



Web Browser requirement

Supported browsers are:

- **Google Chrome**
- **Mozilla Firefox**
- **Opera**
- **Microsoft Edge**

Update your browser to the latest stable version to work better with LaXpro. In other versions or browsers, the system may function incorrectly.

Computer Capability

Computer capability affects browser operation. The key points of high performance are **CPU** (central processor) and **RAM** capacity. Multi-core processors do not affect browser operation in most cases. The exception is Google Chrome that can use more than one core in its operation.

Considering the information mentioned above, the **minimum requirements** are:

- CPU at 1,6 GHz clock rate;
- 512 MB of RAM.

and **recommended requirements**:

- CPU at 2,4 GHz clock rate
(a processor with two and more cores is recommended if Google Chrome is used);
- 2 GB of RAM.

Monitor size and screen resolution should also be considered. The bigger the monitor is, the more data is queried from the server and processed by CPU. For this reason, the program may work perfectly on a 17-inch screen but start running slow on the 22-inch one. The solution for big monitors is not to use a browser in a full-screen mode. This issue is especially actual at low speed of Internet connection.

Antivirus software as well as gathering actual data from units can slow down computer performance. If LaXpro is running slower, you can add it to the list of exceptions or simply disable antivirus monitoring during LaXpro session. You can also create a rule which allows LaXpro to have any network activity.

Internet Connection

A 1 Mbit Internet connection channel is enough for the normal operation of LaXpro on one computer. If more than one operator will work simultaneously, do the speed test, and choose the most appropriate speed.



ⓘ Furthermore, when working with LaXpro, your IP address should not be changed within a session.

Optimization Measures

Here are some tips, which will help you to improve LaXpro performance in cases when more than a hundred units are connected.

1. Web Browser

Web browser plays a very important role. Use only the browsers specified in the list of supported browsers. **Google Chrome** is the most efficient one. It is followed by Mozilla Firefox and Opera. The slowest, according to our tests, is Internet Explorer.

The performance of the monitoring system strongly depends on the event system of the browser in which LaXpro is started. Each browser has its individual event model. As the tracking system is rather dynamic and tracks change with up to a 2-second delay, some browsers (for instance, Internet Explorer) cannot process such a large quantity of events. The solution here is to use a more powerful computer.

2. Graphics & Tooltips

The display of graphic elements on the map and in the lists is resource consuming. If you notice that your browser is getting slower, try to disable the display of the following elements: units, geofences, places, tracks, as well as names, direction arrows, and 'tails' for units (these elements can be disabled with the help of the three corresponding buttons in the visible layers menu). Limit the number of units displayed in the Monitoring tab. Limit the number of other objects displayed on other tabs that are frequently used (apply the filter to do that). Enable only those elements that are required for your work now.

The optimal settings for unit display can be adjusted in the **Unit visualization on map** section of General Settings tab. In addition, if the speed of the Internet connection allows it and there are no restrictions on traffic, geofences can be drawn not in the browser, but on the server. This option is enabled in the user settings on the **General settings** tab in the other items on map section.

A tooltip and additional information about the unit should also be taken care of. In the **Show additional information about the unit** section of the User settings dialog, it is recommended to turn off the parameters that are not used (if necessary, switch off **all** the parameters). If there are a lot of geofences or geofences composed of multiple points and the **Presence in geofences** option is enabled, your browser can become overloaded. In such a case, make sure this option is disabled.

If the Internet connection is slow or you need to save the traffic, disable geofence rendering on the server. Besides, when you use reports with a map, messages, and tracks clear your request when it is no longer useful.

Pay attention that for the charts to be displayed, the browser you use has to support the WebGL component. If the browser or the operating system cannot support it, enable



the **Render charts on server** option in the User settings dialog (limited functionality will be available).

3. Queries to Server

When LaXpro starts, not all the data is loaded at once. It is made to speed up the loading and operation. That is why some actions that are performed for the first time may take more time than in the future. Resource-consuming reports (such as reports on groups or reports with grouping and detalization) should be avoided. Enclosed rows of detalization stay hidden until you expand them, and if there are a hundred or more enclosed rows, the browser may freeze.

If you have any technical questions, please contact support@laxsongps.com or call at 1-866-657-1358.

