Installing AI for UTLive (P3Dv4)

- Version 1.3.1 -

Overview

As the title says, this document will tell you how to (download and) install additional AI aircraft's and repaints, that can be used with UTLive. Installed models/repaints can be used with other tools as well, however this documentation will be aimed at usage with UTLive. I will provide the links from where models/repaints can be downloaded and how to set up P3Dv4/UTLive to use these. I will provide a in-depth tutorial telling you all the steps to install a single model/repaint, and then its a matter of rinse-and-repeat for you to add all the models/repaints you can get your hands on.

I want to send a big "**Thank You**" to forum-user **ScottecLEMD** who have been helping me - a lot - to understand the various aspects of AI Traffic. Thanks to you I now know a lot more about AI aircraft and repaints, and hopefully others will get access to some of that knowledge via this document ;-)

Pelle Liljendal

History

Here is a short description of the history of this document, in case you have just downloaded and updated version, and you want to see what have changed.

- Version 1.3
 - New section showing how to add AI flights via AI Flight Planner (till we have the power-pack).
 - Version 1.3.1 rewrote a few tings, fixed a few typos (nothing major).
- Version 1.2
 - Added this History section.
 - Minor reformat of the documentation, and rewrite of a few parts.
 - Added ScottecLEMD's description of what to do when installing UTL.
 - Added a paragraph explaining how to activate the Deadalus repaints in UTL.
 - Added more subjects to the Tips section.
- Version 1.1
 - Added a 3rd section explaining how to add and use OSP ATR 42's and 72's.
 - Added the name of the file to download from AVSIM to get the free FSPXAI MD11.
 - Added a section with a few tips I have picked up along the way.
- Version 1.0
 - Initial version describing how to install a FAIB B737-800 model/repaint.
 - 2nd section shows how to add additional repaints for some of the default UTL aircrafts (Q400).

Disclaimer

Recently I got a new PC on which I installed **P3dv4**, hence I only have this single version of Flight Simulator (FSX or P3Dv3 are not, nor have been ever installed). So if you have an installation with another/additional flight simulators your might have to do things a bit differently, but I guess for the most parts you can use this description as it is.

I have installed P3Dv4 and UTLive into the default drives/folders, so all directories in this document will use the default folders. If you have installed your products in other folders I am sure you know how to adjust for this ... just a heads up. This manual was written for

UTLive version 1.23, so if using it with newer versions than 1.23 things might have changed in UTLive.

Why additional AI models/repaints

In the past (using P3Dv3 on my old PC) I used MyTraffic6, and for the most parts I was happy with it (had a few CTD on some flights with P3Dv3, that could only be resolved by disabling MyTraffic – at least for a specific leg of the flight). However it didn't seem likely that MyTraffic6 was going to be updated for P3Dv4, and even though others managed to make it work under P3Dv4, it was not the way I wanted to go (it has in no way been written for P3Dv4, and I did not know if the models would work – well – with P3Dv4). Hence I looked for other alternatives, and my choice ended up being UTLive which was - at the time - released as a "Soft Release" (in my words: "a public beta"). It was not perfect (as a product still in development seldom are), but for the most parts it worked for me, and I did not experience major issues.

However I have to admit I was initially disappointed. I had expected to see a product like MyTraffic6, where I had lots of traffic everywhere, but with UTLive I saw much less traffic at most of the airports. At EGLL (London Heathrow) I saw lots of traffic as UTLive comes with a lot of British Airways repaints and flight schedules, along with other airlines also present at EGLL. However at many other airfields I felt the airports lacking traffic or being "too empty". E.g. at KMEM (Memphis) I would only see about 6 planes on the ground and at PANK (Anchorage) I also felt like traffic was sparse (I often fly 777/747 Cargo and these airports are both major Cargo hubs).

UTLive never promised they would cover every single airport with traffic, nor that they would have schedules/repaints for all airlines. They do however have a lot of schedules for which they don't have repaints, so simply by adding the "missing" repaints you can add a lot more AI traffic to your sim. Adding your own schedules and airlines will most likely be possible when the UTLive "Powerpack" becomes available, but for now you can "easily" add "missing" models/repaints. So I chose to do that, and now I have a lot more traffic at most airports. I still only see about 6 planes at KMEM, but KMEM is a huge cargo hub, and UTLive is missing in the Cargo department (their supplier are not able to supply them with these schedules, as the airlines most likely don't publish these). But we are many crossing our fingers that Flight1 will release a Powerpack (like they did for UT2). Once that (hopefully) becomes available, I will be able to add a lot of FedEx flying into/out of KMEM, along with any other missing Airlines around the world.

There is a feature in UTL that allows you to see all those schedules with "missing repaints". This is possible because in UTL whenever an "appropriate repaint" don't exists, they have in stead assigned a "dummy repaint" for a made-up airline called "Daedalus". Normally these will not show in your sim, however you can manually "activate" these Deadalus repaints by editing the ui_settings.xml file located in your main UTL folder. Simply open this file in a text editor (like Notepad/Notepad++) and change "<useGenericPaints>false</useGenericPaints>" into

"<useGenericPaints>true</useGenericPaints>" (in effect change "false" to "true").
Next time you start your sim, you will most likely see a lot of extra aircraft's with the blueand-white Deadalus repaint. As you add more and more repaints yourself, many of these
Deadalus repaints will be replaced by those repaints you add (when you add a repaint, be
sure to remove the default).

Installing UTL

Before adding any aircraft's/repaints to UTL, you should verify that UTL is running as it should. Some users have had issues with UTL not starting up, or starting up with their sim only to have it close again with an error. To my knowledge its only a minority of the users who have this problem (I have not had it myself), but a lot of potential problems can be avoided by installing UTL "in the correct manner". The following text and screenshots have be written/done by ScottecLEMD, and with his permission I have included them here.

Over to ScottecLEML, copied from the UTL forum

(http://ultimatetraffic.flight1.net/forums/forum posts.asp?TID=15363&title=development-too-slow):
Works for me too, no crashing but some cosmetic issues and minor operational issues.

As Dave has previously mentioned, most of the users experiencing crashing or lack of traffic have most likely an install issue.

It is important to ensure that if you are reinstalling that you clean out any remnants of the previous install.

e.g Delete the Flight One Software folder that contains DATA, IMAGERY, UNINTSALL, utLIVE AIRCRFT.

This should be where you told UTLive to install.

Delete: C:\Users\username\AppData\Roaming\Flight One Software

Delete: C:\Users\username\Documents\Prepar3D v4 Add-ons\utLive

If you tweaked any EXE.xml files check that there is no entry for UTL.

Reboot

Run CCleaner - freeware.

Run the installer (red aircraft icon) as Administrator and make sure Anti-Virus is OFF, user account control set to Never Notify.

After installing run the following:

- D:\Lockheed Martin\Prepar3D v4\redist\Interface\FSX-RTM\retail\lib Simconnect.msi
- D:\Lockheed Martin\Prepar3D v4\redist\Interface\FSX-SP1\retail\lib Simconnect.msi
- D:\Lockheed Martin\Prepar3D v4\redist\Interface\FSX-SP2-XPACK\retail\lib Simconnect.msi

Launch UTLive from the desktop icon,

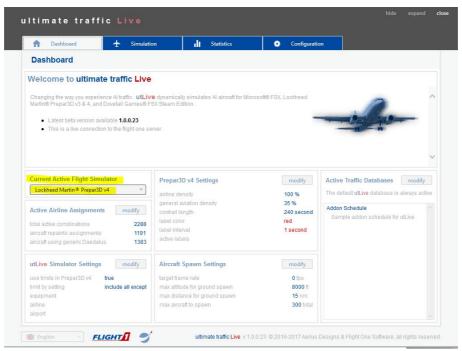


Illustration 1: Dashboard Tab - Current Active Simulator - make sure this states the sim you are using

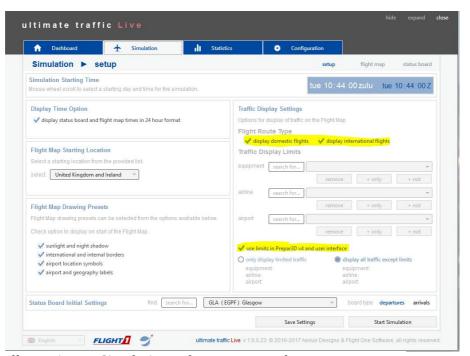


Illustration 2: Simulation Tab - Per screenshot

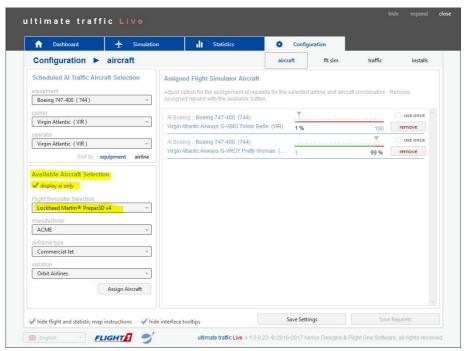


Illustration 3: Configuration Tab - Aircraft- Per screenshot

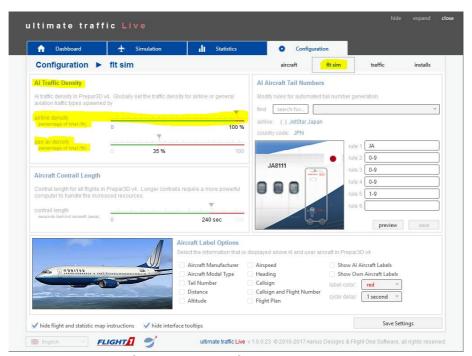


Illustration 4: Configuration Tab - flt sim- Per screenshot

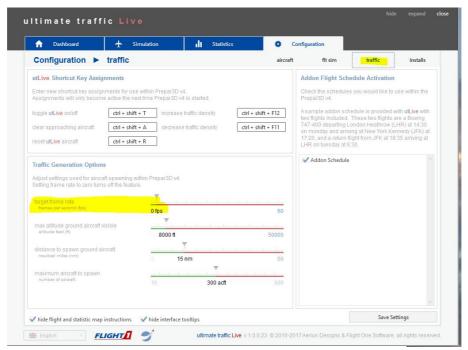


Illustration 5: Configuration Tab - traffic - Per screenshot

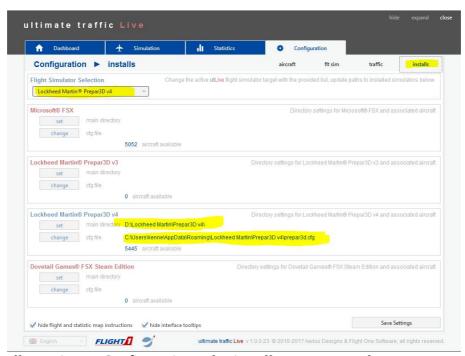


Illustration 6: Configuration Tab - installs - Per screenshot

Now run P3D/FSX using Administrator rights. If you are running P3D V4 you should be prompted to allow UTL to launch.

For what it is worth, I have followed the above procedure since I started Beta Testing V1.0 and have never experienced any issues with UTL not running.

Give it a try!

Thanks to ScottecLEMD for that detailed description ;-)

Adding FAIB/FSPXAI repaints

I've decided to split this document into a few major sections. In this first section I will give you the links you need to add repaints for FAIB and FSPXAI aircrafts. These links also have repaints for AIA, AIG and TFS models, but more on these in Section 2. If your are new to adding AI aircraft's/repaints I urge you to at least browse through Section 1 before proceeding with Section 2 or 3, as many basic things are only mentioned in Section1, and Section 2/3 expect you to know these things.

The links (where to get AI aircraft's/Repaints)

Most of my AI-aircraft's/repaints have been obtained through the links below, however I have chosen to buy a few AI aircrafts via **SimMarket** (FSPXAI: **A330**, **A380**, **B777**). Beside the payware FSPXAI aircrafts, you can also find freeware FSPXAI aircrafts for **B787-800/900** on AVSIM (fspxai_b788.zip, fspxai_b788_v1_1.zip, fspxai_b789.zip, fspxai_b789_v1_1.zip, fspxai_b789_v1_2.zip, fspxai_b789_v1_3.zip). At AVSIM you can also find a FSPXAI aircraft for a **MD11** (fspxai_md11.zip). At FlightSim.com you can download a FSPXAI **A350-900** (fspxai_a359.zip).

The links below allows you to download models and repaints for free, but some of these sites lets you **Donate**. Its optional to donate, but I urge you to do so. I am sure these people put in a lot of work to please the rest of us, so why not show your appreciation for their work, by donating \$5, \$10, \$15 or whatever you feel is appropriate. Some of the repaints are only linked to by these sites, hence you most likely need to setup an account at Avsim.net and FlightSim.com to be able to download these repaints.

The first link is for **FAIB** (FSX AI Bureau) where you can get a lot of Boeing- and Airbus-AI aircraft's (**B737**'s, **B747**'s, **A318**'s, **A319**'s, **A320**'s and **A321**'s): http://fsxaibureau.com/

FAIB also have a few repaints for these AI aircraft's. E.g. in the top/left corner choose "model" and enter the value "737-300" in the search-field and press enter, you will see a list which both contains the "Basepack" (the actual AI Aircraft), "Repaint's" and "Paintkit" if you want to begin repainting yourself. If you do create a nice repaint, be sure to put it online for the rest of us to use :-)

The next links are sites where you can find additional repaints. They both have repaints for the FAIB models, but also other models (e.g. FSPXAI, AIA, AIG, TFS, OSP and more): https://jcai.dk/

http://www.juergenbaumbusch.de/

http://www.ai-repaints.com/

http://www.flyingcarpet75.com/

The last of the links above (Flyingcarpet75) require that you create a profile, and its a manual process to have your account activated, so please be patient and allow a day or two to pass before you can actually download any repaints. The other links will provide you with enough repaints to keep you busy while you wait for the activation.

When you look for repaints to the models mentioned above, each repaint will tell you which model it is a repaint of. The FAIB repaints simply reference the model as "FAIB", whereas the FSPXAI models can either be referenced as "FSPXAI", "FSPainter" or simply

"FSP". However TFS/The Fruit Stand are other models, not compatible with FSP, so don't try to use a TFS repaint with a FSP model, or vice versa.

Setting up P3D for AI planes

Before we can use any AI aircraft we have to tell P3Dv4 and UTLive where to look for these AI aircraft's/repaints. I have put all of my additional AI in a new sub-folder, that I have created in the SimObjects folder. This folder only contains my AI aircraft's and I simply called this folder "AIAircraft" hence the full path for this folder is:

C:\Program Files\Lockheed Martin\Prepar3D v4\SimObjects\AIAircraft

Adding the folder is just the first part. Second part is telling P3Dv4/UTLive to use this folder. You therefore need to edit your **simobjects.cfg** file. This file is a simple INI-fil, and you can use Notepad if you want, but personally I prefer using Notepad++. This file can be found in this folder:

C:\ProgramData\Lockheed Martin\Prepar3D v4

The file contains multiple entries, where each entry has an incrementing number (you cannot have two entries with the same number). So you have to add a new entry-tag with the next available number. Hence if the last entry-tag you have is "[Entry.10]" you would have to call the new tag "[Entry.11]" (as long as you pick the next available you are set, no matter the value of this number). The items below this entry have to reference the folder you created before, hence in my case I added the following lines to simobjects.cfg:

[Entry.11]
Title=AI Aircraft
Path=C:\Program Files\Lockheed Martin\Prepar3D v4\SimObjects\AIAircraft
Required=True
Active=True

Making this change to simobjects.cfg only needs to be done once (per Flight Simulator installation). Once you have added this new entry to simobjects.cfg your flight simulator "knows" where to look for additional AI aircraft's.

Download and install your first AI Aircraft

By far the AI aircraft I have most repaints for is the Boeing 737-800, hence lets install this aircraft as the very first. This is a FAIB model, so navigate your browser to the FAIB website (http://fsxaibureau.com/). In the search window in the top/right part of the site choose "Model" and enter "737-800" and press enter. You will then be presented with the following list (feel free to use the Donate-button):

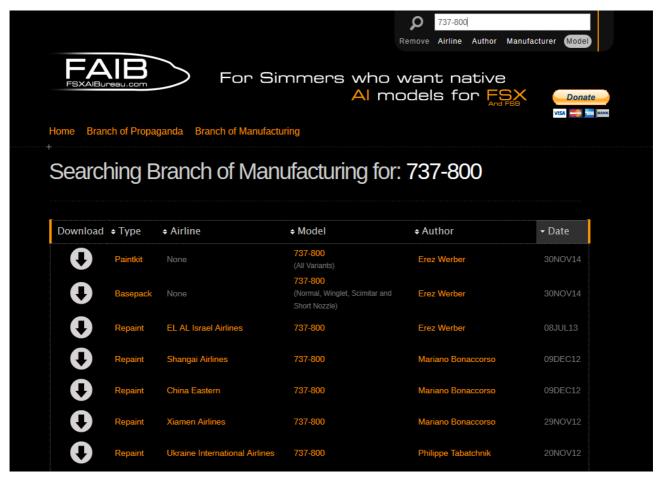


Illustration 7: Boeing 737-800 files (basepack, paintkit and repaints)

In this case you can see the very first item on the list is the Paintkit which you will need if you want to create any repaints yourself. The 2nd item is the basepack which is the actual AI aircraft, hence it is this file we need now. If you click the orange "Basepack" text the FAIB site will take you to a page where all basepacks (AI aircraft's) are listed.

We want however at this time to download only the basepack for the Boeing 737-800, hence we in stead click the white download button in the left side of the screen. This will open a new page what list some information about the basepack (author, dates) along with links for the actual file and a few pictures:

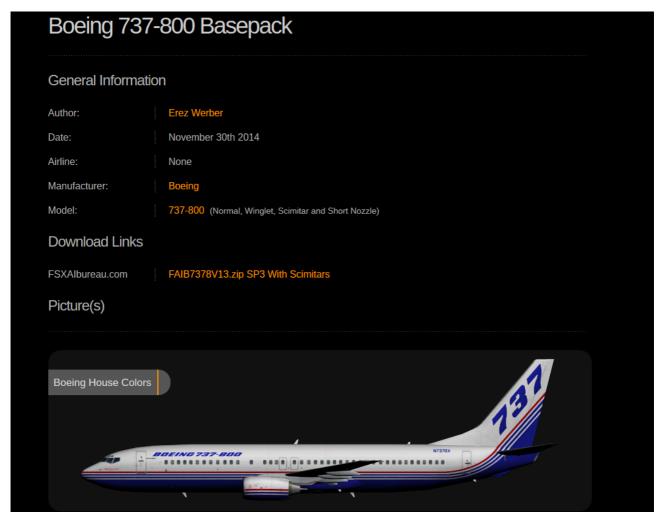


Illustration 8: Basepack for the FAIB Boeing 737-800

The basepacks are hosted directly by the FAIB website (as you can see below "Download Links"), however many of the repaints are hosted at other sites, in which case the FAIB website simply links to these. Therefore you might have to setup an account with Avsim, Flyingcarpet75 or the other sites listed in this manual (please remember that AIG and Flyingcarpet75 require a manual activation, so be patient and polite – they do it for free to please the rest of us). Many of the repaint links are both listing FS9 and FSX, but as written before P3Dv4 is not playing nice with FS9, so be sure only to download AI aircraft's/repaints for FSX or P3D.

Anyhow, now we are only concerned by the actual model so click the Orange download URL and download the model zip-file. Whether you unzip the entire file, or you simply extract the files you need is not important, so do what you think feels most natural to you. If you are having difficulties, I suggest unzipping the entire file, take what you need, then delete the rest. In the zip- you see a FS9 and FSX folder, along with a jpg and readme-file. I urge you to read the readme to see your options and what you are allowed to do or not allowed to do. Since we are installing for P3Dv4 you should only use the content of the FSX folder:

□ EXTRA
 □ FAIB_B737-800
 □ FAIB_B737-800_W
 □ PLACE INSIDE YOUR FSX MAIN TEXTURE FOLDER

Illustration 9: Folders contained within the FAIB 737-800 basepack

As you can see there is an "Extra" folder along with two FAIB folders and a folder with content to put into your flight simulators main Texture folder. Some basepacks might also come with effects to put into your flight simulators effect folder (C:\Program Files\Lockheed Martin\Prepar3D v4\Effects). If that is the case, you must remember to do so.

Lets deal with the 2 FAIB folders first. These two folders you simply move/copy into the AIAircraft folder that we made previously (both the actual folders and their content). Hence opeing your AIAircraft folder (C:\Program Files\Lockheed Martin\Prepar3D v4\SimObjects\AIAircraft) it should now contain:

FAIB_B737-800
FAIB_B737-800_W

Illustration 10: Folders to copy into our new AIAircraft folder

The next folder to deal with is "PLACE INSIDE YOUR FSX MAIN TEXTURE FOLDER". This time you are NOT to move/copy the folder. In stead only the content of this folder (the files within the folder) are to be moved/copied. The content in this case, are 2 dds (texture) files, and as written these are to be copied into the main texture folder (C:\Program Files\Lockheed Martin\Prepar3D v4\Texture).

Had this model contained any effect-files these should have been copied into the main effect folder (C:\Program Files\Lockheed Martin\Prepar3D v4\Effects). Only the effect files WITHIN the effect folder needs to be copied (not the folder) - in the same manner as we copied the texture files.

Congratulations !!! You have now successfully installed the AI Aircraft for the Boeing 737-800. Actually you installed 2 AI aircraft's since the zip both contained a "normal" and a "winglet" Boeing 737-800, along with multiple models for each of these aircraft's.

Installing additional AI aircraft's are done in the same way (be sure only to download/install FSX/P3D aircraft's or P3Dv4, and if the zip contains effect-files remember to copy these as well). I do however urge you to wait installing more AI aircraft's at this time. I suggest you follow this tutorial first (installing a single Aircraft, Repaint and setup its use in UTLive, before adding additional aircraft's/repaints).

The aircraft.cfg file

In the previous paragraphs we added our first AI aircraft, and doing so you actually also installed your first repaint, as the "normal" 737-800 comes with a Boeing-livery repaint. If you look in the FAIB_B737-800 folder you will see a sub-folder called texture.Boeing, which contain that Boeing repaint. Try opening the aircraft.cfg file in a text editor and look for the tag "[fltsim.0]". You should see the following:

```
[fltsim.0]
title=Boeing 737-800 Boeing House Livery
sim=FAIB 7378
model=
texture=Boeing
atc id=N737BX
atc airline=BOEING
atc flight number=
ui manufacturer=FAIB
ui type=737-800
ui variation=Boeing House
ui createdby=FAIB
description=For AI use only, Boeing House N737BX :: Repaint by Erez
Werber.
atc parking types=GATE
atc_parking_codes=
```

An aircraft.cfg file have to contain such an fltsim section for each installed repaint, and these are incremented. The first must be called "[fltsim.0]" the next "[fltsim.1]", the next after that "[fltsim.2]" ... and so on. You have to make sure there are no "wholes" in this series of numbers, or there are 2 or more with the same number. Also you will see the texture-item says "texture=Boeing", therefor the name of the folder containing this texture has to be named "texture.Boeing". All texture folders will begin with "texture." (remark the "dot"), suffixed by the value of the texture-item within the aircraft.cfg file (in this case "Boeing").

When you install your repaints you want to make sure that you install them for the aircrafts they are intended to be used with, and one way of doing this is looking at the model-item. In this case it simply says "model=" meaning that we need to have a folder called "model". Had the line instead read "model=SN" (short nozzle), then we needed to have a folder called "model.SN". Had it read "model=winglets" it would be a clear indication that the repaint is not intended for this particular AI Aircraft as it would instead be intended for the winglet version (FAIB_B737-800_W) as the folder for that AI Aircraft contains a "model.winglets" folder, whereas this folder does not.

Another thing to check is the sim-item, which in this case is "sim=FAIB_7378". This means that our AI Folder (FAIB_B737-800) must contain a file called "FAIB_7378.air". Please however note that different AI aircraft might have air-files with the same name (both the normal and winglet 737-800 have an air-file called FAIB_7378.air"), but had the sim-item in stead said "sim=FAIB_7373" there would be a big chance the repaint had been aimed at the 737-300 in stead.

Often you can also look at the title-item ("title=Boeing 737-800 Boeing House Livery"), as it will often contain the "name" of the aircraft (in this case it says nothing about "Winglets") so we can assume it is intended for the "Normal" version of the 737-800 (FAIB_B737-800). However don't put too much trust in the title, as I have seen titles saying its an "Airbus 320 IAE", when the model being used is a CFM. When it comes to Airbus'es be sure to see if the repaint is for an IAE or CFM (engine types), and if is for the S-version (Sharklets on the wing-tips). E.g. if the sim-item says "sim=FAIB_A321", and the model item says "model=CFMC_S" the repaint is for the S-version of the A321 with CFM engines (AI aircraft "FAIB_A321S_CFM").

NOTE: The repaints you download are not always without errors.

Beside the sim, model and texture-items, the 3 items you need to be concerned about - when it comes to UTILive - are the items "ui_manufacturer", "ui_type" and "ui_variation". Each of these items correlates to the 3 combo-boxes you see in UTLive (labeled: "manufacturer", "airframe type" and "variation"). But lets put the aircraft.cfg file to the side now, and in stead download and add a new repaint for the Boeing 737-800 Winglet.

Download and Install your first Repaint

We could download a repaint from the FAIB website, but lets in stead grab one from http://www.juergenbaumbusch.de/ just to ensure we don't find a repaint that needs to be downloaded from a website requiring an activation (like flyingcarpet75). When you access the juergenbaumbusch site, you will see an alphabetically sorted list of airlines in either the left- or right -side of the screen. Lets download a "Fiji Airways" repaint for the Boeing 737-800w, so scroll down to where the F's are starting and click the "Fiji Airways" item. Doing so will open a new webpage listing all the Fiji Airways repaints available from this site. So scroll down until you find the Fiji Airways Boeing 737-800w:

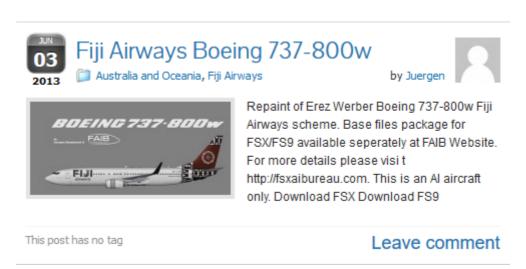


Illustration 11: Found the Fiji Airways Boeing 737-800w

To download the repaint first click either the blue "Fiji Airways Boeing 737-800w" text, or the small preview photo of the aircraft. This will bring up a new page where you can see the available files for this repaint. As stated before P3Dv4 don't like models/repaints prior to FSX, so be sure to download the FSX version:



Repaint of Erez Werber Boeing 737-800w Fiji Airways scheme. Base files package for FSX/FS9 available seperately at FAIB Website. For more details please visit http://fsxaibureau.com. This is an AI aircraft only.



Download FSX

Download FS9

This post has no tag

Illustration 12: Only download FSX and P3D repaints for P3Dv4

Unzipping the downloaded file, you will see it contains a folder ("Texture.Fiji DQ-FJG") which again contains the actual texture, and it contains a few additional files, that contains the information we need to insert into the aircraft.cfg file that we "installed" with the AI Aircraft. The naming convention of these files will vary from repaint to repaint, so you will not always find a "flightsim.txt" file, in stead the repaint might just contain a readme.txt or similar. In this case the author has been very nice and clearly labeled the file, so open this file in a text editor:

```
[fltsim.X]
title=FAIB Boeing 737-800w Fiji Airways DQ-FJG
sim=FAIB_7378
model=winglets
texture=Fiji DQ-FJG
atc_id=DQ-FJG
atc_airline=FIJI
ui_manufacturer=Boeing
ui_type=737-800w NG winglet
ui_variation=Fiji Airways
ui_createdby=FAIB
description=For AI use only, Airways DQ-FJG :: Repaint by Juergen
Baumbusch.
```

atc_parking_codes=FJI
atc_parking_types=GATE
We already know that this repaint is for the 737-800w, but lets double-check anyway.
These are the items to concentrate on:

sim=FAIB_7378
model=winglets
texture=Fiji DQ-FJG

The AI aircraft folder (FAIB_B737-800_W) contains a "FAIB_7378.air" file, so the sim-item seems to be ok. Likewise the AI aircraft folder contains a folder called "model.winglets" so the model-item seems ok also. Finally the texture-item tells us the repaint texture to use is "Fiji DQ-FJG" and the name of the repaint texture folder is "Texture.Fiji DQ-FJG" so everything seems fine. Copy the texture folder ("Texture.Fiji DQ-FJG") into the AI aircraft folder (FAIB_B737-800_W).

Keep the flightsim.txt file open, and then open the aircraft.cfg file in the FAIB_B737-800_W folder. We now need to merge the content of the flightsim.txt file into the aircraft.cfg file. At the time I added the Fiji Airways texture to my aircraft.cfg file I had already installed 140 repaints (0-139), hence I had to change the flightsim-tag from "[fltsim.X]" to the next available value "[fltsim.140]". Also I manually changed the 3 items "ui_manufacturer", "ui_type" and "ui_variation" as I prefer them, but the rest of the items I left untouched:

[fltsim.140]

title=FAIB Boeing 737-800w Fiji Airways DQ-FJG
sim=FAIB_7378
model=winglets
texture=Fiji DQ-FJG
atc_id=DQ-FJG
atc_airline=FIJI
ui_manufacturer=FAIB
ui_type=737-800 Winglets
ui_variation=Fiji Airways
ui_createdby=FAIB
description=For AI use only, Airways DQ-FJG :: Repaint by Juergen
Baumbusch.
atc_parking_codes=FJI
atc_parking_types=GATE

If this is the first/only repaint you have installed for the FAIB_B737-800_W (which I guess it is, reading this manual), you should instead have a fltsim tag saying: "[fltsim.0]", and the next you install after this one should be called "[fltsim.1]"... and so on.

The 3 items I changed are used when you want to instruct UTLive which repaint to use for a particular equipment (aircraft model) operated by a particular carrier/operator. But we will look at this in the next section.

Some repaints contains multiple variations of the same repaint. Some are subtle where only the registration is different, others are completely different where the plane might be

"decorated" with the face/name of a famous person, is supporting a football/rugby -team, promotes a resort, celebrate a 50 year anniversary, promotes a country/city as the next possible olympic host or something completely different. In either case it is important that ui_variation will be set to different values for each of these variations. In this example (if there had been multiple variation), we could add the registration to the variation ("ui_variation=Fiji Airways DQ-FJG"). If you have multiple repaints for "the same plane" with the same variations, you are not able to pick these in UTLive.

Instructing UTLive to use this repaint

UTLive already contains a flight-schedule for the Fiji Airways Boeing 737-800w, however it lacks the repaint for this plane, hence it has assigned a dummy (Deadalus) repaint. *As explained previously these Deadalus repaints only show in the sim, if you change a setting in the ui_settings.xml file*. To tell UTLive to use our new repaint, you must start up UTLive. If UTLive was already running while you added the repaint, you must shut it down, and restart it, as it only scans for installed AI aircraft's/repaints on start up. When UTLive has been started click the "modify" button in the "Active Airline Assignments" section on the dash-board:

Active Airline Assignments	modify
total active combinations	3598
aircraft repaints assignments	2154
aircraft using generic Daedalus	1901

Illustration 13: Click the "modify" button

In the left/top side of the screen you find the schedules that are installed by UTLive ("Scheduled AI Traffic Aircraft selection"), and in the lower part you find the installed AI aircraft's ("Available Aircraft Selection"). The lower part will show all AI planes both those installed by you and those installed by UTLive (or other sources). Be sure to keep the checkbox "display ai only" checked, as you only want to assign aircrafts that are meant to be used as AI aircrafts.

In the top section navigate to the schedule for the "Fiji Airways (FJI)", "Boeing 737-800 (winglets) (73H)". Start from the top, and find "Fiji Airways (FJI)" as the carrier. In this case there is only one operator, so as soon as you choose the carrier, the operator will be set to "Fiji Airways (FJI)" as well. Last use the equipment combo-box to locate "Boeing 737-800 (winglets) (73H)":



Illustration 14: Choose scheduled carrier, operator and equipment

Now its time to locate our Repaint. As you remember I've changed the values of "ui_manufacturer", "ui_type" and "ui_variation" to suite my preferences. So for me I have to choose "FAIB" as the "manufacturer", "737-800 Winglets" as the "airframe type", and "Fiji Airways" as the variation:

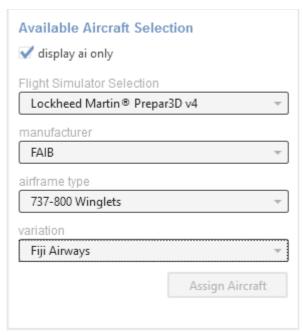


Illustration 15: Choose manufacturer, airframe type and variation

If you did not change these 3 items as I did, you should instead look for "Boeing", "737-800w NG winglet", "Fiji Airways". Having found the correct repaint, you must click the "Assign Aircraft" button. *In my case (as seen above) this button is disabled, as I have already assigned this repaint to the aircraft.*

You can assign multiple repaints to the same carrier, operator, equipment, and doing so UTLive lets you set a percentage chance for a particular repaint to appear. In this case a dummy repaint had already been assigned ("Air Pacific"), hence when we click the "Assign Aircraft" button, UTLive sets a 50% chance for each of these to appear (but remember the

scheduled flights only using dummy repaints will only show in the sim if you change a setting-value in ui_settings.xml).

We only want to see our Fiji Airways repaint that we chose before, so we have to remove the dummy repaint. When you have assigned additional repaints you **MUST** remember so click the "**Save Repaints**" button before you proceed. Next we can click the remove button next to the dummy repaint, and change the chance to 100% for the Fiji Airways repaint we added (by dragging the slider to 100%), and then click the "Save Repaints" button again:

AlB , 737-800 Winglets		<u> </u>	use once
Fiji Airways	1	100 %	remove

Illustration 16: In 100% cases the "Fiji Airways" variant will be used

A few get this wrong, and have trouble saving their assignments, so let me clarify the order by which you have to do it:

- 1. Assign your repaint(s), by clicking the "Assign Aircraft" button.
- 2. Then you HAVE TO hit the "Save Repaint" button.
- 3. Remove the dummy repaint, or other assigned repaint(s) you don't want.
- 4. Adjust the slider(s) so the total percent of chance add up to 100%.
- 5. Once again you HAVE TO hit the "Save Repaint" button.

As written before, if you have have multiple variations/repaints for the same carrier, operator, equipment, it is important you assign different variations for each repaint in the aircraft.cfg file (e.g. "ui_variation=Fiji Airways DQ-FJG"). If you have not changed the repaint for (carrier, operator, equipment) "Ryanair (RYR)", "Ryanair (RYR)", "Boeing 737-800 (winglets) (73h)" you can see that UTLive comes with 3 repaints for this aircraft. As you can see the percentage chance is set so there is a 48% chance for either of the first two repaints to be used, but only a 4% chance for the last to be used:

Ultimate Traffic Live, Boeing 737-800 (winglet	<u> </u>		use once	
Ryanair - El-DAP	1	48 %	100	remove
Ultimate Traffic Live, Boeing 737-800 (winglet	<u></u>			use once
Ryanair - El-DHD	1	48 %	100	remove
Ultimate Traffic Live, Boeing 737-800 (winglet	<u>.X</u>			use once
Ryanair - Dreamliner	4 %		100	remove

Illustration 17: Ryanair chance of repaint usage

Also you can see that these 3 repaints all have different ui_variation values ("Ryanair — EI-DAP", "Ryanair — EI-DHD" and "Ryanair — Dreamliner).

Check our repaint in P3Dv4

It would be nice to confirm that our new Fiji Airways repaint is actually being used by Utlive, and therefore visible in P3D. We therefor need to start up P3Dv4 and go to an airport where we are likely to see these planes. Choosing Fiji Airways as an example was not a clever decision on my part, so I actually had to try a few times (changing time of day/week day) before I eventually found a 737-800w Fiji Airways at "NFFN" ("Nadi Intl – Fiji Islands"):



Illustration 18: Our Fiji Airways 737-800w repaint in use at NFFN

Finding and Fixing mistakes

At the time I wrote version 1.0 of this manual I had installed more than 1200 repaints (of which +170 were for the 737-800 winglets alone, but since these numbers have grown to even more (a lot more). For each and every repaint you add, you have to find the correct-AI aircraft to use, meaning the correct aircraft.cfg file to edit. So even when you think you are very cautious, mistakes will be made at some point (e.g. you have a repaint for an airbus A320 with CFM-engines, but you install it for an A320 with IAE-engines in stead, or

you have a repaint for a "737-500 Logolight" that you install as a "737-500 Normal" in stead).

Beside the mistakes you make yourself when you install the repaints, the repaints you download are not without errors. I have seen repaints where the texture folder had another name than the texture tag they ask you to use in the aircraft.cfg file, or the painter have perhaps changed the name of the (FAIB) aircraft-model on his/her own system, in which case a model with that name don't exist on your computer. Everything is possible, so even when YOU are careful mistakes will be made, and the most obvious way to see this in P3D, is seeing "black" AI aircrafts within your sim.

When I started adding AI repaints I was very careful when I edited aircraft.cfg files, and I only added a handful of planes at a time. Then I started P3D and moved my plane to airports where I was expecting to see these AI planes, and looked for trouble. This is VERY time consuming, and not a plausible solution when adding a lot of repaints. I therefore began to add more and more repaints, before checking them out in the sim.

At one point I did find a black (un-textured plane) and I was unable to see which plane/repaint was causing the trouble. Being a software developer I was thinking about writing a tool for the job, but being lazy I in stead searched for, and found a tool for the job. I found ACA 2017 (http://aifs.pvdveen.net/) which I have used, but others have suggested Owlsnest's AI-Aircraft Editor (http://www.owlsnest.eu/tools.php). A very nice feature of AI-Aircraft Editor is that its able to show a preview of the repaint assigned to the AI Aircraft, and I've found a few mistakes using this feature alone. Here below is a screenshot from the Model Viewer windows in AI Aircraft Editor:



Illustration 19: Preview of repaint in Owlsnest's AI-Aircraft Editor

Starting ACA, I click on "Find Errors", then I check the first 4 checkboxes ("AIR file errors", "Model map errors", "Texture map errors", and "Title entry errors") and the last checkbox ("Errors in FLTSIM numbering"), after which I click the "Start Search" button, and lets ACA search for errors. In this (constructed) case I have renamed a Texture folder so that the texture assigned by the aircraft.cfg file, cannot be found (I simply added 2 x's to the foldername):

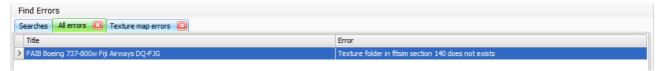


Illustration 20: Error found by ACA2017

In the screenshot you can clearly see the title of the repaint, telling us it is a 737-800w repaint so we know which AI aircraft/aircraft.cfg file to look for. It also tells us that the error is in the "[fltsim.140]" section of the aircraft.cfg file, and it is a texture error. But you have to figure out yourself if the texture-item in the cfg-file is wrong, or the texture foldername is wrong, of if you simply forgot to copy the texture-folder into your AI aircraft folder.

If you double click the error, ACA will show more information regarding the AI Aircraft, which might help you locating the correct aircraft.cfg file, and/or locate what the problem might be:

Fltsim number	140
Title	FAIB Boeing 737-800w Fiji Airways DQ-FJG
Sim	FAIB_7378
Model	winglets
Texture	Fiji DQ-FJG
Description	For AI use only, Airways DQ-FJG :: Repaint by Juergen Baumbusch.
ATC	
Airline	
Callsign	FDI
Parking Codes	FJI
Parking Types	GATE
Heavy	NO
Flight number	
Reg	DQ-FJG
JI	
Manufacturer	FAIB
Туре	737-800 Winglets
Variation	Fiji Airways
lightplans	
Flightplans	

Illustration 21: ACA2017 details regarding an AI aircraft

ACA have served me well as it have found A LOT of errors I made and errors in some of the Repaints I downloaded. If you download/use the ACA-tool I will again suggest that you **donate** an "appropriate amount" to its developer.

Adding repaints for UTLive models

You can add additional repaints to the models already supplied by UTLive, however I chose not to. Using the UTLive models directly there is a chance you will "loose" your repaints whenever you update UTLive, or at least you would have to backup/restore. In stead I chose to copy the UTLive aircrafts into my own AIAircraft folder, and add my own repaints there. Doing so I won't loose anything if/when the UTLive aircraft's are updated. Many of the UTLive IA aircraft's are updated FTS- (The Fruit Stand) and AIA (AI Aardvark) models that have been updated to work with FSX (and thereby also P3D including P3Dv4).

Using UTLive Dash8-400 with your own repaints

Lets make a copy of the UTLive Dash8-400 so we can add our own repaints to this model. The UTLive Dash8-400 is actually a TFS (The Fruit Stand) model that has been updated to work with FSX (and thereby also P3D incl. P3Dv4). First we need to locate the UTLive AI aircraft, and if you have used a default installation-folder it can be found in this folder:

C:\Program Files\Flight One Software\Ultimate Traffic Live\utLive
Aircraft\DH4

Copy (**DO NOT MOVE**) this entire folder into the folder where we install our AI aircrafts/repaints, which in my case is the folder:

C:\Program Files\Lockheed Martin\Prepar3D v4\SimObjects\AIAircraft

I decided to rename this folder from "DH4" into "UTL_DH8-400" so I can see where it originated from (which AI Aircraft its based upon), in case I some time in the future decide to install the new updated FTS model that can be obtained from the AIG forum.

Within this folder (the one in our "SimObjects\AIAircraft" folder, NOT the one in the "Ultimate Traffic Live\utLive Aircraft" folder) I deleted all texture folders except the one only called "Texture", as all those textures are present in the UTLive folder, so we don't need them here also. I kept the default texture-folder so I can use if for reference when installing new repaints, as we most likely need to change the filenames of the repaints we import.

Opening the Aircraft.cfg file you will see it containts multiple "[fltsim.XX]" sections. In the top of the file you will wind a "[fltsim.0]" section, and further down it contains (at least at the time of writing this) section "[fltsim.1]" to "[fltsim.24]". You must delete all the fltsim sections 1 to 24, and for convenience move "[fltsim.0]" to the bottom of the file, as it makes it more easy to add new section (simply go to the bottom of the file).

The tool "ACA 2017" mentioned in the previous section don't like when two AI Airplanes have the same title, so I chose to rename the title, as the original UTLive DH4 already have an aircraft with the title "UTLive_DH4_Daedalus". Likewise when I assign my own Dash-8 400 repaints in UTLive I want to able to tell apart which are "my own" repaints and which that are the "official" UTLive repaints, so I also changed ui_manufacturer, ui_type and ui_variation. So this is how my "[fltsim.0]" section looks:

```
[fltsim.0]
title=UTL DH8-400
sim=DH4
model=
panel=
sound=
texture=
atc airline=NONE
atc flight number=
ui manufacturer=UTL
ui type="Dash-8 400"
ui variation="Dash-8 400"
ui_typerole="Commercial Airliner"
ui createdby="Ultimate Traffic Live / Craig Ritchie"
description="Repainted by David Rawlins"
atc_parking_types=GATE,RAMP
atc_parking_codes=
```

I will never assign this "default" repaint to any flight schedule in UTLive, but I can use it as a reference when I import new repaints (e.g. see the value of the sim item).

We are now ready to add a new Dash-8 400 repaint, and the one I choose to use is an "Air Berlin" repaint than can be found at Juergen Baumbusch's site (http://www.juergenbaumbusch.de/?p=3592). So please download and extract the FSX version of this Air Berlin Dash 8-Q400 repaint. Unpacking this archive, you see it contains two repaints and therefore two texture-folders, but we will only look at the first one, so copy the "texture.Air Berlin" folder into our AI aircraft folder for the Dash-8 400 (if you named it as me "C:\Program Files\Lockheed Martin\Prepar3D v4\SimObjects\AIAircraft\UTL_DH8-400", or otherwise "C:\Program Files\Lockheed Martin\Prepar3D v4\SimObjects\AIAircraft\DH4"). If you open this "texture.Air Berlin"-folder you will see it contains 3 files called:

```
TFS_Dash8_Q400_L.dds
TFS_Dash8_Q400_prop.dds
TFS_Dash8_Q400_T.dds
```

However opening the default "Texture" folder, we left when copying the original UTLive DH4 Aircraft, the files in this folder has other names:

```
TFS_Q400_L.bmp
TFS_Q400_prop.bmp
TFS_Q400_T.bmp
```

Its not important that one has dds-files where the other has bmp-files, however the "name" of these files are important, so we need to rename the files in the "texture.Air Berlin"-folder, to match those the AI aircraft is using:

Next we need to add the content of the "[fltsim.x].txt" file to the aircraft.cfg file of our AI aircraft. As explained previous I will only add one of the repaints (not the albino), so if you want to add both, simple repeat these steps we are doing here. Looking at the content of the "[fltsim.x].txt"-file we got with the repaint, you see it contains a tag called "sim=TFS_Dash8-400", however looking at the same tag for the "[fltsim.0]" we left from the original Dash8-400 it list the sim as "sim=DH4", so you need to change this also. Here is how the section for the Air Berlin looks in my aircraft.cfg (note I have changed ui_manufacturer and ui_type as I perfer — you don't have to):

```
[fltsim.1]
title=Air Berlin Bombardier Dash 8-Q400
sim=DH4
model=
texture=Air Berlin
atc_id=D-ABQE
atc_airline=AIR BERLIN
ui_manufacturer=UTL
ui_type=Dash-8 400
ui_variation=Air Berlin - D-ABQE
description=The Fruit Stand Bombardier Dash 8-Q400 Air Berlin - D-ABQE
atc_parking_codes=BER
atc_parking_types=GATE
prop anim ratio=-0.2
```

As you can see I imported this as "[fltsim.1]" since I decided to leave the original default "[fltsim.0]" as it was, but if you don't want to keeps that first original/default section, simply remove it, as we primarily kept if for reference (so we could see what the value of the "sim"-tag should be. In case you do remove it, this Air Berline repaint must be changed to "[fltsim.0]".

As we did previously you need to (re)-start UTLive and assign this new repaint to the Air Berlin Dash8-400 (remove the dummy-repaint), and then you can start up your sim and verify it is working:



Illustration 22: Air Berlin Dash-8 400 at EDDL

Utilizing other of the UTLive AI aircrafts are done in the same way. **Copy** the AI aircraft, to your AIAircraft folder (**NOT MOVE**), delete the texture folders you don't need (leave "Texture" for rerference, so you know how to rename the repaints you download). Remove all "[fltsim.xx]" except "[fltsim.0]" from the aircraft.cfg file, as we need to know that to rename the "sim" tag of the imported repaints into (they simply have to be renamed into the name of the .air file). In some cases you have to pay attention to the "model=" tag as well. In some cases I've imported repaints where they have "model=ge_no_ref1", where the UTLive aircraft don't have these models, so I simply cleared the model-item ("model=").

Once you have installed these AI aircraft's/repaints you naturally need to go into UTLive and assign them to the scedules as we did in section1 of this document. The UTLive models I have used this way are the Airbus 340's (TFS), 777's (TFS), Dash-8's (TFS), Embraer 170/175/190/195 (AIA), Saab340/2000 (TFS). So far I have not had any issues with the repaints I have downloaded and used with these AI aircraft's. However the UTLive AI Aircrafts are only available for a single engine variant (e.g. GE). So be careful when you donwload repaints that they are for the same engine variant (often the engine variant is part of the filename for the repaint-files).

AIG (Alpha India Group)

If you want to, you can disregard the UTLive updated models, and yourself download the models that have been updated by AIG (Alpha India Group). I have not done this myself as you both needs the original FS2004/FS9 AI aircrafts that you need to merge with the updated models, and then you also have some graphical work to do, as in many cases a new alpha channel needs to be merged with the repaints. If you want to have a look at the AIG updated models, here below are some links to get you started (you need to create an account with AIG, that needs to be activated before you can proceed):

http://www.alpha-india.net/forums/index.php?topic=25472.0 http://www.alpha-india.net/forums/index.php?topic=23926.0

However using the AIG updated models you are often able to find all the different engine-variants. So compared to using the UTLive models there are more work involved (you need to merge the original models with the updated, and you need to apply new alphacannels), but you get all the engine-variants.

Adding OSP(AIG) ATR models

The ATR's bundled with UTLive are perhaps not the most nice-looking models, hence many perfer to use the OSP AI Aircraft's in stead. The OSP ATR's were originally made for FS2004/FS9, so you both need the original FS9 "base"-models along with the updates that makes them suitable for P3D. In order to get these files you need to create an account with AIG (Alpha India Group), and as written before its a manual process to have your account activated, so be patient and polite. Once your account have been activated you can use the following link to download what you need: http://www.alpha-india.net/forums/index.php?topic=23926.0 (same link as one of those in the previous section). Scroll down the list till you find the ATR's:

ATR	42-300	OSP	FS9	
	42-400	OSP	FS9	
	42-500	OSP	FS9	
	72-200	OSP	FS9 Upd	
	72-210	OSP	FS9	
•	72-500 (72-600)	OSP	FS9 Upd	•

Illustration 23: FS9 base models of the OSP ATR's (AIG's forum)

Lets download the ATR 72-500 (FS9). First you click "FS9" and download the base-model, next you click "Upd" (to the right of "FS9") to down load the update. Both of these are links to AVSIM, hence you need to download both files from AVSIM. Once downloaded unpack the base-pack (osp_atr_72_500_base.zip). The zip you just unpacked contains a folder called "osp_atr_72_500" which you copy to your AIAircraft folder.

Next step is the update we also downloaded via a link to AVSIM where we got the file "osp_atr72_fde_update11.zip". This zip contains an update program (ATR72 FDE update v1.1.exe) which you need to copy to your new "osp_atr_72_500" folder (below AIAircraft). Once copied run the program, and it will update your aircraft.cfg file. Once updated you can delete the exe-file as we don't need it any more (it also created a backup of the aircraft.cfg file that we don't need – be sure you delete the backup and not the actual aircraft.cfg file).

The update we just executed was just an update for the original FS9 version, so our AI Aircraft is still not ready to be used for P3Dv4. Once again we need to access the AIG forum to find the files that will upgrade this AI Aircraft to be used with FSX/P3D (http://www.alpha-india.net/forums/index.php?topic=25472.0). Scroll down until you find OSP:

```
OSP:
===

ATR42 All Series  Patch here in the forum http://www.alpha-india.net/forums/index.php?topic=25759.0

ATR72 All Series  Patchh ere in the forum http://www.alpha-india.net/forums/index.php?topic=25759.0
```

Illustration 24: Links for FSX/P3D updates to OSP ATR 42/72 (AIG's forum)

As of now we concentrate on the ATR72, but as you can see both links are identical, so I leave it to you to click the first or the last :-) The top posting in this thread contains links to two zip-files (one for the OSP ATR42 and the last for the OSP ATR72). Click the last of these (as we are installing the ATR72) and download the "OSP ATR 72 Series.zip" file:

```
OSP ATR 42 Series.zip (1134.25 kB - downloaded 343 times.)
OSP ATR 72 Series.zip (1135.19 kB - downloaded 344 times.)
```

Illustration 25: AIG updates for OSP ATR's

Unzipping the "OSP ATR 72 Series.zip" file you will see it contains a folder for each of the 3 different ATR 72's (-200, -210 and -500) along with a new alphachannel file and a readme. As we are adding the ATR 72-500 go ahead a go into the "ATR 72-500" folder.

This folder contains two sub-folders (one for FSX and another for P3Dv4) along with two light textures.

But lets put this folder aside for now and look at the (FS9) base-version of the ATR we started to download via AVSIM. That folder contains the air-file, the cfg-file, a house-texture ("Texture.house") and a Model folder. Since we have now downloaded a new updated model from the AIG forum (updated for P3Dv4) we no longer needs the old (FS9) model, so go ahead and delete the Model folder. Next copy the "Model P3D v4" folder from the last file we downloaded from the AIG forum (be sure you copy the one in the "ATR 72-500" subfolder). I've deciede to rename my "Model P3D v4" into "Model.500", so if you do the same your "osp_atr_72_500" folder should look like this now:

Model.500	8/6/2017 11:11 AM	File folder	
Texture.house	8/6/2017 10:37 AM	File folder	
Aircraft.cfg	1/11/2009 9:20 PM	CFG File	8 KB
ATR72.air	1/11/2009 12:17 PM	AIR File	14 KB

Illustration 26: "Model P3D v4" folder copied from AIG, and renamed

At this point we are ready to download our first repaint. I chose to download a repaint for "HOP" (ATR 72-500) which you can get from the flyingcarpet75. In the top of the screen use the menu to first choose "Repaints", then "Airlines", then "H", then "Hop!". The menu can be a bit tricky, so sometime I just pick any airline, Then navigate to the letter (in this case "H") and then open the airline I need (in this case "Hop!"):

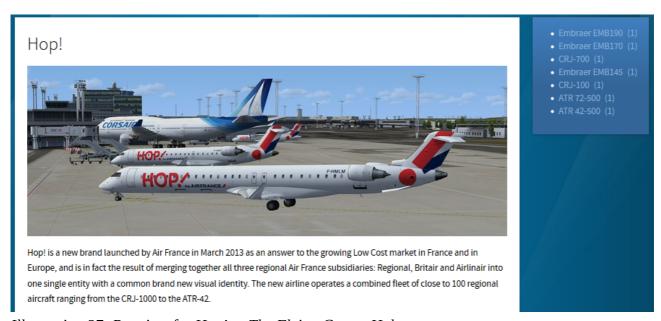


Illustration 27: Repaints for Hop! at The Flying Carpet Hub

The Embraer EM170/190 works fine with the UTLive models, so these can be used as we did in Section2 of this manual, where we used the UTLive Dash8-400 models with our own repaints. However for now we are concentrated on the ATR72-500, so download this repaint. When you click "ATR 72-500 (1)" you are taken to a new side showing all the available repaints (in this case there is only 1, as denoted by "(1)" in the previous

screenshot). Clicking that one image, you are taken to a new side from where you can download the actual repaints (be sure to pick the "fsx" version).

Both the image at the Flyingcarpet75 and the content of the repaint folder shows you that this single file contains several variation of this plane. In my perspective Hop! is not the most important repaint for me, so I am happy to use just a single of these variations, but if Hop! is important to you, feel free to add all the variations (just be sure they all have different ui_variation values). Here I will only show how to install the "texture.hop gvzv" texture. So copy this folder to our AI Aircraft folder ("osp_atr_72_500").

Like we did in the previous section, its a good idea to match the names of the texture files. The files we downloaded with the repaint are called: "osp_atr_72_500_I", "osp_atr_72_500_t", "osp_atr_prop". These filenames both match with the texture files in the house-texture (those in the "Texture.house") folder and those we downloaded with the updated model from AIG's forum. So there is no need to rename any of the files. However the P3Dv4 update from AIG's forum came with an additional file called "osp_atr_72_500_light_Splash.dds". I am not sure is this file is important or not, but to be on the safe side I decided to copy this file into the "texture.hop gvzv" folder.

Next step is to copy the "[fltsim.x+3]" section from the fltsim.txt file (from the repaint) into the aircraft.cfg file of our AI Aircraft ("osp_atr_72_500"). Like you have done a few times now, you need to change "the number" of the fltsim-section to match those in your aircraft.cfg file. In my case this was the first repaint, so it was going to be my "[fltsim.0]". As before I changed ui_manufacturere, ui_type and ui_variation to my perferences, but you don't have to do this:

[fltsim.0]
title=OSP ATR 72-500 HOP F-GVZV
sim=ATR72
model=500
texture=hop gvzv
atc_id=F-GVZV
atc_airline=AIR HOP
atc_parking_codes=HOP
atc_parking_types=GATE
ui_manufacturer=OSP
ui_type=ATR72-500
ui_variation=HOP F-GVZV
description=Repaint by Philippe Tabatchnik

Since I chose to rename theq model-folder that we downloaded from the AIG update (from "Model P3D v4" into "Model.500", I need to change the model-item into "model=500". Last and final step is to (re)open UTLive and assign this repaint to the Hop! ATR 72:

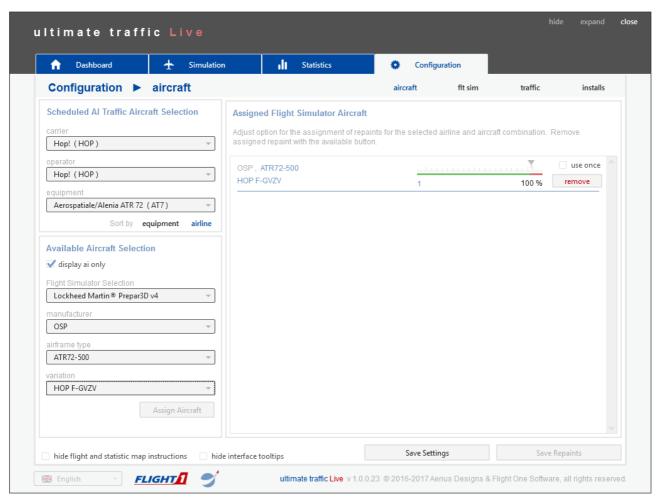


Illustration 28: Our HOP Atr72-500 repaint have been assigned in UTLive

Time to save our changes in UTLive, and then launch your flight-sim. I first went to LFPG (Paris - Charles De Gaulle), however I found it at LFPO (Paris - Orly):



Illustration 29: Our Hop! ATR 72-500 at LFPO – Paris, Orly (default P3D airport)

Adding AI Traffic via AI Flight Planner

Once the power-pack for UTL becomes available we will hopefully be able to add additional airlines, along with their schedules. But what if we want it like yesterday? Those of you old enough might remember the 80's song "I want Candy"? keep the melody, but change the lyrics to "I want Cargo", and this is exactly how I feel when flying in P3D ... especially after seeing the (cargo) screenshots by forum users Dave_YVRATC and laskar972. Naturally UTL can only give us traffic for airlines for which they are able to get data (flight shedules). So even though UTL have a lot of Airline traffic (especially when you have some extra repaints), there is still a lot of room for additional Cargo. Without the Powerpack, we have to rely on other tools for adding additional traffic, and AI Flight Planner (AIFP) is just such a tool. I am myself a complete newbie to AIFP, and have never used it prior to adding FedEx and UPS to P3Dv4.1, so most likely things can be done differently.

First of all you need to get all the models/repaints that you need. AIFP has some ways to automatically download and install (some) models/repaints, but I did things manually to be in control (and frankly because I don't think this automatic feature works with P3Dv4 where we often need update-packages for old FS9 models) – feel free to experience on your own.

First item on the agenda is to go hunting for models/repaints for FedEx and UPS. Previously in this document I have shown how you can utilize the UTL Q400 (Dash-8) model for your own repaints. In the same matter you can use the UTL **A310** and the **AB6**. Its not obvious to most who don't know all IATA-codes by hand, but AB6 is actually an Airbus A300-600 (thanks Ken).

At the time I'm writing this FAIB have just released the Boeing 767-200, -300 and -400, along with a lot of repaints for these models. At the FAIB-website you can also find FedEx and UPS repaints for the 767-300. Installing the 767 models and repaints are no different than installing the FAIB 737-800 as we looked at in the first section of this document.

Using the links mentioned before for the AIG website, you can download the FS9 version of the AIG 757-200 along with FSX/P3D updated models (be sure to scroll a bit down and grab the V2 version).

Using the "usual sources" (listed in this document) you can find many of the repaints you might need for FedEX and UPS. Last but not least there are also a few repaints to be grabbed from AVSIM. Before realizing that there was a 77X (Boeing 777-200F) repaint available for the FSPXAI 77X I had begun making my own (haven't repainted anything in years), but before I finished I found one on AVSIM (fspaix_b772f_fdx.zip). At AVSIM you can also find a FedEx repaint that you can use with the UTL A310 (tfs_a310_ge_fedex_express_n816fd.zip). The only thing I have not been able to find are FSX/P3D models for the DC/MD10's (used by the FedEx schedules), but I simply chose to replace these with the MD11F in stead.

Once the models and repaints have been taking care of, the next step is to find the schedules. The schedules I chose to use was those you can grab from the United Traffic Team (UTT) website. At the UTT website you can find many interesting things, but I only grabbed the 2016/2017 winter schedule for FedEx and UPS (in this document we will however only install the FedEx schedule): <a href="https://unitedtrafficteam.com/index.php/kunena/usa-su15/2556-fedex-express-https://unitedtrafficteam.com/index.php/kunena-2014-09-04/usa-su15/2272-ups-10-2014-09-04/usa-su15/2272-ups

Each of these schedules consists of 3 separate (formatted) text-files. One file lists all of the different aircraft's of that airline (in our case FedEx). Each of these must "point to" a specific model/repaint we have installed. The 2nd file lists all of the airports served by the airline. The 3rd and last file contains the actual schedule (which aircraft is to take-off/land at which airport at which times, during a week).

Since we don't want to change the schedule we can "forget" about the last 2 files, and only concentrate on the first. As written above each line in this file needs to "points" to the actual repaints we are using. As of now this file is using "generic names". We could manually edit this file and replace the generic names with the names (titles) used in our aircraft.cfg files, however I chose to substitute these in AIFP.

AIFP needs to "compile" these schedules into BGL-traffic files (that P3D can use), and to do this you need to install the Prepared SDK, if you have not done so already (frankly its the first thing I did install on my PC after having installed P3D). Next you need to download and install AIFP, which you can grab via this link: http://stuff4fs.com/open.asp?Folder=AIFP&JS=TRUE

AIFP don't come with an actual installer, so you simply create a folder and put all the files in this folder. I suggest you don't use the "normal" program-files folder, as it will only complicate things. Personally I have a "FS" folder in the root of my C-drive, where I have created sub-folders for a few FS util programs (e.g. ADE, AIFP, Rex Texture Direct/-Soft Clouds and so on).

The first time you run AIFP it will create a few sub-folders, and among these one called "FlightPlans". Simply take the 3 text-files from the UTT FedEx schedule and dump them into this folder (either the "normal" or those from the "Optimized speeds" sub-folder). Then start up AIFP and hit the "Select FP txt/zip" button, and AIFP will open a file-browser that default to show txt-files that begins with "Flightplans". Choose this file and hit open. Next AIFP shows a dialog saying that "Day-encoding scheme" is not specified and it ask if you want to use the day-encoding used by FS9 (for which I answered "No"):

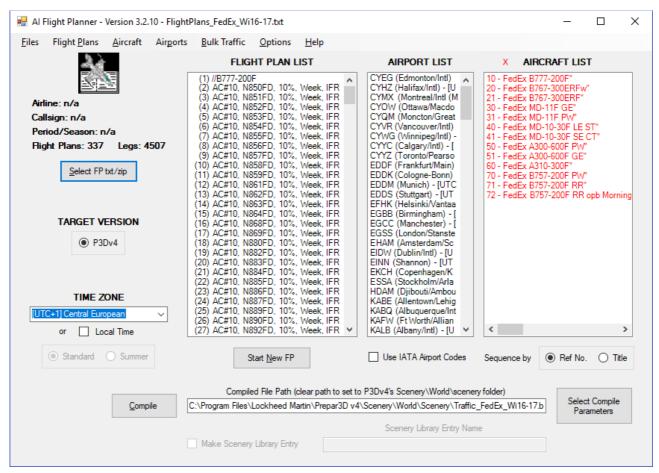


Illustration 30: Flightplan, airport and aircraft lists loaded into AIFP

Even though we only selected one of the txt-files AIFP will load all 3, and it knows which file is which, so all of the 3 listboxes are filled. The first 2 are populated by Flightplans, and Airports, and they are listed in black to tell us that everything is just fine. However all of the items in the last listbox are in red to inform us that I don't have these models/repaints installed (or at least not using those names). In theory AIFP can download/install these models/repaints, however I doubt it will work for P3D, and I "have a system" how I want my models/repaints installed, and will not leave it up to AIFP to do this.

So in stead I right-click each of the red Aircraft's (one at a time), and from the context menu I choose the item "Substitute". AIFP will now scan your computer for installed repaints and list them in a window. I don't have count of all the repaints I currently have installed, but scrolling up/down to find the repaint to use will take forever. In stead I click the Radio-button labeled "Airline" next to the label "Show", and in the bottom entry field I enter the IATA code of FedEx ("FDX"), and then I hit the "Search" button to the right:

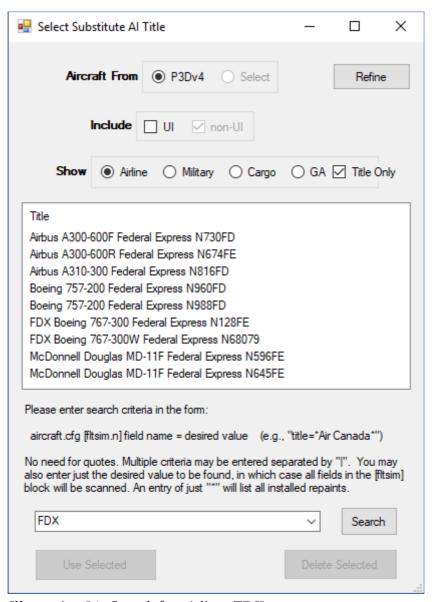


Illustration 31: Search for airline: FDX

Searching for the airline "FDX" have greatly reduced the length of this list, and its now manageable to find a substitute repaint. The names and the number of available repaint on your system will naturally not be the same. But you simply pick the repaint you want, and then hit the "Use Selected" button. You will now return to the previous window where you can now see that the repaint we substituted has now changed name, and its now listed in black (where it was previous red), to tell us that we have this repaint in our system.

Now its simply rinse-and-repeat, as you will have to do the same with all the aircraft's (basically repaints) that are still listed in red. In the list there are 2 MD10's, however I don't have any MD10's on my system, so I simply replaced these with MD11's. So having replaced all of them, they are now all listed in black in the Aircraft list:

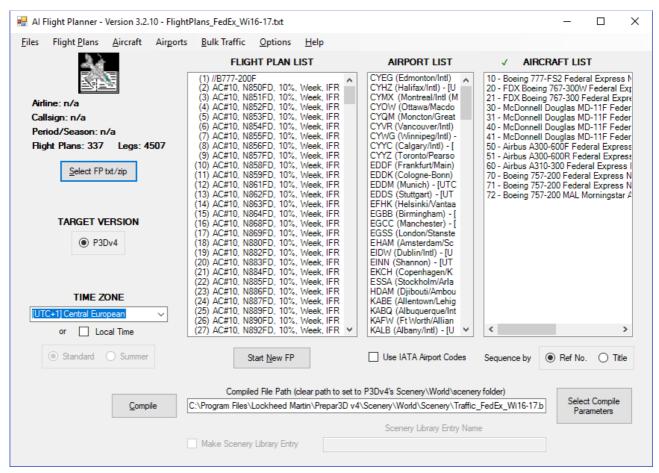


Illustration 32: All aircraft's have been substituded

Now you are ready to compile your traffic-bgl file. I simply used the folder/filename as suggested by AIFP, so simply hit the "Compile" button. The process of compiling this bgl-file is done in a second or 2, and that is all you have to do in AIFP. In the file menu I hit the item "Save File Set", in case I later want to change anything, and I don't want to go through the substitute-process again.

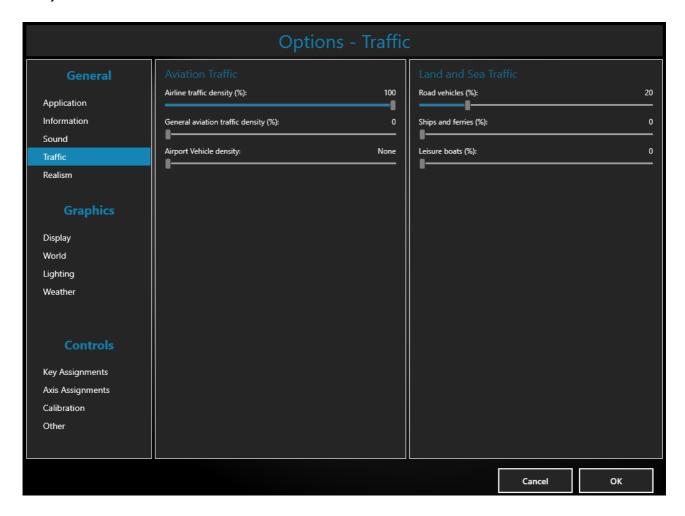
Normally when running with UTL we don't want to see the default P3D (generic aircraft) traffic so in P3D we normally disable airline traffic. However to see this traffic we need to bring back that traffic setting in P3D. However before doing so we want to ensure we don't see the generic airline traffic that is bundled with P3D. So navigate to the world scenery folder in your P3D scenery. In my case using the default installation this folder is:

C:\Program Files\Lockheed Martin\Prepar3D v4\Scenery\World\scenery

In this folder locate the file "trafficAircraft.bgl" and change its extension into something else. I chose to rename it into "trafficAircraft.OFF". This will ensure that P3D will not load/use this file. In this folder you also find the bgl-file that we just generated using AIFP: "Traffic FedEx Wi16-17.bgl".

The last and final step is to start P3D and enable airline-traffic. So fire up P3D and go to the menu: Options \rightarrow General, and then chose the "Traffic" tab. In the

screen that appears you dial in the amount of traffic you want. As I have only installed FedEx and UPS this way, I went with 100% (I want to scratch my Cargo itch):



Having created- and enabled our FedEx-bgl traffic to be visible, lets see how it looks in the sim. So head over to KMEM and have a look. Previously I had decided not to purchase the KMEM airport from FSDT, as it with the default UTL traffic looks like a ghost-town with only 4-8 planes on the ground. But now we have added some FedEx traffic even the default P3D KMEM has come alive:



Illustration 33: We now have FedEx at KMEM :-)

Running with both UTL and the traffic I have installed this way I have not noted any problems. The settings in P3D (in this case 100% airline traffic density) only affects the BGL's I have made this way, and all setting in UTL only affect the AI traffic that UTL injects into P3D.

Spawning at an airport these traffic-bgl's are loaded before UTL populates the airport. So you can regard it as if the traffic-bgl's have an higher priority that UTL. Hence there will be fewer gates for UTL to populate. However I don't see this as a problem. Not counting a major FedEx hub like KMEM (or a major UPS hub like KSDF) there will at most be 1-2 FedEx at other airports (you might see a few more at PANC or other major cargo hubs). Here below is a screenshot from PANC showing the UPS (I have also installed just like the FedEx), along with Polar, Cathay and China Airlines injected by UTL:

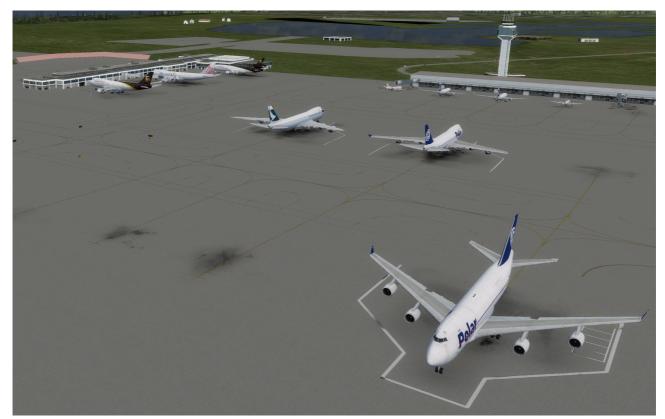


Illustration 34: UPS from a bgl-file, along with other planes from UTL (at PANC)

Tips !!!

Adding all these AI Aircraft's/repaints, and trying to stay up to date with the UTLive forum I have picked up a few Tips on how to do things. These tips are naturally based on my preferences and how I do things, so take what you can use, forget the rest, and feel free to disagree.

You don't have to download/use all repaints/variations you come across

I suggest you begin with the airport that you are likely to visit. I fly mostly in Europe, but from time to time I do fly longer flights (the 744F don't like to be constrained). As of now I don't have many payware airports outside of Europe, so when I do fly out of Europe I mostly visit the airports for which Microsoft back in the days made "High Detail" versions (http://www.simtours.net/highdetailairports.php).

At wikipedia you can often find a list of airlines who are using a specific airport. So you can choose to look up an airport you know you are going to visit, and then find/install repaints for these airlines. At the UTLive forum ScottecLEMD showed how you in UTLive can see which airlines service a specific airport

(http://ultimatetraffic.flight1.net/forums/forum posts.asp?TID=15210&title=request-printable-timetable), so this is another way to perhaps determine which repaints to install first.

To be honest I have probably installed/assigned a lot of repaints I'm never going to see. If you are never going to fly in to/out of south-america, china, europe or some other regions, there are no need to add any of their local airlines. I like the colorful repaints of

Nok Air (where the nose of the plane looks like a beak of a bird), but if I never fly in to/out off Thailand I might never see these. So these would not be the first repaints to add (if adding them at all).



Illustration 35: Nok Air Dash8-400 flying locally in Thailand

I think the Nok Air aircraft repaints came with 8-10 different variations, however I chose only to install 3-4 of these to have some variation. Naturally I spend less time installing 3-4 variations in stead of 10, but also it helps you minimize the number of repaints your sim have to load (less memory – even though VAS is not as issue anymore with P3Dv4). I downloaded a Norwegian repaint that I think contained 30-50 variations where the tale of each repaint was decorated with the portrait of a famous Nordic person. Had I been flying with a virtual Norwegian Airline I would probably want to install all of them, however for me 3-4 different variations was enough.

So for the regions you are not likely to use, don't install the small/short-range aircraft's. If you don't fly into China - as an example - only install the repaints for the big/long-range aircraft's, as these are those you are most likely to see outside this region (e.g. an A330/B777 flying to other regions, in stead of Dash8's/A318's only flying "locally").

I actually ran into a problem with UTL (version 1.23) where AI started to disappear from the sim, the more repaints I was assigning. Before this problem I saw +80 AI Aircraft's at EDDF, however when I observed this problem, I only saw about 10. It was not only at EDDF I saw less traffic, but it was all over I started to see less traffic, but some airports were more affected than others. At the time the problem appeared I was assigning additional B737-800, but the repaints that disappeared was other types as well (e.g. all my Lufthansa MD-11F disappeared from EDDF, and my Air Berlin Dash-8 where disappearing from EDDL, along with other aircraft's/repaints as well).

In the end (to get rid of the problem) I reverted back to an "empty" repaints.xml file, only containing the default UTL assignments (if you delete repaints.xml UTL will automatically generate a new one, next time you start it up). I then started over from scratch assigning repaints, but this 2nd time around I assigned far less repaints per carrier/operator/type. For most of them I only installed a single repaint, for many I installed 2 (e.g. "a normal" and a "Skyteam"), and for a few airlines with many different repaints like Frontier, Norwegian and Nok Air I installed no more than 4 different repaints. Doing so I kept the size of repaints.xml much smaller than the one where I had the problem (the smaller size is the result of assigning less repaints), and doing so I avoided the problem I had before.

Since I only installed fewer repaints (in many cases only a single per carrier, operator, type) I wanted to install "the best ones". E.g. installing a single Lufthansa repaint for a specific type (aircraft model) I certainly did not want to install a retro repaint, or some other very special repaint. So using AI Aircraft Editor I was able to see the repaints to pick the one (or the few) I wanted to assign. Its time consuming, but as an added bonus I was able to nail a few bugs in the process (e.g. where the texture-files were wrongly named).

Do your installations in batches

If you have downloaded 300 different repaints and you try to add them all in one go, you get tired along the way and more and more errors will be made. I have often added my repaints in batches, where I might have installed 30 repaints, and once they were added, I had ensured there was no errors (with ACA 2017). Doing so you will make less errors. Also doing a few flights where you start to see the repaints you have just added, you begin to appreciate your "all your hard work" more and more, and you get more addicted to adding more repaints ... perhaps ... I did:-)

Often I have downloaded all the repaints for a particular airline, but when you install these repaints, its much quicker to do it by type. E.g. you open the aircraft.cfg file for a Boeing 737-800 Winglet, and then you quickly add 10 repaints for this type. In stead of first adding a single repaint for an A319, then one for an A320, then one for an A321 (3 different aircraft.cfg files to open, to locate the next fltsim-number to use ...) and then do it all over again with the next airline.

Make your system, and stick with it

As you can see from this "manual" I had my way of setting ui_manufacturer, ui_type and ui_variation, just as I preferred it to be. If you look at the UTLive forum where this manual was announced you see a posting where ScottecLEMD, shows how he does things. Its not important you follow either of these, but if you have "a system" and you stick with it, things becomes more easy to manage.

Along the way I discontinued my old system, and instead adopted the system I leared from ScottecLEMD. Initially I had installed each separat AI Aircraft into its own folder along with all repaints for that particular AI Aircraft, and the repaints were simply installed with the name the repaint had given each texture-folder.

They way ScottecLEMD does it was in stead to group AI Aircraft's by their ICAO code. E.g. some of the FAIB Boeings comes with "Normal" and "Light" models. I had these in separate folders, where SottecLEMD put them into the same. Within each aircraft-ICAO folder there is a folder per operator (labeled both by ICAO code and name), and within each of these there is a folder per texture (named by the aircraft ID for that particular aircraft). Here is a small view of how the folder-tree looks for the 737-800's:

- AI Boeing 737-800 7S8
- AI Boeing 737-800 73H
 - texture.BER Air Berlin
 - D-ABAF
 - D-ABBB
 - D-ABBK

- texture.BMS Blue Air
- AI Boeing 737-800 738

I like this system very much. Its very clean, you know how to label your folders and its easy to locate problematic repaints (if you have any). However it also requires a lot of work. Within your Aircraft.cfg files you have to set the texture names to this system (e.g. for the D-ABBB you have to use "texture = BER Air Berlin\D-ABBB"). To make it easy to find these repaints within UTL, you also have to set ui_manufacurer, ui_type, and ui variation:

```
ui_manufacturer = AI Boeing
ui_type = Boeing 737-800 (73H)
ui variation = Air Berlin D-ABBB (BER)
```

Last but not least you also have to set the title, and as noted before you cannot have 2 different repaints with the same name (each repaint must be titled differently). This is easy fixed by a system of how to set the title (e.g. "title = Boeing 737-86JWL Air Berlin D-ABBB"). By making the registration-ID part of the title, you should not run into two repaints with the exact same name.

Whenever you assign a repaint in UTL, that assignment is put into the repaints.xml file using only the title. So you while can freely change ui_manufacturer, ui_type and ui_variation, if you have assigned a repaint in UTL, and you change the title, that assignment is lost. So be sure to change those titles you want to chage BEFORE you start assigning the repaints in UTL.

If you scroll back a few pages you can see the fltsim-section of the ATR72 (HOP repaint) that we added (however not following this scheme I use now). Here below you see the entry that have been added to repaints.xml, when I assigned that repaint:

As you can see only the title is used (not ui_manufacurer, ui_type, nor ui_variation). The val tag is used to set the percentage chance this repaint is use (in this case 100%), and if this particular repaint should be used only once (e.g. if you have a very special repaint, and you only will allow a single AI Aircraft to use this special repaint).

Save some space on your harddrive (reuse texture-files for many repaints) Here is another trick I've also learned from ScottecLEMD. In many cases you will have a single texture-file that you will be using for many different repaints. It can be Light-texture telling where the repaint will be lit at night, or it can be Prop-texture. In the case with the Q400 there is a prop-texture, and there is no need to put this Prop-texture into each and every repaint folder you have for the Q400. In stead you put a text-file instruction P3D where to look for textures not located in the folder.

In the texture folder for my Air Berlin Q400 I put a text-file called texture.cfg along with the texture for the aircraft itself (however I don't put the Prop-texture). This file only consists of 2 lines. It doesn't mention the Prop-texture specifically, but it only serves the purpose to tell P3D where to look for textures it can't find in this folder: [fltsim]

fallback.1=..\..\Texture\UTL Q400

The number of "..\" is dependant on how many of sub-folders it have to "go backward" to go back to your main "AIAircraft" folder. In my AIAircraft folde I have a "Texture" folder where I have a sub-folder for each Aircraft for which I want to install these fallbacktextures. In this case my AIAircraft\Texture folder have a sub-folder called UTL_Q400 that contain the prop-texture I want to use for all my Q400's.

In the same way I have put a texture.cfg file into each repaint-folder of my FAIB A320-200, where the fallback.1 tag is set as "fallback.1=..\..\.Texture\FAIB A320-200". In stead of putting the light-textures directly into all A320-200 repaint folder, I have instead put the 4 different light-textures (FAIB_A320_CFM_AlwaysOn_L.dds, FAIB_A320_CFM_L.dds, FAIB_A320_IAE_AlwaysOn_L.dds, FAIB_A320_IAE_L.dds) into the "AIAircraft\Texture\ FAIB A320-200" folder.

Adding sounds to your AI

Again a trick learned from ScottecLEMD. On the net you can find some free soundpackages for AI Aircrafts, and from a vendor like SimMarket you are able to purchase sound-packages (often sold as one package for one aircraft-model, but you can also find some bundles that has sets for multiple models e.g. the one by Alan Constable). Like with the Light-/Prop-textures these sound-sets can be put into a single folder (one subfolder per engine-type), and then these can be referenced from many aircraft's/repaints.

In my main AI-Aircraft folder, I've added a folder simply called "AI Sounds". In this folder I have a sub-folder for each engine-type. Normally you will not do it per aircraft-model as the same engine (and thereby the same sounds) can be utilized by many different aircraft's/models. E.g. a CF6-80C(GE) engine can be used both by Boeing 747-400 and MD11.

Lets use the MD11F as an example. The MD11F can either be equipped with GE-engines (as written above) or with PW-engines. So in my "AIAircraft/AI Sounds" folder I have made a sub-folder for each engine type - one sub-folder called "CF6-80C" (the GE-variant) and one sub-folder called "PW 4000" (the PW-variant). In each of these sub-folders I have yet another subfolder called "Soundai" that contains the actual soundset for that particular engine. Here is how the folder structure looks:

- AIAircrafts
 - AI Sounds
 - CF6-80C

• Soundai (the actual wav-files / the soundset for CF6-80C engines)

■ PW 4000

• Soundai (the actual wav-files / the soundset for PW4000 engines)

Next step is to make 2 configuration folders (one for each engine-type, referencing that engine) within the AI folder for the aircraft in question (in my case "AIAircraft\AI Boeing MD-11 - M1F"). In my case these sub-folders are as following:

- AIAircrafts
 - ∘ AI Boeing MD-11 M1F
 - soundai.GE
 - soundai.PW

Each of these sub-folders (soundai.GE and soundai.PW) will only contain a single soundai.cfg text-file, that will be referencing the actual sound-sets we delt with before. As an example here is how the soundai.cfg file in the soundai.GE folder looks: [fltsim]

alias=AI Sounds\CF6-80C\Soundai

The soundai.cfg file in the soundai.PW folder is almost the same, however referencing the sound-set for the PW engines in stead:

```
[fltsim]
alias=AI Sounds\PW 4000\Soundai
```

The last part of the equation is to tell each repaint which sound-set to use. In this example I have opened the aircraft.cfg file for my MD11F, here I have found the fltsim-section for a Lufthansa MD11F with GE-engines. In this section I've added a "soundai" tag, so it looks like this (all non-essential lines are not shown):

```
[fltsim.3]
soundai = GE
```

Like with the textures you only list the last part of the folder name. So even though the folder with the configuration of the GE sounds is called "soundai.GE", the tag simply says "soundai = GE". Soundai-folders will always be prefixed by "soundai." (like texture folders always will be prefixed "texture."). So if I have another MD11F that is equipped with PW-engines I simply reference the other folder:

```
[fltsim.4]
soundai = PW
```

A plane like the 747-400 comes with 3 engine variants (GE, PW and RR). In that case I would make 3 sub-folders called "soundai.GE", "soundai.PW" and "soundai.RR). In case you want to be more specific, you can instead label these folders as the exact engine names (e.g. "soundai.RB211-524" in the case with the Rolls-Royce variant). Even if you only got a single 747 engine type, I would make these 3 sub-folder anyway, but then I would let them contain identical soundai.cfg files (all referencing the same sound-set). If you later come across (or puchase) a sound-set for GE-engines you only have to change the soundai.cfg file in you soundai.GE folder, to equip all your GE 747's with the new sound-set.

Backup, Backup and Backup !!!

A forum user asked me how much time I had spend adding AI Aircraft's/repaints and honestly I don't know, but a lot of time have been spend doing it. In the beginning it took longer time, and I did more errors (which again added to the time), but having a system, and have done it many times, its now much quicker to add repaints. But would I like to do it again from the beginning? ... Nooooooo !!!

Therefor you should backup your files. I have put all my AI-aircraft's/repaints into a single AIAircraft folder, so backing up this single folder I have (almost all). Don't forget to backup the few files you put into the Effects- and Texture-folder also. Having a backup of all your AI-aircraft's/repaints is just half the story. You should also backup all your assignments. Whenever you assign a repaint in UTLive, its saved to the repaints.xml file that you find in this folder:

C:\Users\username\AppData\Roaming\Flight One Software\utLive\Data

Potentially this file can be overwritten if/when you update UTLive, so **before** any update you should remember to backup this file.

Happy AI aircraft/repaint installing/assigning !!!