



winlonlocal[®] 2004

The list of new features and optimizations



CMS Manager

Accounts, resources, billing plans, users, units, retranslators, and ACL management system.

- **Extra CMS**

The option to get several CMS Manager sites for you, your dealers, and clients; with different addresses, settings, and accessibility. Get an additional site that after installing the update will be displayed as a Wialon Web site and then change its type to the CMS Manager type.

- **New retranslators support**

With the current update, Wialon Local has a handy mechanism to integrate new retranslators' protocols quickly upon the users' request.

- **Access to the change log report**

In CMS, we added the button to request the items change log report. For example, on the unit group tab, you will be able to view the changes in this group (access rights changes, adding new units, etc.) for the last week. It will help to see all changes without launching the system itself.

- **Notification on the data storage time reduction**

It is a notification saying that the reduction of the data storage time will impact all the sub accounts. You can also find the list of these sub accounts there. It will help avoid the situations when the historical data is lost beyond retrieval.

- **CMS login page redesign**

We changed the design of the CMS login page, its logo, and favicon. With it, you will easily find the page among many other open tabs.



Monitoring system

Units list management and quick access to major monitoring options.

• Dashboard

There is an option to view the fleet key characteristics in the form of charts. Thus, the data becomes more visually compelling and easy-to-grasp. Available blocks are:

- Connection state;
- Motion state;
- Geofences with units;
- Latest notifications;
- Mileage (for the last 7 days for the first 5 units on the list);
- Fuel consumed by FLS (for the last 7 days);
- Speedings (for the last 7 days according to the “Use limits from roads” method of speeding detection).

• Minimap for the unit on the Dashboard

Working with units became more effective. Now, clicking on the unit, you will see the minimap for further operations with this unit and getting detailed information on it.

• New search filters on the units list

The option to search for the unit by its name, IMEI/unique ID, unit group name, type of device, and characteristics. Now you don't have to scroll the whole units list to find the needed unit: just type the first several symbols in the search field.

• Commands management

The status for virtual commands (“In a queue” or “Delivered”) for the devices operating over the Wialon IPS protocol will be shown in the user's activity log in the lower-right corner of the screen. While in the unit properties on the Commands tab, we added the Queue column. It displays the number of commands in a queue for a particular device.

• DNS and equipment IP displaying in unit properties

We added the server DNS and equipment IP, now displayed in unit properties. DNS is a more flexible tool. For example, you can connect several IPs to a single DNS and later change this data if necessary. This function helps provide the stable operation of the equipment.

• The map search field relocation

Now, the map search field is located on the map itself.



Reports

Reports are used to analyze and display data in the form of charts, tables, and statistics.

- **Heat map layer in reports**

Parkings, speedings, and trips clusters of the entire fleet or just one unit can be identified visually when building a report.

- **Custom fields added to reports**

Now, there's an option to display the custom field values in the separate columns of various report tables. It is available for custom fields of units, unit groups, drivers, and trailers.

For example, now one can view not only the unit name but also the VIN and the registration plate of the vehicle, or the device IMEI, or other data stored in the custom fields by the client. This update helps to get more detailed info about the units in a single table and more conveniently. Besides, the feature is required for the correct integration with some third-party platforms.

- **New type of report – Geofence**

The new table shows which units and how many of them visited the given geofence within the stated period of time.

Example: a client needed a tool to conveniently track the collection of garbage containers. It would be a real challenge to generate the report on each garbage truck and then merge all of them into one report. Now a single report provides the information on how regularly garbage is removed from the geofence and which units are engaged.

- **Mileage column in the Passengers report**

It shows how many kilometers/miles the passenger traveled, which is useful when you charge passengers based on the mileage.

- **The Unit column in reports on drivers**

The Unit column is available in Eco Driving and Infringements tables. Besides, there is now the Count column in the Infringements table. These enhancements will allow getting more detailed info on the quality of the driving style.

- **Custom sensor values in reports**

In Digital Sensors, Summary, Trips, Engine Hours, Fuel Thefts, Fuel Fillings, Geofences, Eco Driving tables in reports, we added the columns with maximum, minimum, average, initial, and final values of the custom sensor.

It makes the data management even more flexible, allowing, for example, to compare speed data from CAN and GPS.

- **Tooltip in reports**

The tooltip appears above the exclamation mark next to the disabled button and informs what went wrong and what you have to do to finish generating the report successfully.

- **The new format of the exported report filename**

Earlier, when exporting a report by a resource object (driver, trailer, geofence, etc.), there was no object name anywhere.

Now, the exported report filename will contain not only the resource name but also the object name. Thus, when exporting several reports, their files now have different names. It allows choosing the needed file without opening it.

- **Displaying the unit properties in reports**

We added the ability to display the unit properties from the corresponding tab, as well as the Unique ID value from the Basic tab, in reports. Use the calculator to add the unit properties to the report tables.

- **The ability to change the report filtering order**

Now a user can drag or add the needed report filters in the required order. This order will be applied for filtering the data in the report table.

Example: previously, when it was needed to show engine hours outside the geofence lasting more than 10 minutes in the report, the filters left only those rows in which engine hours exceeded 10 minutes, with the intervals outside the geofence extracted from them afterward. With such filter implementation, the report could include the data that actually did not meet the specified conditions. Now it is possible to filter the intervals outside the geofence at first, and then – those which lasted more than 10 minutes. In that manner, the report data is going to be correct.

With the ability to change the filtering order of the report, the user can get accurate data. This feature will be particularly valuable for those who use several filters in reports.



Notifications and jobs

Notifications are used to keep users informed and can launch some system processes upon triggering. **Jobs** launch certain processes according to schedule: commands execution, report sending, access rights changes, sensor value saving, etc.

• Driver/trailer control notification

Now, in the driver/trailer control notification, you can add comma separated multiple code masks or codes. It will allow controlling as many drivers/trailers as you need, unlike one driver or trailer as it was before.

• Using tags in commands

Previously, the text in all the commands was static, but now you can put tags in it to use various parameters. If you do so (just like in the notification text), the corresponding tag value will be set instead of the tag itself during the command execution. For example, when sending the "Custom message" command, you can set up the sensor's value with the help of the %SENSOR_VALUE% tag.

• Improvement of the Speed notification type

We added the "Unit moves without a driver" option to track the movement of the unit without an assigned driver. It appears on the Speed tab when creating a notification.

Now it is possible to define the vehicles with drivers who, for example, had not used iButton before the trip started. It can be effective for tracking stolen cars.

So that, if the set limit is exceeded and the "Trigger if there is no assigned driver" option is enabled, and the driver wasn't assigned manually or automatically, the system will generate a corresponding notification.

• Notifications and jobs import

From now on, jobs and notifications import will be successfully executed, even if the system doesn't have access to the unit mentioned in the notification or the job. Before the update, an error was shown, and the import didn't occur.

• "Digital input" notification by io_n parameter

In the "Digital input" notification, we added the option of processing the io_n parameter providing the inN one is not found.

• Notification on approaching the units limit

We added the option of sending the notification to the email when the number of connected units is getting close to its limit, meaning that the number of spare slots is reducing.



Messages

The module is used for working with messages of any type: tracker messages, SMS, commands, registered events, unit log.

- **New types of messages in the monitoring log**

In the monitoring log at the bottom of the map, different types of messages are displayed simultaneously. Now, you can sort them and view according to their category: messages, user actions, command execution.



Video monitoring

Wialon offers video monitoring by events, web-cameras binding to geofences, and MDVR video streaming. Video is displayed in mini-windows that open upon clicking on the icon in the monitoring panel or on the mini-map.

- **Integration with CMSv6, the video monitoring platform**

The platform is popular all over the world and is integrated with the majority of the Chinese MDVRs. Now you can use almost any of them even if it's not integrated with Wialon directly – the versatile API would be enough for that.

[Read the article](#) to find out more about all available video monitoring functions.



Map

20+ map layers to show the system items, their movements, and event markers.

- **Support of Amap and Namaa maps**

The option to use the Chinese maps Amap and the Iranian maps Namaa. Activate them in the Administration system on the Maps tab.



Optimizations

• Track player redesign

The player got a new stylish interface. On top of that, it works faster now and displays data more vividly.

• Resource content export

We added the ability to export the resource content (geofences, jobs, notifications, drivers, trailers, passengers, report templates) in the .csv format.

This option eliminates the need to manually copy the necessary information and helps save time and effort.

Application example: Export the list of drivers with their names and phone numbers to quickly contact them without accessing the system.

• Database compression

We added the option of compressing historical messages (older than 14 days) with the help of the lz4 algorithm and putting them into a separate folder. It allows increasing the available disc space. The speed of historical data reading remains equally high. This enhancement helps store the more recent and requested messages on the SSD discs and historical messages – on slower HDD discs.

• Improved fuel consumption calculations

The order of filtration and smoothing for fuel consumption was changed.

For example, previously, when using the “Detect fuel fillings only while stopped” option, the messages that were not related to the stop were being filtered first. Then it was time for smoothing. As over 100 messages from both ends from the message being smoothed can take part in the process, we could get unreliable values at the beginning and at the end of the stop’s interval.

Now, to get the precise graph of fuel consumption, the smoothing algorithm is applied first, and only after it the stop’s intervals are filtered.

• Future shift registration warning

Now, when trying to register the future driver/trailer shift, you will get a warning from the system saying you can’t do it.

• Import optimization

We enhanced the import mechanism making the import of large data volumes faster. When the import error happens, you will see its detailed description.

- **Quick geofences editing**

The geofence editing is available via ctrl+click inside the geofence you want to edit.

- **New chart rendering**

You can set up the maximum interval between messages on the Advanced tab in Unit properties. For intervals with lost connection, the graph line changes from solid to dashed.

- **Daily driving time**

If the option of driver activity monitoring is turned on in the unit properties, the tooltip with the driving info will show the driving starting time.

- **Support of the hardware working through flespi**

Now, in Wialon Local 2004, you can use the hardware that works through [flespi](#) including sending the commands.

- **Optimization of the loading speed and memory consumption**

Now Wialon Local uses less server memory due to the duplicated metadata removal. Additionally, we improved the web-part of the system, and now the pages load faster.

- **The mechanism for mass background export and import of unit messages**

This internal mechanism is needed to create backups or to move to another server.

- **Automatic backups**

We added a mechanism for automated creation of backups of the administration system settings and the part of the database of the Wialon element properties (units, resources, etc.).

- **The new design of the preloader image**

We redesigned the preloader image.



Administration system

Tools for the system administrator.

License tab

• Showing the Wialon Local license expiration date

12 hours prior to the expiration date, you will get a yellow notification. If Local hasn't updated the license before the specified date (couldn't connect to the license server), the notification will be red. You will also see the corresponding error in the logs.

System tab

• Limitations and settings section on the System tab

We divided the block Limitations and settings into two separate parts. In the Limitations section you can specify:

- maximum number notification executions for unit per minute;
- maximum number of simultaneous SDK requests;
- maximum number of event requests per minute;
- maximum number of messages requested per minute.

• Mail settings

We implemented the option of working with modern SMTP servers under a secure encrypted protocol. The mail server for the entire Local is set up in the Mail system section on the System tab.

Besides, in the billing plan settings in CMS Manager, you can specify the email address to send emails from, as well as any third-party SMTP server. It will let you set up emails tailored to each client.

In the Settings section, you can specify the DNS to direct devices there (alongside IP) as well as set up receiving Telegram notifications from Wialon.

• Restoring resources and unit properties

The option to roll back the unit or resources properties by choosing the date in the calendar.

• Redesign of the visual and internal logic of the update section

We removed the 'Update all' button clicking on which you could download all the modules from scratch (in case of the system malfunctions) and replaced it with the confirmation icon. Now, there will be fewer accidental repeated downloads of modules.

- **The option to manually recalculate** events for the selected units for the specified time interval in the Events module section.

- **Management letters language**

Now, you can select the language for the management emails (English, Russian, Spanish). Previously, these emails were in English only.

Wialon tab

- **Sites settings**

- By specifying the coordinates in the 'Map initial position' field, you can center the map on a certain position after launching the system.

- updating of the language list and optimization of its management: now you can, for example, change the language order or rename them.

- **Sites certificates**

- Added the ability to use automatically generated and renewable [Let's Encrypt](#) SSL certificates. Feel free to select the corresponding certificate type on the Advanced settings tab.

- Showing the status of the uploaded SSL certificates. The certificates are displayed in the form of multicolored locks with tooltips (validity, duration, DNS, certificate chain completeness, etc.)

- Added the option to fix the certificate with an incomplete chain on the Advanced settings tab.

- **Connections**

Here you can get the info on all the trackers that are connected to the server at the moment. If necessary, you can disconnect them.

- **Sessions**

The option to view the info on the running sites: their names, DNS, authorized users, and the duration of their sessions. Here you can also finish the sessions.

- **Device types**

The option to view the information on all available devices: their status, ports, commands, timeouts. Here you can stop or start all or some of them and change their names.

- **Logos in reports**

The option to set different logos in reports for different billing plans.



Flagship apps

Hecterra

The application for the agro-industry, which allows controlling field works based on telematics data. Deliver transparent data about fields, crops, and field operations to the employees and managers of agricultural enterprises. It will help them to effectively plan and improve agribusiness processes.

If you need more information about [Hecterra](#), which the Wialon Hosting users have successfully been using for almost a year, please explore [the product presentation](#), study [the documentation](#), and watch [the webinar](#).

Logistics

The solution designed to manage and control the operating processes of courier and delivery services.

- **The notification on the order rejection**

It will help to quickly contact the driver or client to let them know that the order was canceled or to reschedule the delivery.

- **The new search filters for the units list**



Update purchase

You can skip update purchases as before. If you still have the 1704 version, for example, you can get the most recent one without the need to purchase 1804 and 1904. If you pay for the platform monthly, the updates are included into your subscription.



All this functionality will be available if you update to Wialon Local 2004. Feel free to contact your personal manager or to drop an email to sales@gurtam.com to get the details.

