Passengers avoiding jetway at Gate 11

GSX Profile Editor

version 3.5

https://www.pinns.co.uk/flightsim/gsx.html

Introduction

GSX Profile Editor began as a tool to help visualise the details of complex GSX profiles.

It provides a clear, intuitive display of boarding, deboarding, and walker routes for every gate or parking position and plots the location of marshals,stairs,gates etc.

It also makes it far easier to understand left and right pushback paths at a glance.

Beyond visualisation, *GSX Profile Editor* ranks stands by the level of detail in their configuration, helping users quickly choose the most complete and reliable gate when arriving or departing.

While some stands may include walkers, their appearance ultimately depends on the specific version of the airport you have installed.

Although GSX profiles may look simple to edit, Couatl—the engine behind GSX—can be extremely sensitive. Even when following its formatting rules (correct brackets, spacing, and structure), a single unintended change can cause unexpected behaviour.

GSX Profile Editor has been refined through extensive trial and error to help you avoid these common pitfalls.

That said, for complete peace of mind, always back up your original profiles before making changes.

GSX Profile Editor gives experienced users the diagnostic insight and control needed to build, refine, and *maintain robust GSX profiles* with confidence.

Who is it designed for?

- Anyone who wants to **visualise a GSX profile** or compare multiple profiles for the same airport.
- Ideal for users who when flying want to select a gate featuring a more intricate pushback procedure or a detailed boarding/deboarding path.
- Users who want to **create or modify walkers, boarding, deboarding, or pushback routes** without relying on the GSX in-sim editor.
- Creators aiming to build a **fully up-to-date profile that GSX Pro will reliably accept**.
- Pilots who simply enjoy **seeing walkers or boarders from their cockpit.**

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Obsolete GSX profiles

Most GSX profiles available online are likely to be outdated

These may **not** be accepted by GSX Pro.

The usual causes include:

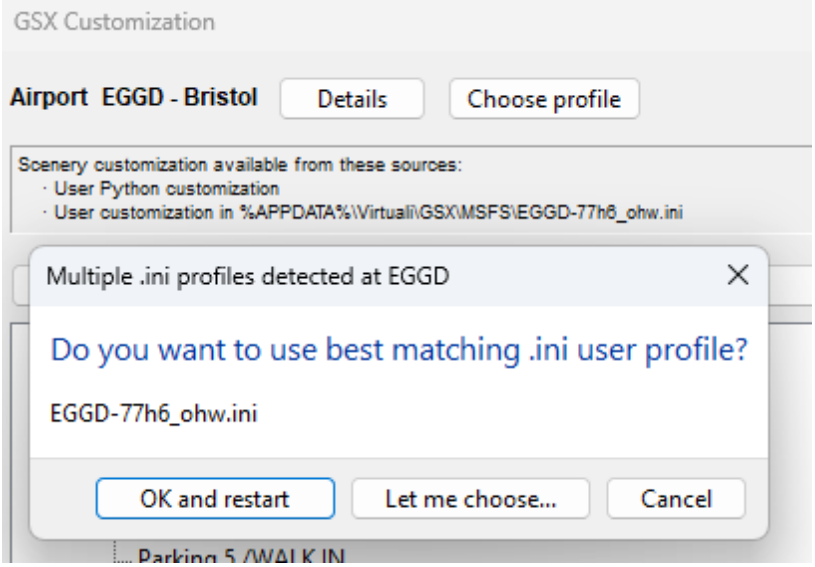
- Gates or parking stands being renamed or removed
- Aircraft parking positions being changed and not complying with the latest navdata.
- New gates or stands being added

How do you know if a profile is obsolete?

Enter GSX Pro in the sim

Select Customize this Parking Position

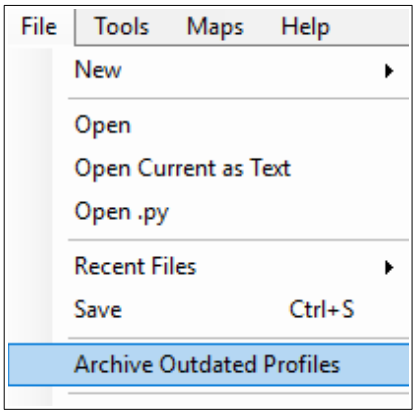
The following screen should appear but may get hidden behind the simulation – in which case al tab it and select. At the Top , you should find the current profile in use by GSX Pro



In our case : EGGD-77h8_ohw.ini

If it does not show any ini file then you need to get GSX Pro to create an ini file – see below.

GSX Profile Editor enables you to archive outdated profiles applying to the same airport so they do not appear in the list. They are stored in a subfolder ‘backup_profiles’ located in the main gsx profile editor folder

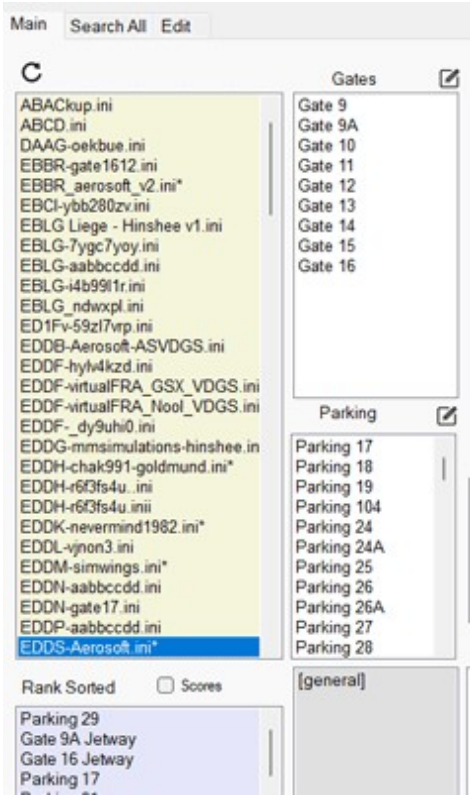


Getting Started

All profiles are appear in a cream coloured listbox – if not , check Settings

If GSX Pro has created a new profile – see below – use the refresh button to update the list.

Click on an airport to lists all gates, parking and other spots.



Click on a gate/parking slot to reveal any object and/or route it contains.

To change any items on the map click on Edit

Quickly Selecting the most detailed gate/parking slot

The lilac coloured list shows gates in order of detail. This can be useful to select a parking slot during the sim.

How to Edit

Click on Edit icon (pencil) or the Edit tab

How to edit a specific item?

Click on one of the lists **(disabled in the LI version)**

If the item exits then a **yellow circle** points to its location

You can also click & select an item shown on the map.

- You can click and drag it to a different location

Once dropped the location has automatically been stored – it does NOT automatically save the profile. To do this click the ‘Save Profile’ Button , or File,Save

- You can change its angle

Objects like Stairs,Baggage,Pushback positions can be turned left or right.

Click Apply Rotation to fix new rotation. The user still has to save the profile

- You can change its height

Boarding and Deboarding Entergates have heights which can be changed

2.5 means 2.5 metres

However,you cannot not change:

`parkingsystem_stopposition`

`this_parking_pos`

These values are hard-coded and have been intentionally disabled in GSX Profile Editor, because modifying them triggers a persistent error message that can freeze the entire profile and render it unusable - see Solution to Frozen Parking

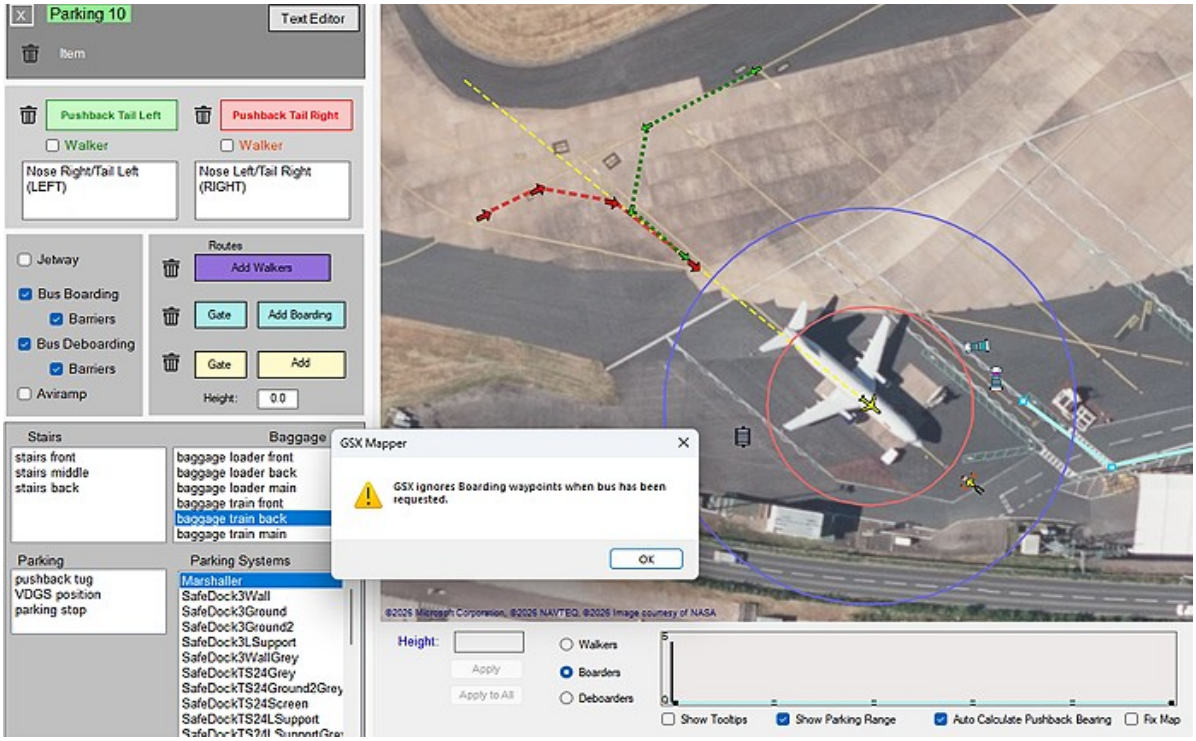
.PY files

Some profiles include **.py handler scripts** that dynamically override parts of a GSX profile based on conditions such as gate, weather, time of day, aircraft type, airline, or local noise-abatement rules.

For example, **rain at an airport may force GSX to use buses instead of your custom boarding/deboarding routes**, because the handler script instructs GSX to ignore those routes under wet-weather conditions.

GSX Profile Editor adds a * to the file name for easy identification.

Edit Menu

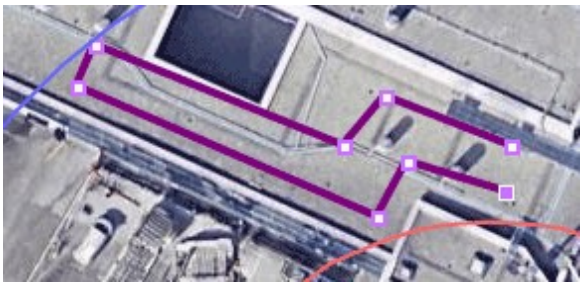


We've created a quick boarding route and added a left /right tail pushback path as well after adding a marshaller, some stairs and baggage trains.

The warning tells us that a Bus has been ordered eventhough we have created a boarding route!

How to draw routes

Walkers



Click Purple walkers button and create your path by clicking on the map.

To finish, click apply route.
Purple coloured in node denotes start of walk.

Walkers start 15+ secs after restarting Couatl – if they don't see below.

Walkers can get trapped in buildings which have no transparent windows.

You do not need to plot a line taking you back to your starting position – GSX does this automatically

Do not use more than 10 nodes.

You can drag each note to a different place.

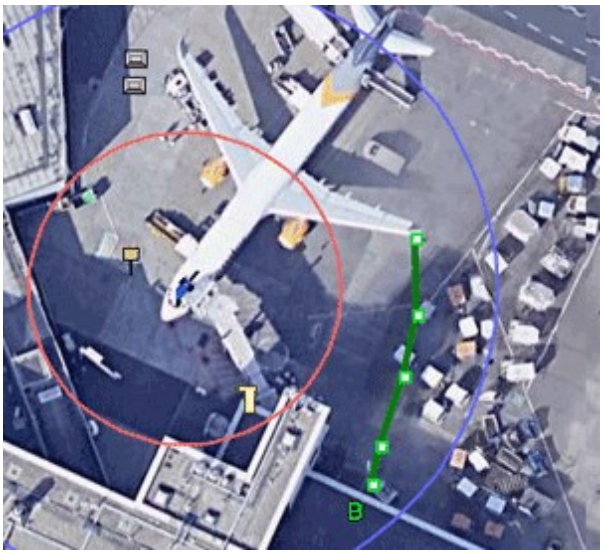
You can apply the same height to all nodes by clicking 'Apply to All'

Boarding and Deboarding

Both need a gate to aim for – they don't need to touch your last node.

Start with a node *level with cockpit with a wing's distance from the cockpit***.**

Finish near the B or D node.



Front pax walk to the wing then turn

Rear pax walk to the front then turn

Both situations are not ideal.

Always Start from the plane and finish near the gate

You 'll soon discover what happens if you don't.

Check to see if the height of your boarding gate etc is the same as the last node you have plotted.

If the route does NOT follow a jetway, but instead runs along the apron , make sure you have the unticked **Jetway option.**

Check if the bus option has been ticked. If so it ignores your boarding or deboarding route!

What if walkers do not appear?

Walkers generally take 15 secs to 'warm up' after an edit of any kind to the route.

If walkers boarders & deboarders do not appear then check:

- Is GSX Pro using the same profile as you are? See below on how to check this.
- After you've edited the route ,have you restarted Couatl (see below) ?
- The route may be hidden within a building
- There may be too many waypoints.

- You’ve made the route too long before they appear.
  Generally, it’s pointless to plot a route through a building without transparent windows.

Solution 1: If in doubt, draw your route covering ground level on the apron and restart Couatl if you are in the simulation.

Solution 2: Add a parking system

- select a VDGS, ie *SafeDockTS24Ground*, **NOT** a marshal
- place it 10m in front of the cockpit
- Restart Couatl

After 5 secs the VDGS should be visible , if not , GSX Pro is using a different profile!

Note: Marshals do not appear when restarting Couatl.

Pushback

GSX Profile Editor supports Left (green) and Right (red) pushbacks.

Currently , we do not support blue pushbacks.

The **first node** in a pushback route is always the **final stop position** of the aircraft. The **second node** must always lie **between the aircraft and the first node**.

A higher **Approach Number** means the node is **closer to the final position**, which is why a pushback cannot simply be drawn as a continuous route. Each node represents a specific orientation and transition point.

Green arrows indicate a **Left** pushback. **Red arrows** indicate a **Right** pushback.

Each arrow shows the **direction the aircraft is facing** at that node. If the arrow is not the final one, it marks the **start of a new path segment**, not the end of the previous one.

In most cases, the **left and right final nodes face each other**. If nodes are incorrectly placed, **GSX Profile Editor will display crossing routes**, making the issue obvious.

When placing nodes—especially the final one—use the **satellite imagery** to click on a precise, painted taxiway reference point. This makes the pushback look more accurate and professional.

To speed up route creation, use the **Next** button. It automatically selects the correct tag for the next node. One button is dedicated to **Left** pushback routes, the other to **Right**.

Be aware that **GSX Pro occasionally ignores custom routes** and generates its own pushback path!

Rotating Angles

Items which do not have a height property, can be rotated.

Click on an item and use he << or >> button to change angle ; untick 10 option to change by 1 degree only

In the sim Stairs etc , if the angle is ‘wrong’ , show a rapid 180 degree spin when the user selects Boarding or Deboarding .

Adding Height

You can change heights for Passenger Gates, both boarding and Deboarding.
Click on a B or D tag and change heights.

Heights of routes can be changed by selecting the correct option,ieWalking, and either click on a node or click on the graph.

Select *Apply to All* if you want the height to apply to all points – restart Couatl if in the sim.

How to delete a waypoint or item?

*Click on a node or item and either click Trash Bucket or press **Delete** key*

Adding Parking Systems (VDGS)

Select Parkingsystem_objectposition and click on the map to fix the location

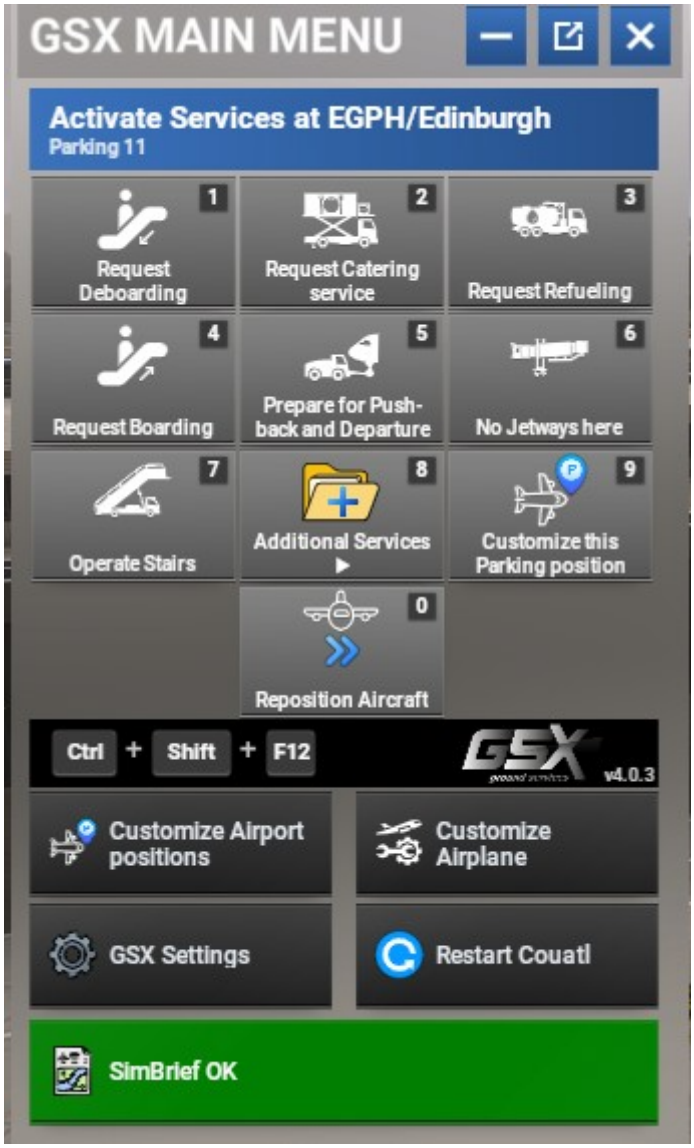
By default it's set to Marshaller (this is referred to as 1 in old profiles)

Change angle so that the pilot can see it head on. The picture on right shows an *incorrect* angle as seen from the cockpit.

Generally, GSX Pro is not too fussy as to where you put it.

How to restart Couatl

In the sim click on your GSX button and select the Restart Couatl button.



If it gives a grunt you need to abort your current ‘operation’ ie click on Boarding , then click Abort.

Wait until it has aborted then click Restart Couatl

How to speed up Couatl

At times GSX Pro gets slowed down by Windows Virus checker

You may wish to add the following folders to the exclusion list

- `C:\Program Files (x86)\Addon Manager`
- `C:\ProgramData\Virtuali`

Vehicle Paths

Vehicle approach paths is a new section in GSX profiles that defines the exact routes service vehicles follow—buses, fuel trucks, catering trucks, baggage carts, and more.

Tips

Lavatory Services: Lavatory service seems to reverse on arrival ; so, ensure the vehicle points away from the aircraft.

Fuel Services : Approach the plane from the plane's tail, NOT the cockpit.

Bus Services: Approach the plane from the plane's tail, NOT the cockpit.

Catering Services: When approaching finish wing's width. Any waypoints nearer the plane forces it to reverse.

When returning , start wing's width of plane allowing it to reverse automatically.

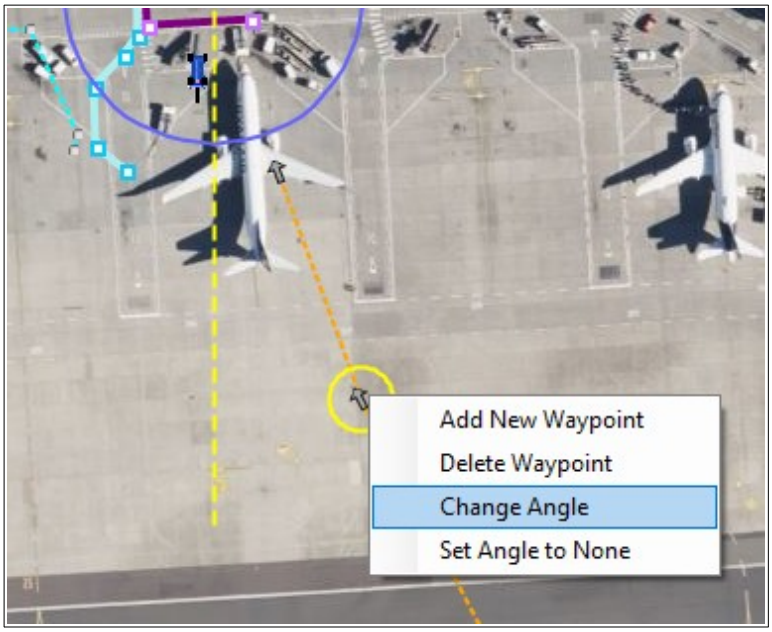
At present, it's not worth spending any time creating paths for baggage vehicles and loaders!

Each baggage vehicle and loader follows a predetermined internal route and more than often ignores the routes you have created!

Right click on an arrow to add or delete a waypoint.

Right click on arrow to generate desired angle or set it to None.

A vehicle turns toward its next waypoint using the direction indicated by that waypoint's arrow. If the arrow on the next waypoint points back toward the current waypoint, the vehicle will approach it in reverse.



Copying Catering Front truck route to Rear Catering truck

To avoid having to create an extra route for the Rear Truck go

Tools,Copy Catering Front Route to Rear

This copies approach and/or return route form Front Catering Truck to the Rear Truck.

This can only be done if no rear truck routes have previously been added.

Solution to Frozen Parking

Once GSX has encountered an ‘error’ you cannot be change gate without having to end your flight.

Even then, GSX will just refuse to refresh the profile.

Solution:

Remove any reference to your profile in **Couatladdons.ini**

Go Tools,Couatladdons.ini to launch this file

This will force Couatl to refresh itself and clear its memory.

Copying and Pasting

Routes even if it is the same route must be added to each parking area

They can be copied from one parking slot to another, particularly useful when copying walkerwaypoints.

Go Tools, Copy Route,Walkers.

Next enter a different parking slot and select Paste from the same tools menu.

How to get GSX Pro to create a new ini profile with ALL parking slots

Go GSX ,Customize Parking etc ;

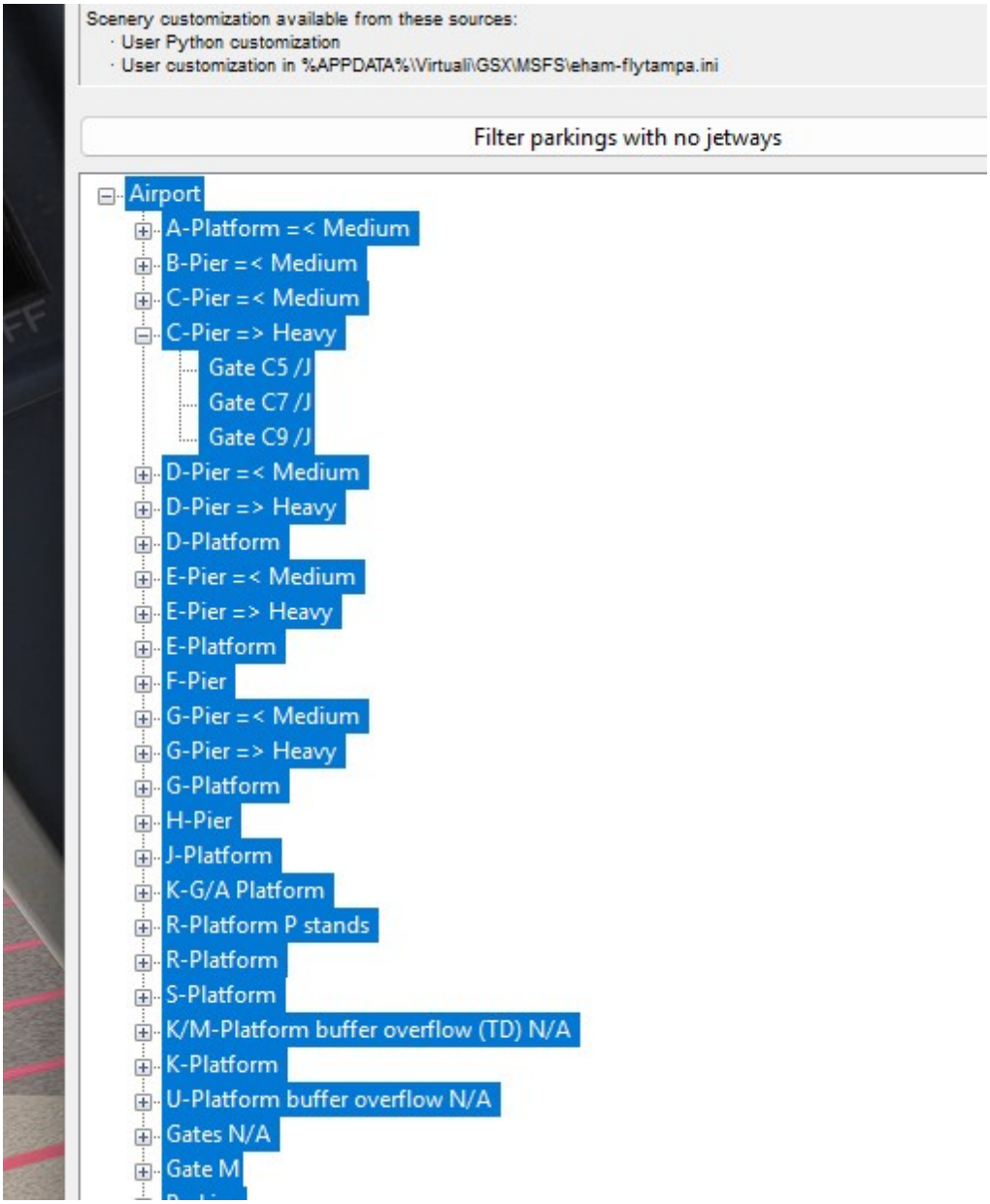
1) Select all parkings

2) Because the Apply button (bottom right) has been disabled you need to tick and untick one of the options , then click Apply

3) You may have to exit this window for GSX Pro to save the new profile

In GSX Profile Editor click the refresh button above the list of profiles so the new profile appears. It will start with the same icao code for your airport

If it doesn't then reenter the GSX's grey options window and check file reference on top.



With **GSX Profile Editor**, you can generate a fresh GSX Pro profile that automatically includes **all current gate and parking names**—a critical foundation for any working profile.

However, this will never be accepted , it seems, by GSX Pro as data is not current.

Evenso, it will force GSX pro to give you an option to create a new profile.

To ensure it contains all parking areas select all parkings as described above.

Working with newly created profiles

These profiles are up to date viz gate labels but do not contain any coordinates.

You can get *GSX Pro* to create coordinates for it's current parking position by:

clicking customize parking system

Important short cuts:

F4 for next item ,**< and > keys** for changing position

Enter for forcing a save and exit editor.

The following procedure has been found to do the trick:

1) Use the < and > key to move it left and then back right – this only has to be done once

2) Press F4 to get the next item

3) Use < and > key as above

4) Press ENTER to exit

This should give the current parking slot 2 coordinates.

Click on your current profile in the light creamy list to force it to reload the current profile

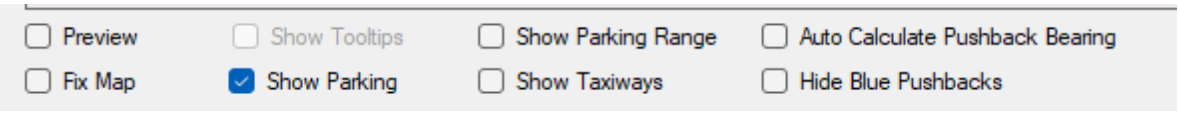
Find your gate and it should now contain 2 objects which enables you to focus on your parking slot

once in the editor

- Place a 'pushback_pos =' marker where the plane should be parked.
- You can also place both front and rear stairs on the left side of the aircraft. They will only spawn when *Boarding* is selected, so it's another quick visual check that your profile is being read correctly.
- You can add a walking route on the apron—ideally in front of the aircraft. This makes it easy to confirm whether GSX is actually using your custom profile, because the walkers will appear after 15 secs if it's active.
- Save profile
- Restart Couatl – Wait 10+ secs and if all goes well the walkers will appear.

Show Parking Slots

Check Show Parking



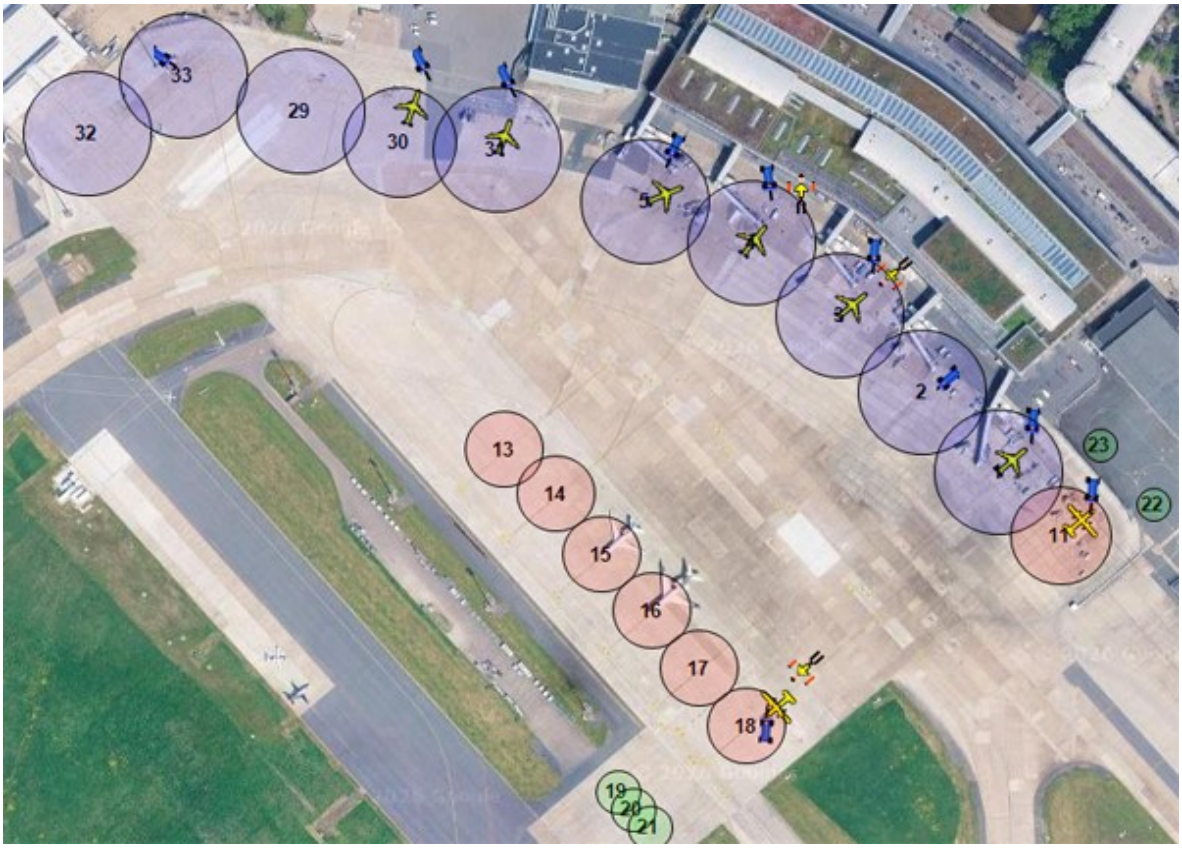
When starting a new GSX profile, it can be difficult to identify the exact location of each parking stand.

Our data is sourced from the MSFS2024 airport database.

While it may not always reflect the very latest scenery updates, it reliably displays all available parking positions for an airport, including their stand numbers and radius values.

Yellow: A380 Blue: 777 etc Red: A320 B778 etc Green:GA

Parking slots at EDDW



Zoom into a slot , check 'Fix Map' and click Edit ; next add a marshaller etc

Show Taxiways

Data is sourced from the MSFS2024 taxiways database.

The option has been added to make it easier to create a pushback route

Hide Blue Pushbacks

These pushback definitions include engine-start instructions and directional labels.

Because GSX Profile Editor does not support these extended pushback features, they cannot be edited within the tool.

Auto-calculate Pushback Heading

When drawing a pushback route, GSX Profile Editor can automatically calculate the correct aircraft heading each time you add a new point.

The same automatic heading adjustment is applied when you drag an existing point to a new location.

If you prefer to set headings manually, simply untick the option to disable this behaviour.