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1. Overview

The Lorby Time Machine (LTM for short) is a simple application that will speed up the simulation rate between waypoints of your flightplan. When your aircraft approaches a waypoint or if it deviates too much from your flight path, the simulation rate is reduced automatically, to give the autopilot a chance to catch up again.

This makes it possible to fly long haul routes on autopilot without having to sit through the whole experience in real time.

**Lorby Time Machine is compatible with**

FSX boxed with Acceleration  
FSX:SE  
P3D 2.5  
P3D 3.x  
P3D 4.x  
P3D 5.x
2. Installation

2.1 Distribution

Lorby Time Machine is distributed as self-extracting installer packages.

2.2 Installation

- Please use the installer intended for your sim:
  - FSX Acceleration boxed or dual install with SE: LorbyTimeMachine_Install.exe
  - FSX SE stand alone: LorbyTimeMachine_SE_Install.exe
  - Prepar3D V2.5: LorbyTimeMachine_P3D_Install.exe
  - Prepar3D V3.x: LorbyTimeMachine_P3D_V3_Install.exe
  - Prepar3D V4.x: LorbyTimeMachine_P3D_V4_Install.exe
  - Prepar3D V5.x: LorbyTimeMachine_P3D_V5_Install.exe
Running the installer:

On the first page you may select optional installation targets:

- “Start Menu Shortcuts”: Lorby Time Machine will be added to your Start Menu (advised)
- On the next page you choose the installation path for Lorby Time Machine.  
  **THIS IS NOT THE PATH TO YOUR SIMULATOR DIRECTORY, IT IS USED EXCLUSIVELY FOR Lorby Time Machine!**
- Selecting “Install” will begin the installation
2.3 **Microsoft .Net 4.8**

The app requires that the .Net ("dot Net") library version 4.8 is installed and current on your PC.

This library can be obtained here:

https://support.microsoft.com/de-de/help/4503548/microsoft-net-framework-4-8-offline-installer-for-windows

2.4 **SimConnect**

Lorby Time Machine relies on SimConnect being installed correctly on your computer. SimConnect is a part of FSX/P3D and it is set up automatically when you first install the simulator. To save you the trouble of installing the SDK, the necessary SimConnect DLL for each sim is shipped inside Lorby Time Machine and gets deployed in your Temp folder when Lorby Time Machine is run.

FSX only: In case SimConnect is not installed, and Lorby Time Machine does not start up, giving you an error message instead, you will have to install SimConnect manually:

- FSX boxed users can find the “SimConnect.msi” installation file either online or in the FSX SDK folder “..\Microsoft Flight Simulator X SDK\SDK\Core Utilities Kit\SimConnect SDK\lib”
- FSX SE users find it here: “..\Steam\steamapps\common\FSX\SDK\Core Utilities Kit\SimConnect SDK\LegacyInterfaces\FSX-SP1\SimConnect.msi”
3. Operations

3.1 Starting the application

- Start your simulator
- Start the Lorby Time Machine app
- The app will connect automatically to your sim, and it will wait until a flightplan has been loaded
- You have to load a flight plan into the simulator itself, using the “Load” button on the Flight Planner dialog. LTM can not work with any of the third party FMS applications, which are running their own flight plan logic.
- As soon as it is activated, the app will speed up the simulation rate between the waypoints of your flight plan, and slow it down in time for the autopilot to catch up.
3.2 Main Window

Connecting

- Current sim rate: 1

Parameters
- Maximum acceleration: 4
- Distances to/from waypoint
  - TO: 5 nm, FROM: 5 nm
- Bank angle: less than 5.0 degrees

Route deviation
- Monitor crosstrack distance and slow down when more than 300 meters
  accelerate when less than 50 meters from the intended route.

Pause
- Pause at 50 nm from destination

Activate acceleration
- Automatically when 8 nm from departure/destination
- Manually

Start
Stop
Close

No Flight Plan

- Current sim rate: 1

Parameters
- Maximum acceleration: 4
- Distances to/from waypoint
  - TO: 5 nm, FROM: 5 nm
- Bank angle: less than 5.0 degrees

Route deviation
- Monitor crosstrack distance and slow down when more than 300 meters
  accelerate when less than 50 meters from the intended route.

Pause
- Pause at 50 nm from destination

Activate acceleration
- Automatically when 8 nm from departure/destination
- Manually

Start
Stop
Close

Flight Plan active

- Current sim rate: 4

Parameters
- Maximum acceleration: 4
- Distances to/from waypoint
  - TO: 5 nm, FROM: 5 nm
- Bank angle: less than 5.0 degrees

Route deviation
- Monitor crosstrack distance and slow down when more than 300 meters
  accelerate when less than 50 meters from the intended route.

Pause
- Pause at 90 nm from destination

Activate acceleration
- Automatically when 8 nm from departure/destination
- Manually

Start
Stop
Close
Elements of the Main Window explained:

– **Status LED (Yellow or Green):** this shows you if the app has connected to the sim and if a flightplan has been loaded. As soon as the LED is green, Lorby Time Machine is active.

– **Parameters:** Here you can set the parameters to control the acceleration between waypoints:
  “**Maximum acceleration**” is the maximum simulation rate that LTM will target. Any value above 4 will remove the AI, and when the rate drops back down below 8, the simulator will reload the situation.

You can choose between two modes of activation:

“**Distances to/from waypoint**”: “TO” is the threshold where the app starts slowing down the simulation rate when flying towards a waypoint, “FROM” is the distance when flying away from the waypoint where LTM will speed up again.

“**Bank angle**”: in this mode the acceleration will start when the current bank angle is less than the indicated value; and it will slow down, when the preset bank angle is exceeded.

– **Route deviation:** If desired, you can make LTM monitor the lateral deviation from your route and let it slow down / speed up accordingly.

– **Auto Pause:** If selected, LTM will pause the simulator at the indicated distance from the destination.
- **Activate acceleration:**
  - Automatically means, that you don't have to do anything. The LTM is active when you are the assigned number of miles from the departure airport and it switches off if you are closer than that distance to your destination.
  - In “Manual” mode you can switch the acceleration logic on and off either with the buttons on the dialog, or without leaving the simulator with a menu under “Add-ons” or with the keyboard combinations “Shift-F9” and “Shift-F10”
4. Disclaimer

Lorby Time Machine is provided free of charge, for private use only. All property rights remain with the author. You may not distribute this package or parts of it. Disassembling, refactoring or changes of any kind are prohibited.

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- the software or the software content will be free of bugs, errors, viruses or other defects;
- any results, output, or data provided through or generated by the software will be accurate, up-to-date, complete or reliable;
- the software will be compatible with third party software;
- any errors in the software will be corrected or that any further development will take place;
- the software will not cause errors or damage to the computer system it is installed on.

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