Thank you!

Orbx would like to thank you for purchasing FTX Global openLC North America, which is the culmination of over three years of R&D and data development. FTXG openLC as the name suggests, replaces the default Landclass layer with higher detailed and a better variety of land types, which then creates more varied and accurate terrain. FTXG openLC also include many new custom textures, used in addition to those installed with the Base Pack.

The version of openLC you have is specifically designed to work with both FTX Global BASE and FTX Global Vector as part of a total simulator overhaul.

What does FTX Global openLC do:

If you are reading this User Guide you have likely already installed openLC and perhaps taken your first flight to discover the difference. Landclass data is the way the simulator knows what all the land is being used for and tells the simulator what type of ground should go where, for example: Forest, City, Agriculture, Desert, Docks, Grassland, etc. The simulators come with a global default coverage of landclass data, but many areas contain missing or in-accurate data. FTXG openLC plans to change that.

So the difference between what you had before and after openLC is quite remarkable; we like to compare it to a complete simulator upgrade, similar to the huge improvement FTX Global BASE's textures provided.
Product requirements

This scenery addon is designed to work in the following simulators: Microsoft Flight Simulator X, Lockheed Martin Prepar3D v1, Lockheed Martin Prepar3D v2 and Lockheed Martin Prepar3D v3.

**Orbx FTX Global** is also required for full functionality.

FTX Global openLC is **specifically designed** for FTX Global BASE, and calls many textures only found in that product. Attempting to use openLC with default textures or other third party texture products is not supported and will lead to unpredictable results.

Please visit [https://fullterrain.com/product/ftxglobal](https://fullterrain.com/product/ftxglobal) to purchase your copy of FTX Global if you haven't already done so.

FTXG Vector is also highly recommended, in fact all of our preview screenshots include Vector.
Quick Installation Guide

Installing Orbx FTX FTXG openLC is all managed by our FTX Central application. This app is responsible for many aspects in maintaining your Orbx installation. Please visit the support forums to learn more.

Once you have purchased FTXG openLC it will be added to your account and you can have FTX Central download and install it for you. The appropriate scenery library entries will also be managed by FTX Central.

You may also manually download FTXG openLC and then have FTX Central manage the installation for you once downloaded.

An internet connection is required for FTX Central to validate your license.

Please note that the above all refers to FTX Central 3. Earlier versions of FTX Central are no longer supported but will still function as before. The integration of FTX Central with your OrbxDirect account is only available with FTX Central version 3 and above.
Scenery Coverage Area

The scenery coverage for openLC North America is shown below. It encompasses the area of North and Central America, Hawaii, Caribbean islands and Greenland.
How does openLC fit with FTX Global BASE?

If you are new to FTX Global and have purchased openLC you’ll probably want to know what the FTX Global BASE product does within FSX/P3D. This was released back in July 2013 and upgrades the entire simulator’s TEXTURES worldwide, more specifically:

- Replaces all the default landclass textures located in \Scenery\World\Texture with custom Orbx FTX textures
- Installs FTX Central and other supporting apps into the \ORBX folder. FTX Central and these other apps help manage all Orbx addons including FTXG, FTX Regions and FTX Airports Adds 3D lights to all vector main roads all over the world. These can be turned on and off using FTX Central
- Makes corrections to the base landclass for some parts of the world, particularly in SE Asia and the USA SW area
- Adds zero-FPS hit 3D lights to all textures all over the world.

So what openLC does is enhance the new textures with much better landclass representation, telling the simulator what type of textures to place in a certain area.
Layers in the simulator

Orbx staffer Rob Newman created a very easy to follow chart which explains how various “layers” work for FSX (as well as Prepar3D):
Where FTX Global openLC fits

So here is the same diagram again but this time showing how the three FTX Global products fit and where specifically openLC fits into the product family:
Orbx FTX openLC Worldwide Regions

The diagram below shows how openLC will be rolled out across the world beginning with Europe (1), followed by North America (2) and so on.

In this way, rather than make you wait a year or two to have a single worldwide openLC landclass installer, we’re releasing each pack separately so you can complete the FTXG layers for major parts of the world as we go along.

Since Orbx has committed to FSX and P3D your investment in the FTXG family will continue to bear fruit if you decide to move your core simulator platform.

We building a platform for the future that embraces existing FSX technology and also allows the freedom to move to future new platforms that leverage DX11 and the latest GPU technology.

Orbx makes no excuse about the fact that we want your business across all three layers so that we can release hundreds of FTXG-compatible airports on this platform and its features whilst still continuing to develop our ultra-featured full FTX regions such as the continuing North American and European FTX regions.
Compatibility Notes

Please visit http://www.orbxsystems.com/forum/forum/80-ftx-compatibility-forum/ for the latest compatibility information between FTX Global openLC and third party addons.

Ultimate Terrain (UTX)

FTX Global openLC competes with UTX since we replace landclass data contained in UTX. You have a lot of configuration options available using the UTX configuration tool and we recommend you take time to explore what works best when FTXG and openLC are combined.

SceneryTech (ST)/Cloud9 (XClass)/Other Landclass products

If using XClass or ST Landclass, note that openLC is a direct competitor and is not designed to work with them. You can keep using SceneryTech and other landclass addons that are outside of the openLC coverage.

GROUND ENVIRONMENT X (GEX)

GEX is a default texture replacement product just like FTX Global and provides its own unique textures using a vastly different colour palette. Additionally, openLC calls many custom textures contained in FTX Global which GEX simply does not contain, or which will have the incorrect color tone. FTX Global BASE is required to work with openLC, since they were designed to work together seamlessly.

THIRD PARTY TERRAIN MESH

openLC does not include any terrain mesh files. Mesh is used to provide the definition of mountains and undulating terrain so the smaller the distance between each mesh point (the resolution), the better defined these features look in the simulator. We recommend you check the compatibility forum in the link above or the FTX forums to research what the best terrain mesh product is for openLC.

Orbx has also partnered with PILOT’s who have released a download version of their worldwide FSGlobal2010 Mesh product, called the “FTX Edition”. This is the mesh product Orbx beta testers used when testing openLC and although it is not required or mandatory, it’s a quick solution to provide a worldwide mesh which you can purchase and download from the flightsimstore.com – this is a ~24GB download though so be aware that's a lot of data!
Quick Reference Simulator Settings

The table below lists in a handy reference the minimum recommended settings required in your simulator to enjoy openLC the way Orbx designed it. These settings will run well on most PCs and take particular advantage of the custom mesh and photoreal imagery used in the scenery area.

If you use the settings below you will be guaranteed the highest fidelity experience and the best balanced performance.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of detail radius</td>
<td>Large</td>
<td>Reduces blurring of textures.</td>
</tr>
<tr>
<td>Global texture resolution</td>
<td>Max</td>
<td>Displays photoreal textures best.</td>
</tr>
<tr>
<td>Mesh complexity</td>
<td>100</td>
<td>Better terrain definition.</td>
</tr>
<tr>
<td>Mesh resolution</td>
<td>5m</td>
<td>5 m is required for openLC.</td>
</tr>
<tr>
<td>Texture resolution</td>
<td>7 cm</td>
<td>Sharpest roads and freeways.</td>
</tr>
<tr>
<td>Scenery complexity</td>
<td>Extremely Dense</td>
<td>How Orbx designed FTX openLC.</td>
</tr>
<tr>
<td>Autogen density</td>
<td>Normal</td>
<td>Best FPS vs detail.</td>
</tr>
<tr>
<td>GA AI traffic</td>
<td>16-50%</td>
<td>Recommended for this scenery.</td>
</tr>
<tr>
<td>Road vehicle traffic</td>
<td>16%</td>
<td>No need to set higher for FTX.</td>
</tr>
</tbody>
</table>
Product Technical Support

Orbx has a very simple support policy: no question unanswered. That means, should you have any questions about openLC or its use, please feel free to register on the forums at fullterrain.com and then log a support question in the FTX Payware Support Forum section. Orbx FTX experts will be available to review your support questions and you will usually get a reply on the forums within 12 hours, often much sooner than that.

To visit our support forums, click on the “Forums” button shown on the homepage of fullterrain.com.

Please do NOT email support requests

Orbx provides world-class support on our forums, and it’s the only way in which you can receive support for openLC. Provided you adhere to the forum terms of use and have a legitimate copy of openLC, you will always be offered our support at no cost as we work toward a resolution to your problem each time.

Use the forum search function

Before you post a question, please try searching for the answer first, using the forum’s built in search function located on the forum menu bar.

What to include in your support requests

If at all possible, this is what we’d like to see provided for each request you log:

- A separate post on the FTX support forums for each issue (don’t tag new issue reports onto existing threads).
- Include your ORDER NUMBER from your openLC purchase in your post or forum signature section.
- A screenshot to highlight what you are talking about.
- A descriptive post title which clearly states what the issue is.
- Detailed comments in your post about what you are reporting on.

The Orbx support team is always on standby to assist you with any problems you may have, or will comment on your issue reports. Please remember, our priority is fixing any urgent issues first, and addressing bug reports second. Clearly though, any “show stopper” bugs will be given top priority though.
FTX Community Forums

FTX already has quite a thriving and active user community on the forums, with over 63,000 members as of September 2016. To visit the forums, just point your web browser to fullterrain.com and from the front page click the “Forums” menu item.

You don’t need a user account to view other people’s posts and information posted by Orbx staff, but if you’d like to join in on the discussion there, simply create an account. It’s instant and no validation email is required. We like to keep things simple😊.

We hope to see you there soon!

Thanks for reading!

You’ve stuck with us through all these pages of information, and we appreciate you taking the time to read the user guide. We hope it gave you some tips and insights. See you on the forums!
The FTX openLC Team

Lead Developer

- **Eugene Krikunov**: openLC Landclass work

Additional Orbx Developers

- **John Venema, Matt Tomkins and Eugene Krikunov**: Original FTX and Global textures/autogen
- **Orbx Team**: Orbxlibs objects

Specialist Roles

- **John Venema**: Business management
- **Ed Correia**: Production Management
- **Ben McClintock**: FTX Central and website

Beta Testing Team

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For the most recent version of the EULA, see fullterrain.com/eula.

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