



World Terrain

Brought to you by

Hush-Software

PRESENTATION

- You enjoy flying with your favorite flight simulator, but have you ever felt bored by watching generic textures?
- Would you prefer to see your favorite's spots from above such as your own house?
- Wonder how it really looks from above?
- Do you want to prepare your next real flights by getting some real visual references?

WORLD TERRAIN IS FOR YOU!

With World Terrain you will have an unmatched quality view from the sky provided by high-resolution satellite imagery of up to 60 cm per pixel.

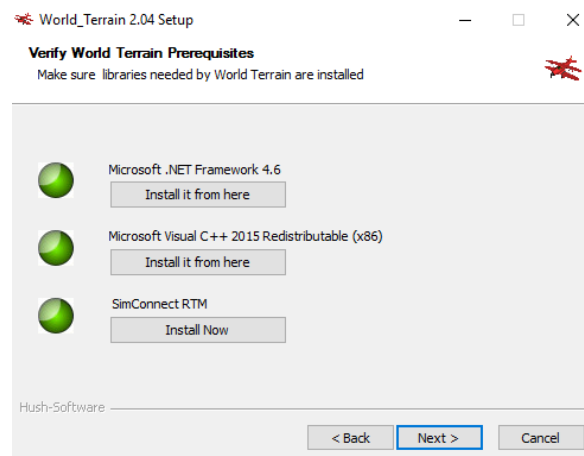
INTRODUCTION

World Terrain is an add-on for your favorite Flight Simulator that generates photo realistic terrain from satellite pictures downloaded from the Internet. World Terrain adds unprecedented realism by adding 3D objects such as buildings and trees at their precise location. World Terrain is designed for both VFR flights for general aviation flying low and slow and for airliners flying high and fast.

INSTALLATION

1. Just run the installer named "Setup_World_Terrain.exe"
2. The Simulator checks that pre-required software is installed and displays red or green lights. If a light is red, press the install button to download and install the prerequisites. You should continue the install once all green lights are displayed.
3. Select your Flight Simulator – The installer will detect the ones currently installed on your System. In case of multiple versions installed, the installer will let you decide which simulator to use with World Terrain
4. When prompted enter the folder where to install the program
5. At the prompt Select the directory where World Terrain will install the Scenery file definition

6. After the files are copied World Terrain will update the files containing the definition of scenery used by your simulator – “Scenery.cfg”
7. The installer will offer you to launch the program and read this file – Enjoy!



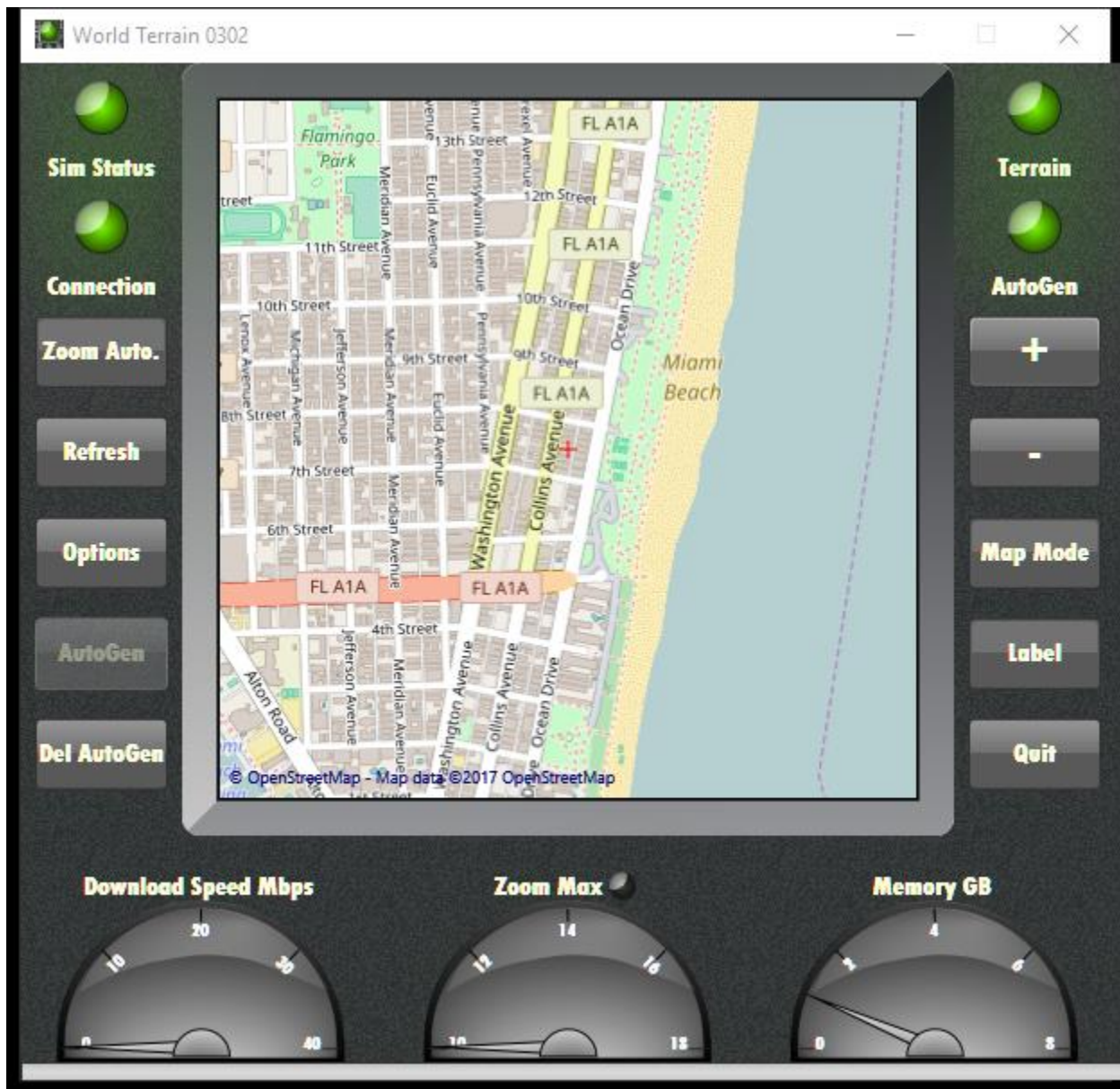
REQUIREMENTS

- Flight Simulator Software
- A Fast internet connection
- Enough Disk space and the required space will grow with usage as the user flies over more areas
- Any Windows 64 bits version from Windows 7 to Windows 10

USAGE

1. Launch World Terrain
2. Launch your Flight Simulator
3. The connection led should turn Green indicating a connection with your Flight Simulator and downloading of terrain should start
4. You should see the Download needle go up and the Terrain led turn red, orange and then green
5. At start-up World Terrain downloads over 30 000 square km of terrain at various resolution and displays a message “Generating Terrain Please Wait”.
6. Press Refresh to allow for the simulator to take into account newly computed terrain
7. If you fly faster than the simulator can download a message “Slow Down or Pause” will appear. If this appears regularly you can either:
 - a. Reduce the Level of detail radius Options-> Settings -> Display -> Scenery
 - b. Reduce the Max Zoom of World Terrain in the Options Menu
 - c. Fly more slowly or change aircraft
8. Enjoy your flights!

USER INTERFACE

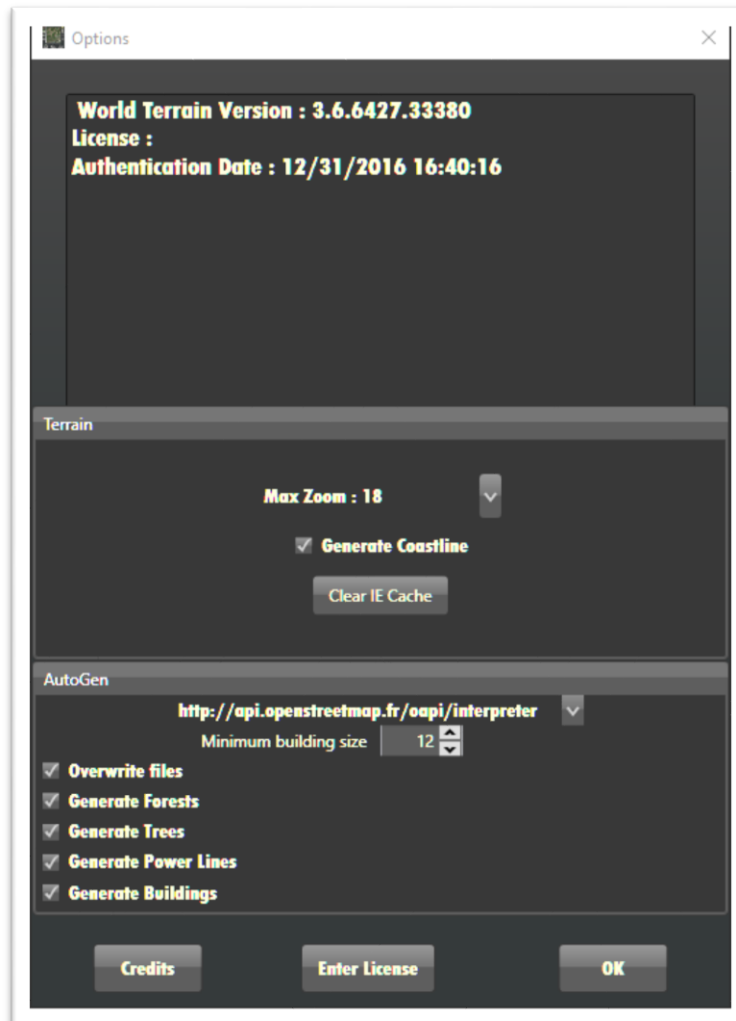


World Terrain displays following information:

- **Sim Status** : Indicates if Simulator is running (Green) or Stopped (Red) or Paused (Yellow)
- **Connection** : Indicates if connected to the Driver (Yellow) then connected to the Simulator – (Green) or disconnected (Red)
- **Terrain** : When red indicates that World Terrain has some missing Terrain and is still catching up. Orange is displayed when World Terrain is downloading the terrain for the predicted next position - Green means World Terrain is idle

- **Autogen:** Green is displayed when Autogen has been created for the area being overflowed - Yellow indicates that Autogen is currently being generated – The led is off when no Autogen for the area has been created Press the Autogen button to create 3d objects for this area.
- **Zoom Auto /Zoom Man.:** In Auto mode the maximum zoom is automatically adapted to the aircraft position to display the most accurate terrain. This is the recommended mode. When the limit is applied the Max zoom led is turned on.
- **Refresh :** Used to request the simulator to refresh the scenery and display the newly downloaded terrain
- **Options :** Allows to enter License information and displays a reminder to check updates on our web site – If you enjoy the free version Please register on our website : www.hush.software
- **Autogen:** Press to create Autogen for the area being overflowed. This creates 3D objects buildings and forests for an area of approximately 20 km by 20 km. As you fly further you may need to press the button again to generate a new area. The button is disabled when AutoGen has already been created and the Autogen Led is then displayed in green.
- **Del Autogen:** Erases Autogen for the whole area as described in Figure 1
- **+ / - :** Buttons Used to zoom in or out on the map
- **Map Mode :** Allows user to select to display the moving map in imagery or map mode
- **Label :** Used in imagery mode to add labels to display information such as city names
- **Quit :** See you on your next flights!
- **Download Speed :** Shows how fast World Terrain downloads terrain in Mbs
- **Zoom :** Shows the resolution of terrain currently generated (Higher is better)
- **Memory :** Displays memory consumption in GB

OPTIONS



TERRAIN OPTIONS

- **Max Zoom :** Allows to reduce maximum zoom for low speed connections or high altitude flights
- **Generate Coastline :** If unchecked the coastline will appear as squared tiles
- **Clear IE Cache :** World Terrain uses Internet Explorer caching mechanism to reduce downloads. Pressing this button will clear the whole cache

AUTOGEN OPTIONS

- **Server Selection :** Used to select Open Street Map server used to retrieve Autogen data. Used to change servers when servers are saturated by too many requests

The next options allow users to tailor the Autogen to their tastes

- **Minimum building size :** When this number is lowered more small building will be generated
- **Overwrite Files :** When unchecked any existing file will not be overwritten
- **Generate Forests :** When unchecked no Autogen forests are created

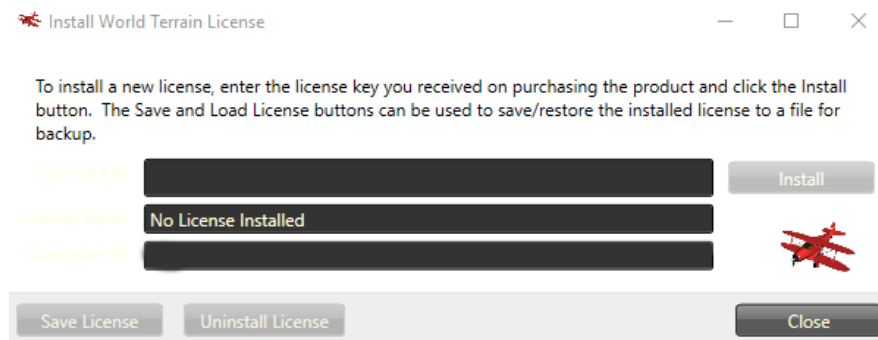
- **Generate Trees** : When unchecked no Autogen Trees such as Alley trees in cities are created
- **Generate Power lines** : When unchecked no Powerlines poles are created
- **Generate Buildings** : When unchecked no Autogen buildings are created

OTHER OPTIONS

- **Credits** : A reminder to check hush.software website
- **Enter License** : Allows to enter or uninstall a license
 - If you wish to install World Terrain on another PC you must first deactivate it before activating the license on a new PC
 - **OK** : Closes Option **window**

LICENSE WINDOW

Use this window to enter license:



SIMULATOR SET-UP

- World Terrain requires Windows Defender to be disabled:
 - Search "Defender" in Start Screen
 - In Settings –Real-time protection select Off
 - You may alternatively simply exclude Window defender from scanning World Terrain Scenery files
- Simulator Set-up
 - Select Option ->Display
 - Graphics :
 - Texture Filtering : Anisotropic
 - Texture Resolution High 2048
 - Hardware tessellation - checked if available
 - Scenery :
 - Level of detail radius : Medium (If your download speed is above 10Mb you can gradually increase this settings)

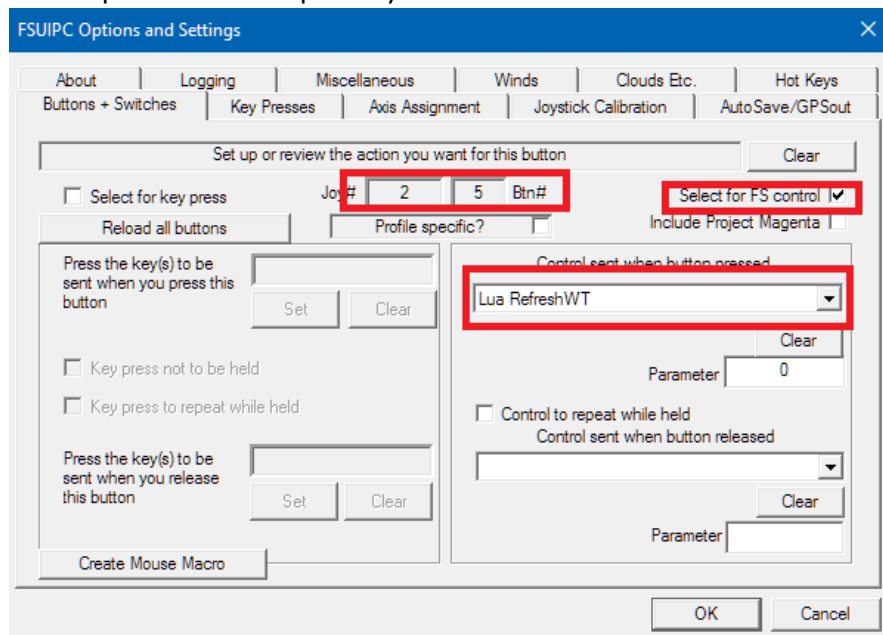
- **Texture Resolution : 7 cm (this is the most important set-up)**
- Land and detail textures - checked if available
- Autogen :
 - Autogen density sliders to the maximum
 - To reduce the number of buildings the **Minimum building size** parameter can be increased.
- Lighting:
 - HDR lightning – as per user preference but it is recommended to start without as settings may require tuning to match satellite imagery

COMPATIBILITY

- Flight Simulator FSX RTM, FSX Acceleration
- Flight Simulator Steam Edition
- Prepar3D V1,V2 , V3 , V4

ALLOCATING BUTTON TO REFRESH

- Users that have a registered version of FSUIPC can allocate a joystick button to trigger the Refresh of the terrain.
- The allocation is done by Selecting the button and associating it to the macro “Lua Refresh WT”
- The macro is copied on user computer by the installer if FSUIPC was detected



KNOWN ISSUES

- Coast Lines not showing water as it should in rare cases
- Green or black squares appearing instead of terrain – This indicates the aircraft is flying faster than World Terrain can download. Consider lowering LOD Radius settings.

- Terrain may show different color from afar as Satellite image providers may use images from various seasons for different resolutions
- Refresh sometimes not performed automatically on FSX and FSX-SE – Please use either Joystick button with FSUIPC or Open Window World ->Scenery Library and Press OK to trigger a Refresh
- When moving the aircraft either by selecting new airport or loading a scenario the simulator is long to update the position while World Terrain displays “Moving Please Wait”. This occurs first time the aircraft goes to a new location and is computing. This waiting time will be much shorter thereafter so please be patient.

FAQ

1. THE SIMULATOR SHOWS WRONG OR GREEN TERRAIN INSTEAD OF SCENERY

This happens if Flight Simulator has not processed the new generated files. Simply Press Refresh to have flight simulator process the new downloaded terrain.

2. I CAN NOT DISPLAY WORLD TERRAIN INTERFACE

You may bring up the World Terrain interface by pressing “Alt+Enter” to toggle your flight Simulator from full Screen / Windowed mode. Alternatively you may switch among windows by pressing “Alt+Tab”.

3. CAN I TURN WORLD TERRAIN OFF TO SEE GENERIC TERRAIN

In your simulator, Select World -> Scenery and deselect World_Terrain_XXYY.

The Value of XXYY can be found on World Terrain Windows Title or on the following map where XX and YY are column and row numbers respectively.

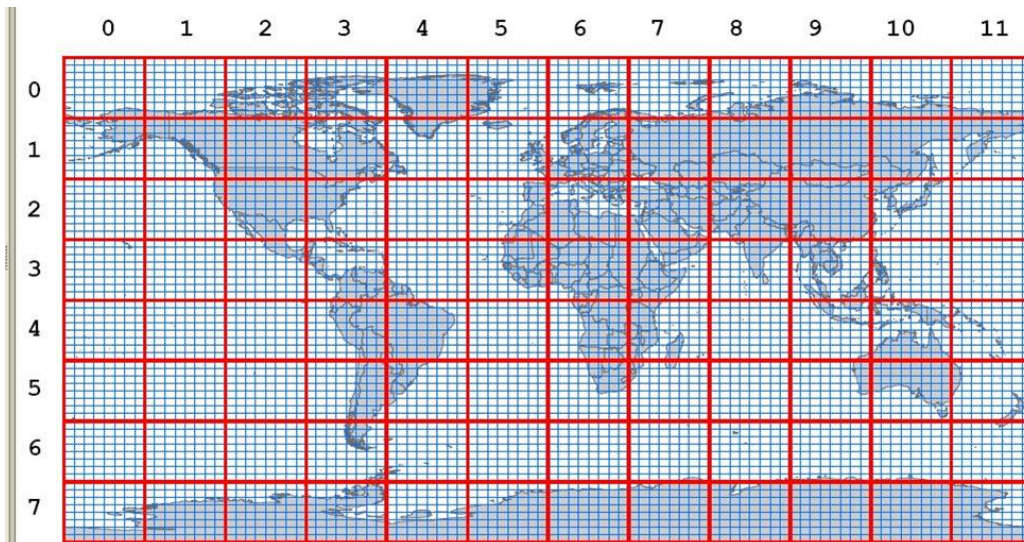


Figure 1

4. NO AUTOGEN OBJECTS ARE DISPLAYED

Check that Autogen density sliders in Options -> Graphics are set appropriately

CREDITS

Special Credits to Christian Buchner for the Original idea of TileProxy

Please check our website : www.hush.software

