

## Access

### Mandatory

**lic.gurtam.com 31176** – license components check  
**local-api.wialon.com 443** – scripts' and modules' updates

### Optionally

**lic.gurtam.com 18711** – Wialon LBS service  
**lic.gurtam.com 18712** – Wialon mobile push notifications service  
**lic.gurtam.com 18611-18614** – Gurtam Maps service  
**https://distro.gurtam.com/maps/** – the old AVD maps storage  
**https://api.telegram.org** – Telegram notifications service

### Apps

**mqt.flespi.io 8883 (SSL) or 1883 (not SSL)** – MQTT broker  
**app-local.wialon.com port 443** – to access NimBus, Fleetrun, Hecterra, Logistics, and other Wialon-based apps

### Hardware

Iptables Wialon hardware ports range:  
-A INPUT -p udp -m state --state NEW -m udp --dport 20100:30000 -j ACCEPT

-A INPUT -p tcp -m state --state NEW -m tcp --dport 20100:30000 -j ACCEPT

### Video server

**1935** or **19350** depending on the device type  
**8083** – to get files from the video server

### Other

BASE URL for Logistics, Nimbus, Fleetrun, Hecterra should be an external DNS record.

For the Wialon Local mobile app, the connection URL should be external without the port. Access through IP:port is not applicable.

The Let's Encrypt certificates generation and updating are performed through the HTTP request, port 80. The attempt to auto update the certificate takes place a month before its expiration date. If failed, the next attempt takes place again in a week each week.

## Storage space control

Wialon Local is installed to **/home/wialon/wlocal** by default.

Wialon controls the free space in **/home** only, if there's less than 5Gb left in **/home/**, the Wialon service stops automatically to prevent the database from being damaged.

The database files defragment automatically if the degree of fragmentation exceeds 20%. For the files to defragment successfully, there should be 2,5 times more space than the database file size. The current level (or percentage) of the database files fragmentation can be viewed in the **wlocal/storage/ms/msgs\_stats**.

Logrotate rotates and stores logs for the last 10 days by default. Check the logs rotation failures from time to time.

In **wlocal/storage**, **wlocal/storage/md** and **wlocal/storage/pd**, there can be cache files for sending data to the backup server that look like **sync.cache.<backup\_id>**. The cache files' size of more than 1Gb indicates the network's slow speed, the backup server being unavailable, or that the hot backup was stopped.

In **/home/wialon/wlocal/**, the file with the **\*.msgs** extension may be created. This is the cache of the received messages for the database. The cache size of more than 1Gb causes the slow writing speed, the slow disk work, and might indicate the database/disk damage.

For the system to function normally and for the authorization in the administration panel, there should always be free space in **/root/** and **/var/**.

## Folders and logs

All the Wialon Local logs are located in **/home/wialon/wlocal/logs/** by default, they are stored and rotated for the last 10 days (logrotate).

The SMS sending via the SMPP gateway or GSM modem is logged in **trace.log** of the Wialon service. The communications with the gateway or GSM device and the SMS sending are logged in **smpp\_device\_\***, **gsm\_device\_\***.

The email sending via the MAIL server is logged in **trace.log**. You should analyze the processing and sending of the email by the MAIL server logs (postfix/mailx by default, or directly SMTP logs).

The timeout for the command sending to the SMTP server in Wialon is 10 sec. The timeout for getting a response (code 250) from the SMTP server in Wialon is 5 sec. There are 5 attempts to get an email to be sent by Wialon -> smtp. After the fifth unsuccessful attempt, the task for the email sending is removed from the queue. The email sending errors are recorded in **trace.log**.

The issues with Let's Encrypt certificates generation and updating are logged in **lcm/lcm.log**. Sometimes instead of the certificate renewal, it's better to delete old SSL certificates (click the Default button) and generate new ones.

All the entries from the service logs with the word 'error' get to **error.log**. It can be the tracker's response to the command or sometimes there's the word 'error' in the name of the text of the report or received notification.

Text files with the statistics for the charts of the administration panel resources are stored in **/home/wialon/wlocal/tmp/charts/**. These files are not rotated or deleted. If needed, the old files can be deleted manually after stopping Wialon Local.

When Wialon Local fails, the system attempts to make the automatic dump of the Wialon process. The dump files are stored in the **debug/** folder.

## Hot backup

An automatic control of the free space on the disk is not available, so it's crucial to monitor the disk overflow with in-built tools.

Primary synchronization of the database ends with the **Sync finished** entry in **trace.log**.

When the connection is lost or there are internet-work issues, the **pipe\_not\_connected** entry appears in **trace.log**.

## The list of don'ts when working with and supporting the Wialon server products

As per the license contract, the interference of the Wialon Local distribution package (changing of any files in any directories) by the client is not allowed. The Wialon configuration changes – website design, SSL certificates, Wialon service limitations, etc. – are performed through the administration website.

2 and more Wialon services are prohibited to be launched simultaneously on one license.

The server shutdown and the OS restart are prohibited when the Wialon service is working.

The directories and files in the working directory **wlocal/** are forbidden to move or delete.