

---

# GMPHelper User Guide

---

JULY 23, 2020

NILS DORNBUSCH

# Disclaimer

This guide and the plugin are made for use on VATSIM online network only. It should never be used in context of real work aviation procedures. Whilst every effort has been made the guide and the software itself might contain errors as the author does not take liability in any context when using this document or the software. The source code is available from [github.com/reddeviln/GMPHelper](https://github.com/reddeviln/GMPHelper) under the GPL-3.0 License. If any bugs are encountered please report them on the github issue tracker or by messaging me on discord.

# Contents

<b>1</b>	<b>Installation</b>	<b>4</b>
<b>2</b>	<b>How to use GMPHelper in different cases</b>	<b>6</b>
2.1	Add aircraft to the end of the T/O queue . . . . .	6
2.2	Give aircraft the earliest CTOT possible . . . . .	6
2.3	Assign a manual CTOT . . . . .	7
2.4	Housekeeping . . . . .	7

# 1 Installation

The plugin is designed to be used with the VATSIM controller client Euroscope and the OMAE sector file. Information on how to install these can be obtained from [hq.vatme.net](http://hq.vatme.net). Normally this plugin will be provided with the OMAE sector file by default. However, if needed you can also follow these steps to install it manually:

1. Navigate to [github.com/reddeviln/GMPHelper](https://github.com/reddeviln/GMPHelper)
2. Obtain the GMPHelper.dll by building the plugin from source yourself or by downloading the binary from github directly from the releases tab.
3. Start Euroscope and load a .prf file of your choice when asked
4. In the top toolbar, find and click other settings to open a dropdown menu. From there select Plug-ins.
5. In the new Window navigate to the top right to click the Load button.
6. Navigate to the downloaded GMPHelper.dll file and confirm
7. Select GMPHelper from the list of plugin and allow it to draw on any screen necessary by selecting them on the right side and then pressing the arrow point to the left.
8. You can close the Plugins window now.
9. If the plugin loaded correctly you should see the T/O Sequence List in the top left of your screen
10. Next, we have to add some fields to the departure list. Click on the S in the menu bar of the departure list
11. Click Add Item two times
12. Select the first newly created item and change the “Tag Item type” to “GMPHelper VATSIM OMAE / CTOT”
13. Change the header name to CTOT and the width to 4
14. The left and right button functions should be assigned to “GMPHelper VATSIM OMAE / Assign CTOT” and “GMPHelper VATSIM OMAE / Edit CTOT” respectively.

15. Do the same for the second newly created item but choose “GMPHelper VATSIM OMAE / TOBT” as the “Tag Item type”. I don’t recommend assigning button functions to this item
16. Enjoy!

## 2 How to use GMPHelper in different cases

In this chapter it is shown how to handle different cases of assigning a CTOT can be handled using GMPHelper.

### 2.1 Add aircraft to the end of the T/O queue

Probably the most used case will be discussed here. We assume an aircraft calls for clearance and we just want to put him in the queue. To do this left click on the CTOT field of the respective aircraft in the departure list. This opens a list of three possibilities. The first one “Assign in sequence” is what we want in our specific case so it should be selected. Now the plugin calculates the CTOT that is as close as possible to the aircraft one slot ahead in the queue. It takes into account the wake turbulence of both aircraft and the different (or same) SIDs. The earliest time that can be assigned is 25 minutes from the current time. The TOBT is calculated as  $CTOT - 20$  minutes. So we assume it takes 20 minutes to push back and taxi to the runway. In the future it is planned to make this stand and traffic level dependent. The calculated CTOT and TOBT will now be shown in the departure list and the aircraft has also been added to the T/O sequence list.

### 2.2 Give aircraft the earliest CTOT possible

For this case we assume we have a busy departure event on e.g. the RIDAP SID. An aircraft calls up and has filed IVURO and the planner wants to get him out as soon as possible. For this specific case we left click on the CTOT field of the respective aircraft and select “Assign ASAP”. The plugin now goes through the following process:

- get the current time
- put the IVURO aircraft in the queue at  $CTOT = \text{current time} + 25$
- move the CTOT back as far as needed to obtain sufficient separation to the aircraft one slot ahead in the queue
- move every other aircraft in the queue behind the IVURO one back as far as needed for separation

So we insert it and afterwards make sure separation still exists. **This procedure will change other already assigned CTOTs.**

## 2.3 Assign a manual CTOT

Sometimes for an event aircraft might have booked a specific CTOT or maybe the planner wants to make manual adjustments to the T/O flow. This can also be done in GMPHelper. Just rightclick on the CTOT field and enter the CTOT you want as HHMM in zulu time. TOBT will be 20 minutes prior to your entered time.

## 2.4 How to clear a CTOT

If an aircraft exceeds a groundspeed of 80kts or disconnects it will be automatically removed from the T/O sequence list. If you want to manually clear a CTOT left click on it in the departure list and select “Clear” thats it.