click that entry in the menu to toggle it off or on. When you re-enable the window in this way it reverts to its default position and size (but will still retain the last colours set)

If the window won't dock ...

- If the Dock option is actually disabled, then either you have not placed it sufficiently over the FS window, or there is no suitable 2D panel part on display at the time. AdvDisplay cannot be docked to panel parts which have been undocked from FS, nor to any 3D/virtual cockpit parts.
- If you get an error message the usual reason is that the PANEL.CFG file for your panel is marked "Read Only". The latter problem seems to occur regularly with the DreamFleet 737 panel, for example. You will need to locate this file (in the Aircraft's Panel folder—the error message will give the path and filename) and remove the read-only attribute (right click, select Properties, and look down the dialogue). Note that the PANEL.CFG file that is needed is normally the one containing all the details, not just an "alias" to some place else.

Displaying adventure text in a separate program

AdvDisplay also copies the text into an area which is accessible via FSUIPC. This is at offset 0x3380-0x33FF (i.e. a maximum of 127 characters and a zero terminator: longer messages are truncated). For this you would need an application program designed to read and display the text. Using WideFS this could be done on a separate PC.

If you have arranged for this to occur, you will want to hide the AdvDisplay window in FS. To do this, Dock the window as usual, then use the "Hide always" entry in the pop up menu.

To un-hide a window hidden in this way you will either have to disable and re-enable AdvDisplay in the Modules menu (in which case the window will come back undocked in its default position), or, if you are Docked, change to another aircraft/panel, and edit the previous PANEL.CFG file, deleting the "HideWindow=Yes" parameter (or changing it to "no").

Displaying ATIS messages through AdvDisplay

AdvDisplay can now capture and divert the ATIS messages which otherwise appear, optionally, and usually scrolling, across the top of the outside view screen. By default it doesn't capture these—enable such capturing via the pop up menu, when you right click on the AdvDisplay window. ATIS messages are not multi-lined, so this option and the multi-line option are mutually exclusive.

In **FS2002/4** the ATIS text will *not* be displayed if you have turned off ATC text in the Options-Settings-ATC dialogue. This applies to normal scrolling ATIS messages as well as those seen in AdvDisplay windows. Also, please note that AdvDisplay cannot capture and re-direct FS2002/4's ATC text. That is another subject!

Notes

If the message window is docked, it will only appear when the appropriate panel part is visible and docked into FS. This way it doesn't 'obscure' full screen, virtual cockpit, or side window views. This may mean that you miss Adventure messages.

On the other hand, if it is position-locked anywhere, it stays in that position and stays on top, always visible, even when FS views are changed. You can use this method, but then be sure to find a suitable position: perhaps on a separate monitor, or near the top of the screen, or even over the title bar (if you run in maximised window mode, rather than full screen mode).

When the window is docked, its size, position, colour and optional font details are recorded in the current panel's PANEL.CFG file, in a new section called [AdvDisplay]. This is so that different positions can be set for each aircraft panel. The window is automatically adjusted when you load a new panel. Positions are based on screen resolution and size ONLY, they are not related to FS's window size or position, so they will have to be re-done if ever you change any of this.

In the right click menu there is also a Close option. This allows you to close the window so that Adventure text reverts to the normal method. As described above, the window can also be closed by clicking the "ADV Display" entry in the Modules menu. This menu entry is also used to re-open the window once it has been closed. Closing it either way also removes docking information from the current panel, if any is stored there.

All Adventure message options are simulated, and these are normally on one line. However, if you prefer, you can make the window narrower and taller. Word wrapping is used as and when enough text appears.