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# Little Navconnect User Manual

#### Version 1.4 (Beta)

Little Navconnect is a small free open source application that acts as an agent connecting Little Navmap with a flight simulator. This allows to use Little Navmap on Linux or Mac and saves the the pain of setting up remote SimConnect links.

More about my projects at GitHub.

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#### Installation

Note that Little Navconnect is now bundled with the Little Navmap download.

Highlighted text is used to denote window, menu, button, file or directory names.

Installation involves the simple copying of files therefore an installer or setup program is not required.

Do not extract the archive into the folder <code>c:\Program Files(or c:\Program Files(x86))</code> since you will need administrative privileges in some Windows versions. Since Windows keeps control of these folders other problems might occur like replaced or deleted files.

Extract the Zip archive into a folder like c:\own Programs\Little Navconnect . Then start the program by double-clicking littlenavconnect.exe .

Little Navconnect is a 32-bit application and was tested with Windows 7, Windows 8 and Windows 10 (32-bit and 64-bit).

Windows XP is not supported.

#### Installing over a previous Release

It is recommended to delete the old installation directory of *Little Navconnect*. You can also install a newer version into a new directory but do not merge the installation directories.

Anyway, no settings (except custom maps) are a stored in the installation directory. Therefore it is safe to remove it.

#### Other Simulators than FSX SP2

This program was compiled using plain FSX SP2 (no Acceleration) SimConnect version 10.0.61259.0.

You might have to install an older version of SimConnect if you use *Prepar3D* or *FSX Steam Edition*. If not sure about this simply try *Little Navconnect* out. If it fails with an error message follow the instructions below:

**Prepar3D:** In the same directory as Prepar3D.exe is a redist\Interface directory (normally c:\Program Files (x86)\Lockheed Martin\Prepar3D v3\redist\Interface ). There are multiple legacy versions of SimConnect available. You have to install FSX-SP2-XPACK.msi for Little Navconnect.

**FSX Steam Edition:** The installation adds the folder c:\Program Files (x86)\SteamApps\common\FSX\SDK\Core Utilities Kit\SimConnect SDK\LegacyInterfaces where you can find the legacy SimConnect interfaces.

#### **General**

Little Navconnect acts as an agent that connects Little Navmap running on a remote computer with a flight simulator. This saves the complexity of setting up a remote SimConnect link and allows using Little Navmap on Linux or macOS.

Little Navmap can connect to the flight simulator directly when running on the same computer as the flight simulator therefore the Little Navconnect agent is only needed for connecting a remote computer.

# **Usage**

Make sure that the major versions of *Little Navmap* and *Little Navconnect* match, otherwise you will get an error message. *Little Navmap* 1.0.5 is compatible with *Little Navconnect* 1.0.2 but not with 1.2 for example.

1. Install Little Navconnect on the flying computer. Start it and take note of the message that is printed in the logging window. You only need the colored values. You can use the IP address or the hostname. The program will automatically connect to the flight simulator using SimConnect, if found. If no simulator was found it will retry in 10 second intervals. Little Navconnect can print multiple IP addresses or hostnames depending on your network configuration. This can happen if you have Ethernet plugged in and are connected using wireless LAN too, for example. You have to try all addresses if you are unsure which one to use.

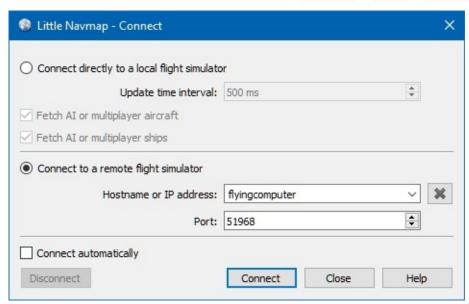


Picture above: Little Navconnect is running and waiting for a flight simulator.

Change the port in the options dialog if you see an error message like shown below:

 $\hbox{\tt [2016-07-27\ 16:45:35] Unable\ to\ start\ the\ server:\ The\ bound\ address\ is\ already\ in\ use.}$ 

- 1. Start Little Navmap on the client computer.
- 2. Open the connection dialog in Little Navmap by selecting Main Menu -> Tools -> Flight Simulator Connection .



Picture above: Connect dialog with correct values to access the \_Little Navconnect shown above.\_

- 3. Select Connect to a remote Flight Simulator .
- 4. Add the value for hostname. This can be either the hostname or the IP address printed by Little Navconnect.

- 5. Check the value for the port. 51968 is the default value and does not need to be changed usually.
- 6. Click connect. The dialog will close and *Little Navmap* will try to establish a connection in the background which can take some time, depending on your network. Your aircraft will show up on the map and on the <u>simulator Aircraft</u> dock window once a flight is set up and loaded on the simulator. You will see the message <u>connected</u>. Waiting for update. in the <u>simulator Aircraft</u> dock window if no flight is loaded yet (i.e. the simulator still shows the opening screen). Note that it sometimes can take a while until an error is shown if you used the wrong values for hostname or port.

# **Menu and Options**



Exits the application. Will ask for confirmation if there are still clients connected.

#### **Tools -> Reset Messages**

This will re-enable all dialogs that were disabled by clicking Do not show this dialog again or similar messages.



# Tools -> Options

Opens the options dialog which has three settings:

• update Time Interval: Allowed range is 50 milliseconds up to 1 second. Little Navconnect fetches data from Flight Simulator and sends it to all clients (i.e. Little Navmap) using this time interval. Increase this value if you get a warning message like shown below:

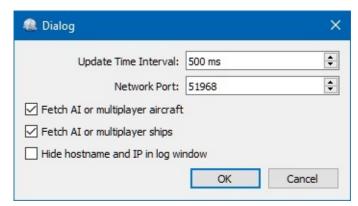
[2016-07-27 16:45:35] Dropped more than 50 packages. Reason: Missing reply. Increase update time interval.

Dropped packages can also appear if the Little Navmap cannot respond because a dialog is open.

Network Port: This can normally be left at default. Change this value only if another application occupies this port and you get an error message like shown below when starting Little Navconnect:

[2016-07-27 16:45:35] Unable to start the server: The bound address is already in use.

- Fetch AI or multiplayer aircraft and Fetch AI or multiplayer ships: Disables fetching of AI vehicles and the transfer across the network. This can be useful for performance reasons if you use large amounts of AI but do not want to see it in Little Navmap.
- Hide hostname and IP in log window: Check this option to disable printing of hostname and IP address on startup. This can be useful for streaming sessions where Little Navconnect window is visible to others.



Picture above: Little Navconnect Options Dialog with default settings.



### **Help Menu -> Contents**

Shows this help in your default web browser.



# **Help Menu -> About Little Navconnect**

Shows version and revision number for Little Navconnect, also contains links to the configuration file, log file and the author's e-mail addresses.



# Help Menu -> About Qt

Information about the Qt application framework that is used by Little Navconnect.

# How to report a Bug

If something goes wrong send me *Little Navconnect*'s log file and configuration file which both can be located in the about dialog. My e-mail address is shown in the about dialog of *Little Navconnect* as well.

Please add all steps that are necessary to reproduce the error.

If you're concerned about privacy when sending log files: The log files will contain all paths (like your bocuments directory) which will also include your username as a part of the path. They might also contain your computer's name IP address in your network.

In no case file names from anything else than flight simulator scenery or configuration files are included. No names or content of personal files is included in the log files.

I'd suggest to remove this information if you're concerned about it.

I strongly recommend to send the log files using a private forum message or by email and not attach them to forum posts where they are publicly visible.

#### **Files**

Log files of Little Navconnect for Windows 7/8/10 are typically stored in the directory:

C:\Users\YOURUSERNAME\AppData\Local\Temp

The program keeps three log files and rotates these on each startup. So you can find up to three logs:

 $abarthel-little\_navconnect.log\,,\,\,abarthel-little\_navconnect.log.1\,\,\,and\,\,\,abarthel-little\_navconnect.log.2\,.$ 

All configuration files of my programs for Windows 7/8/10 are typically stored in the directory:

C:\Users\YOURUSERNAME\AppData\Roaming\ABarthel

There is one configuration file for this program:

little\_navconnect.ini: INI style configuration file. Text file.

# **Acknowledgments**

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AVSIM, SimOuthouse, FlightX.net and FSDeveloper.com.

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