



Version 0.14.5

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1) First connection.

1.1) Supply and completion.

Light Stream Player comes in a special box for the safety of the device during transport.

Included in the package are:

- Patch cord cable.
- Connectors.
- Optional: external antenna for 4G LTE signal reception (LTI).

Patch cord

RJ-45 plug

Connectors

4G LTE

4G LTE module and antenna (optional)



1.2) Location of physical interfaces.

Connection port

8 to 48 V DC power supply

Standard SIM 25*10*0,76

push in until it clicks into place

2 Ethernet RJ45 ports

for accessing the player's web interface.

Port 1: 10/100M/1000M,

Port 2: 10/100M (up to 100Mbit)

OLED Display 1,54"

Control buttons settings

4 DMX ports

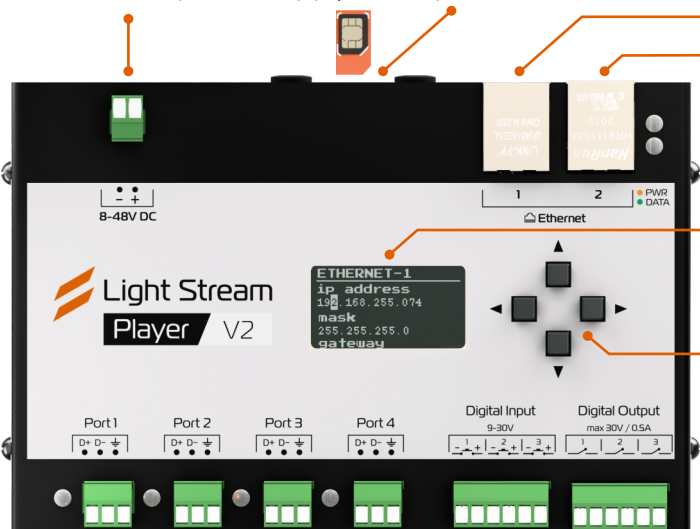
for connecting lights devices.

USB port

Interfaces for automation

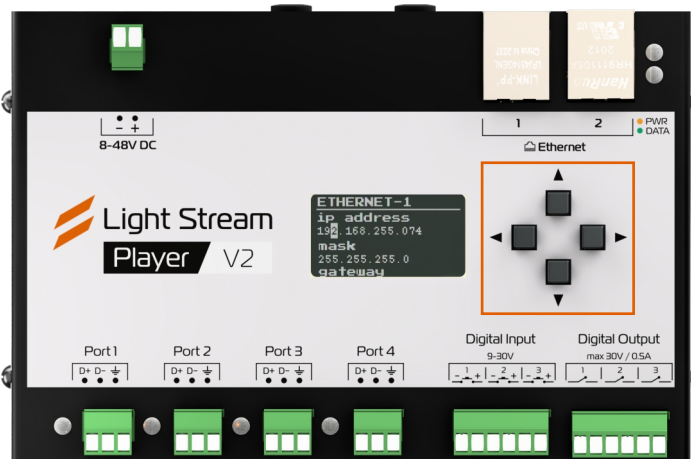
3 x DO isolated up to 30V / 0.5A

3 x DI isolated 9-30V



1.3) Menu navigation.

The menu is operated using the navigation buttons on the right side of the screen.

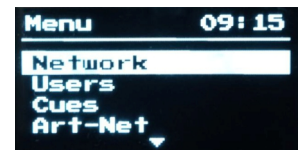


- ▲ Moving upwards through the menu
- ▼ Moving down through the menu
- ▶ Opens the selected menu item
- ◀ Return to previous menu level



When the device is switched on, the display automatically shows the current time and date.

Press the button  and you are taken to the first level of the device menu.

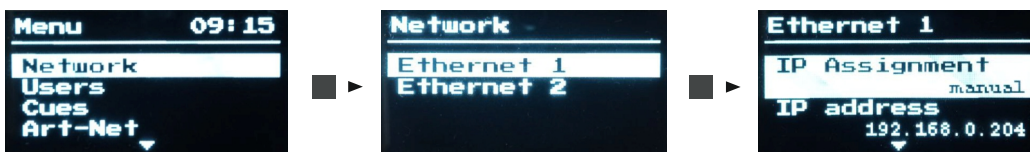


The system will automatically return to the main screen with the splash screen if no button is pressed for 30 seconds.

Network settings.

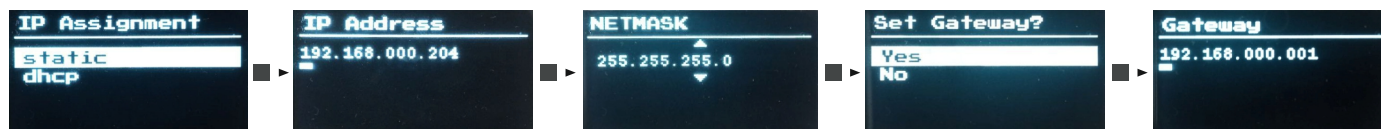
In the Network section, you can view the current parameters:

IP address, mask, gateway and MAC address on Ethernet ports 1 and 2.



To change network settings from any item on the Ethernet 1 or 2 screen, press .

Static IP configuration.



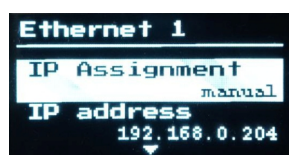
On the **IP Address** screen, place the cursor on the desired value and change the value using the **▲** and **▼**.

To move to the next **NETMASK** screen, place the cursor on the rightmost digit and again press the button **▶**.

On the **NETMASK** screen you can change the netmask using the buttons **▲** and **▼**.

Next, press the button **▶** to go to the **Set Gateway** screen.

If you need to set the IP gateway, select **Yes** and specify its IP address.



You will then return to the Ethernet 1 or 2 screen.

It will take another 2-3 seconds to update the network settings.

Retrieve network settings via DHCP.



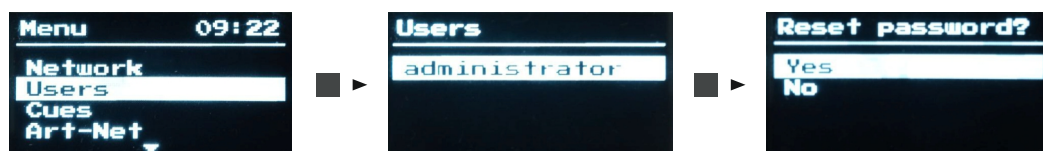
On the **IP Assignment** screen, select **dhcp** and press **▶**.

It will take another 2-3 seconds to update the network settings.

Alternative ways to change network settings see the **User Manual Player V1**

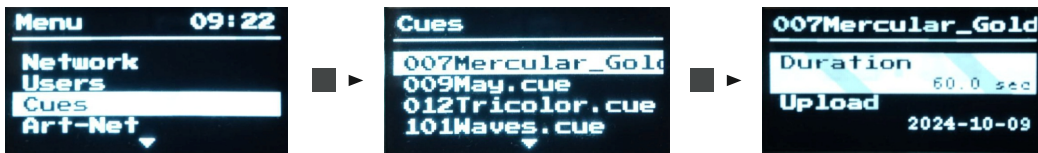
Users.

In this section, you can reset the user password.



Cues.

This section displays information about animations uploaded to the player:
title, duration and date of download.



Art - Net.

This section displays information about the converters configured in the «ArtNet devices» section of the player's WEB interface.



When a device is selected, a signal will be sent to the device. A signal will be sent to the device and all LEDs on the housing will blink several times.

Date and Time.

In this section, you can view the date and time settings.

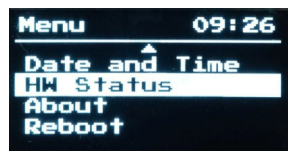


DI/DO.

In this section you can view and activate the DI/DO ports.



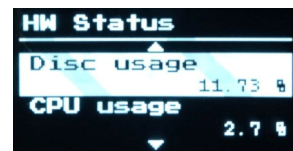
Current status of the device.



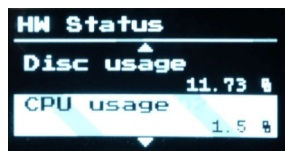
Time since last switch on switch-on



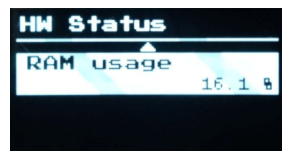
Processor temperature



Amount of information on disc



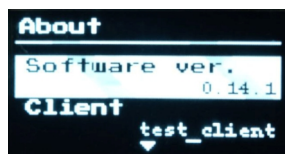
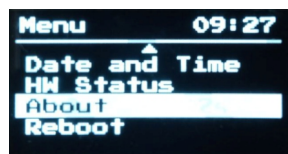
Using the processor



The amount of RAM used

About the device.

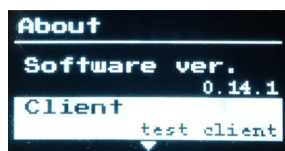
This section contains information about the licence and firmware of the device.



Version information firmware



Maximum number of universes under the terms of the licence



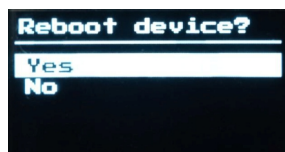
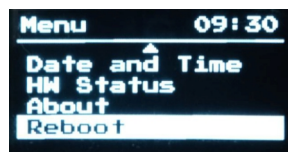
Licence holder




Licence expiry date

Reboot.

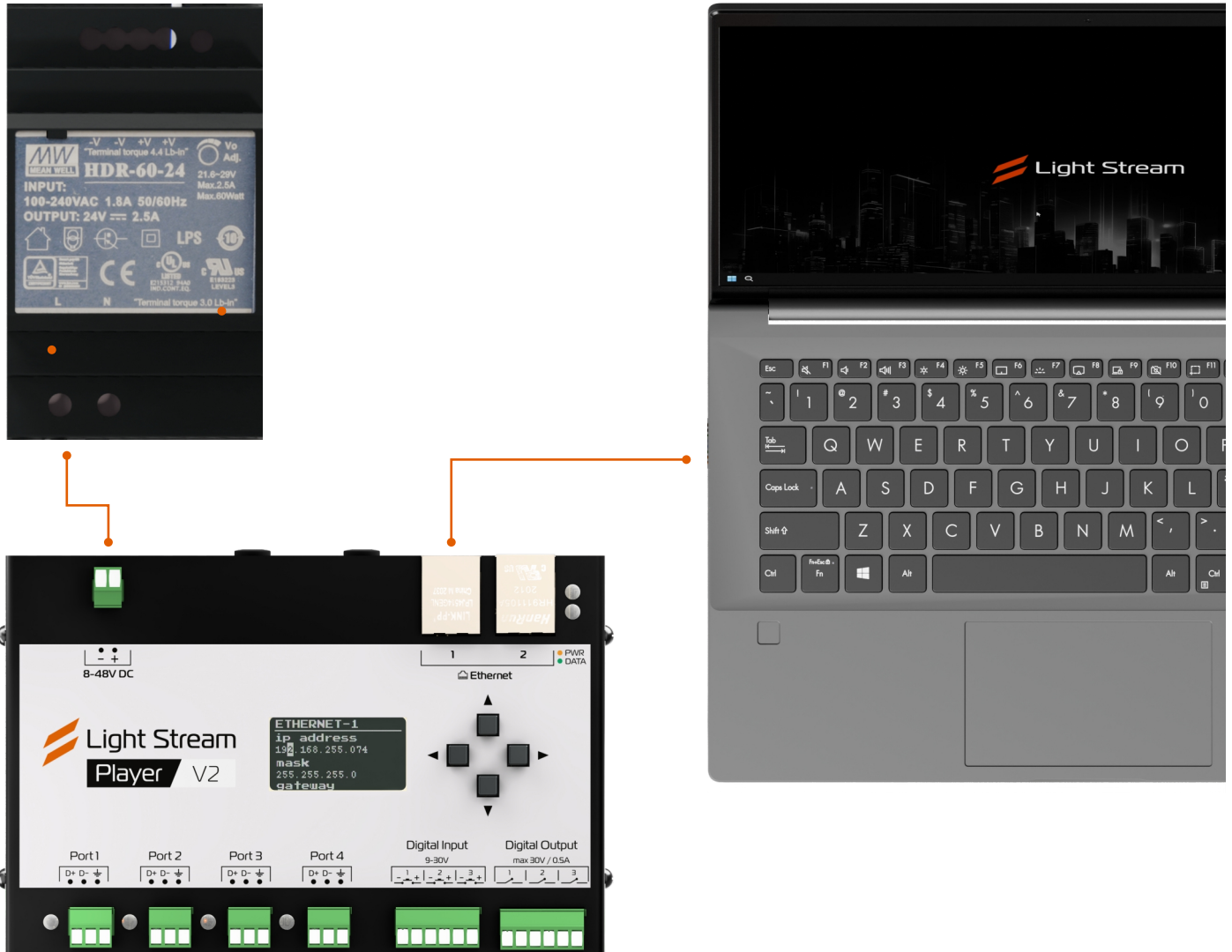
In this section, you can reboot the device.



To reboot, select Yes in this list and press the button .

1.4) First connection without internet.

1. Connect the Light Stream Player to a 12-36V power supply unit
2. Patch-cord cable, which is included in the kit, connect to the Light Stream Player in the Ethernet socket, and connect the other end of the cable directly into the network card of your personal computer or laptop.

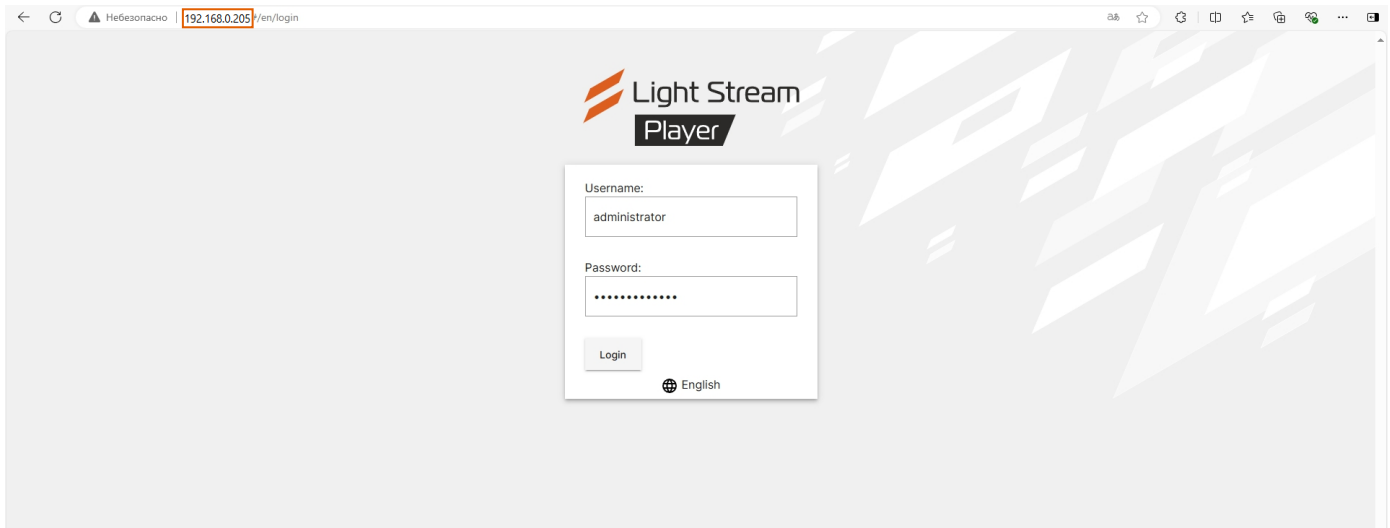


There are two ways to connect: With and without internet access, directly to a PC.

1.5) Access to the web interface.

Now we go to your web browser.

In the address bar of the browser enter the IP address of Light Stream Player **192.168.0.205**. In the opened page of the Player web-interface enter Username and Password, by default **administrator** and **administrator** in English layout and with a small letter.

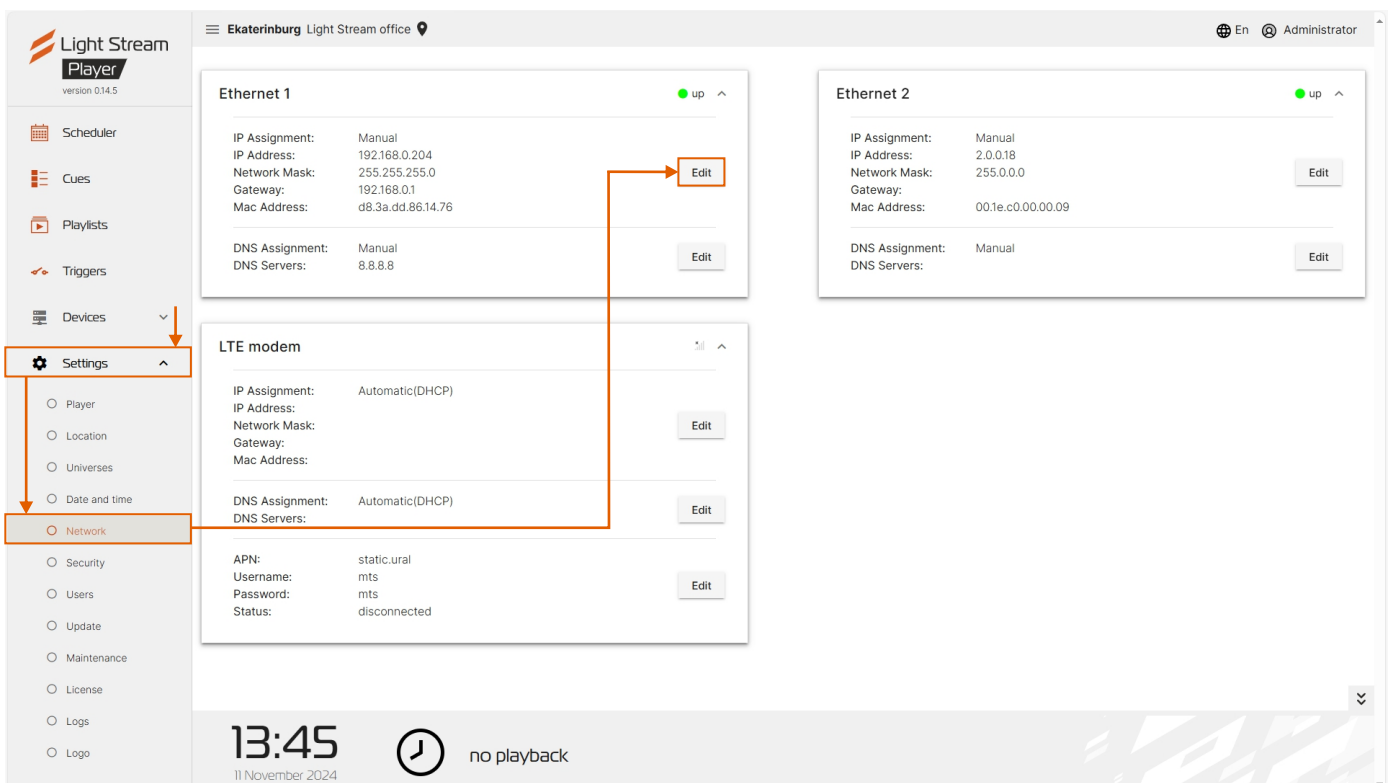


You can now change the IP address of LightStream Player to your network address.

You can set it in «Manual» mode or select «Auto (DHCP)».

Let's break down the «Manual» setting.

Under «Settings / Network», click Modify next to the Ethernet section and type in IP address of your subnet.



For example, **if your computer was in another subnet and used IP address 192.168.5.14**, then you should change the IP address of LightStream Player to **192.168.5.** and enter the last digit different from the IP addresses of your PC, router and other devices in your subnet. Don't forget to specify the Netmask **255.255.255.255.0** and the Gateway of your subnet, which is the address of your router (you can see it on the saved data we copied in the beginning).

Edit network IP settings

IP Assignment:
Manual ▼

IP Address:
192.168.0.204

Network Mask:
255.255.255.0

Gateway:
192.168.0.1

*indicates required field

The gateway address is needed to access the internet when we connect LightStream Player to the router.

Next, specify DNS server, you can use public **DNS 8.8.8.8.8**. Click the **Save** button and save the data.

Edit DNS settings

DNS Assignment:
Manual ▼

Primary DNS server:
8.8.8.8

Secondary DNS server:

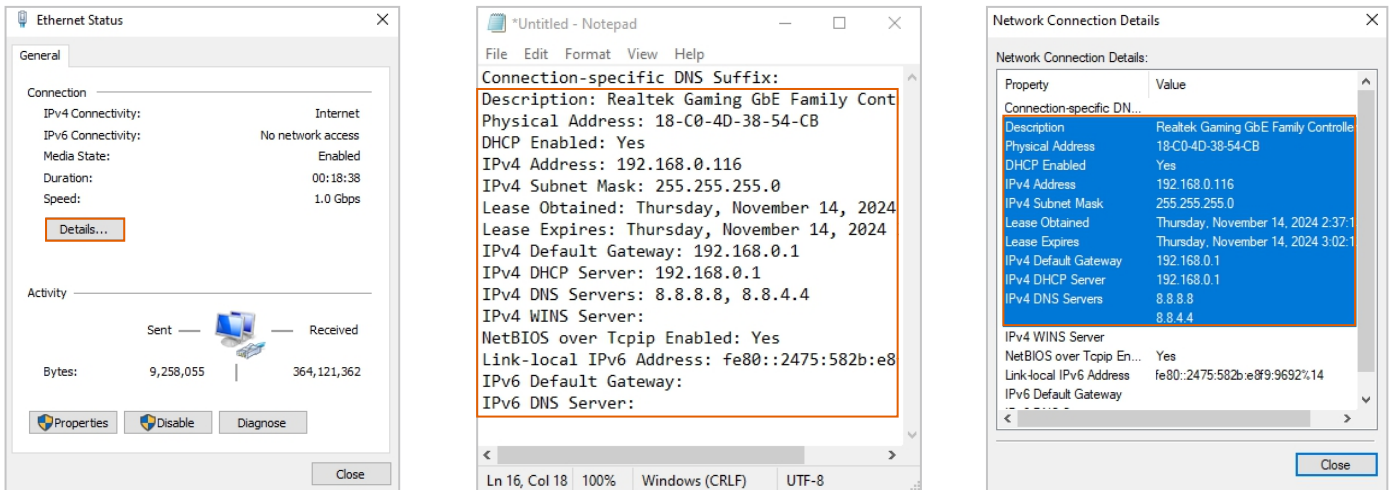
*indicates required field

1.6) Return your network to its original settings.

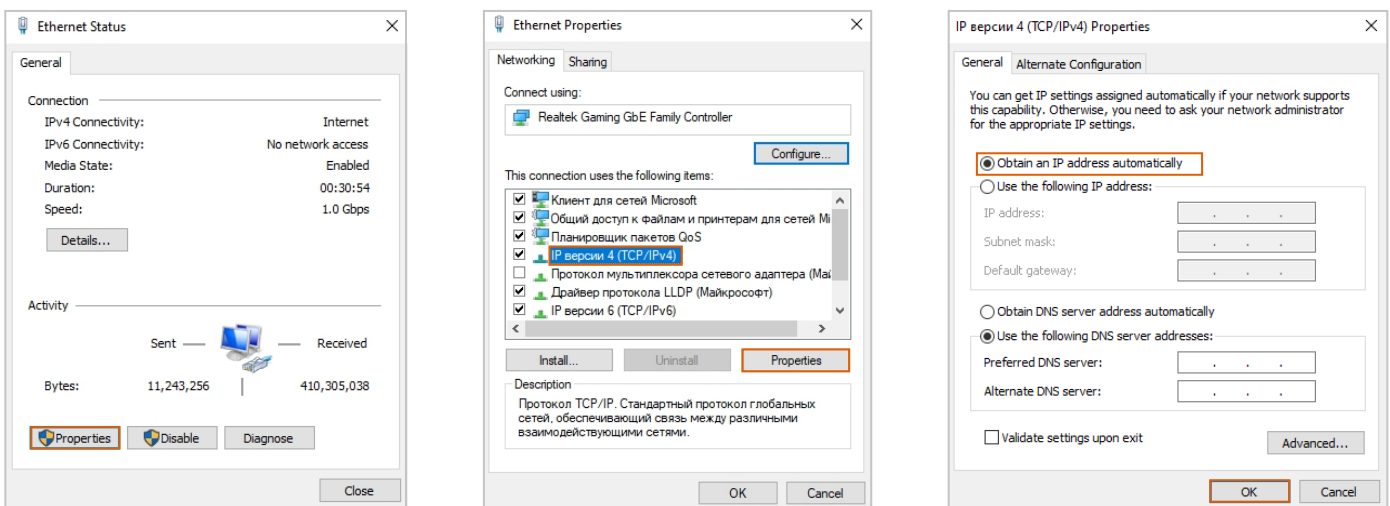
We have configured LightStream Player to be on the same subnet as your devices. You can reset your network card settings to the original settings.

We copied them at the very beginning of the setup.

Just go into the **«Network Connection»** folder, open your network card settings and overwrite the values from the saved data of the original setting. You can simply **copy/paste** the fields from a text editor.



If your network card has been configured to obtain an IP address automatically, select **«Obtain an IP address automatically»** and click **«OK»**.



1.7) Completing the setting

Now, to access the web-interface of your Light Stream Player, you need to enter the IP address that we have entered in its settings. In this example, it is **192.168.5.21**.

Let's now connect an internet connection to our chain to fully configure Player and synchronise with WorldTime.

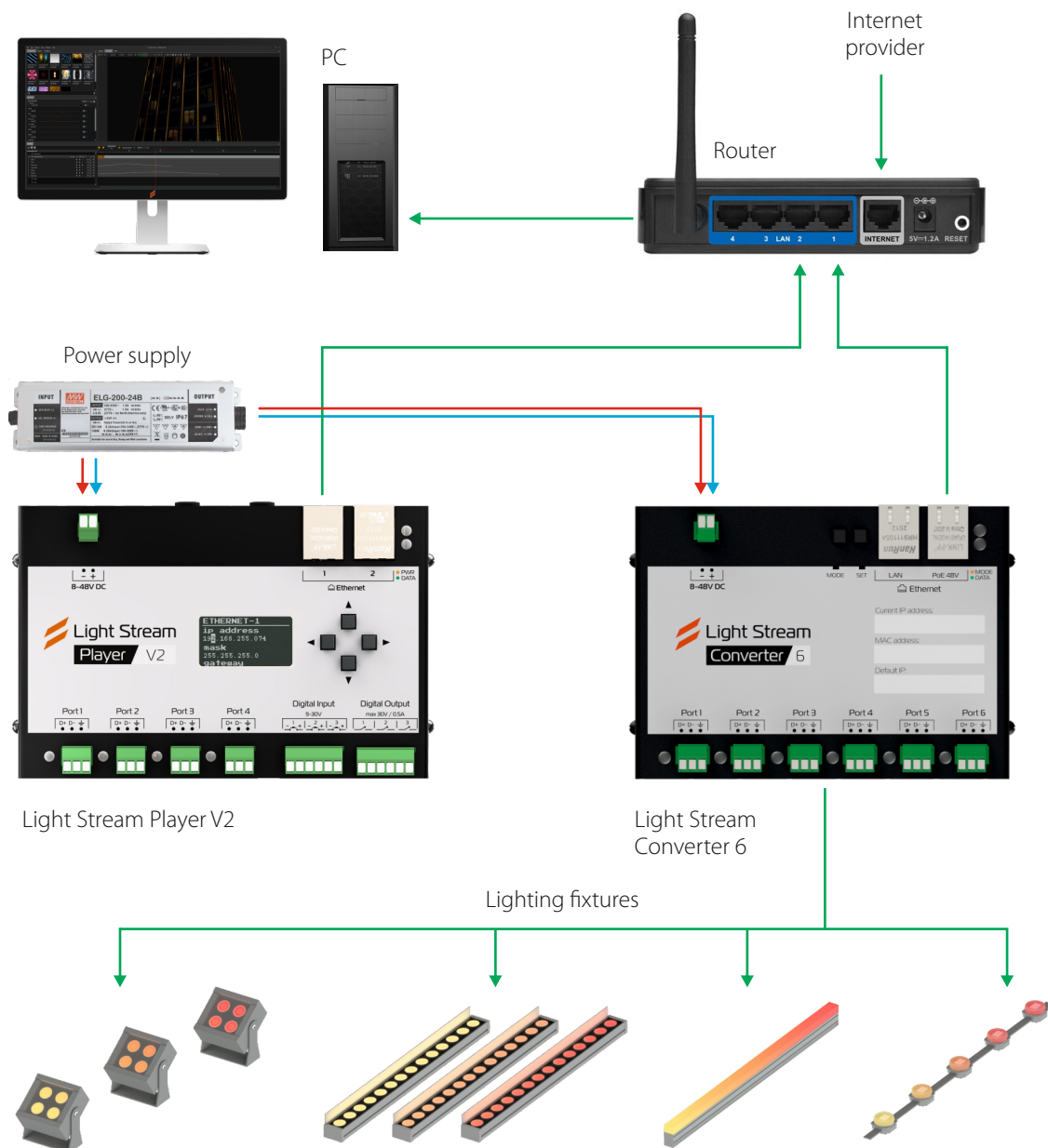
To do this, connect Light Stream Player to the router to which your PC is connected to access the Internet, then LightStream Player and your PC will be on the same subnet and will have access to the Internet.

Now you can go to the Light Stream Player web interface to configure it in detail.


You can also add to this chain Light Stream Converter,

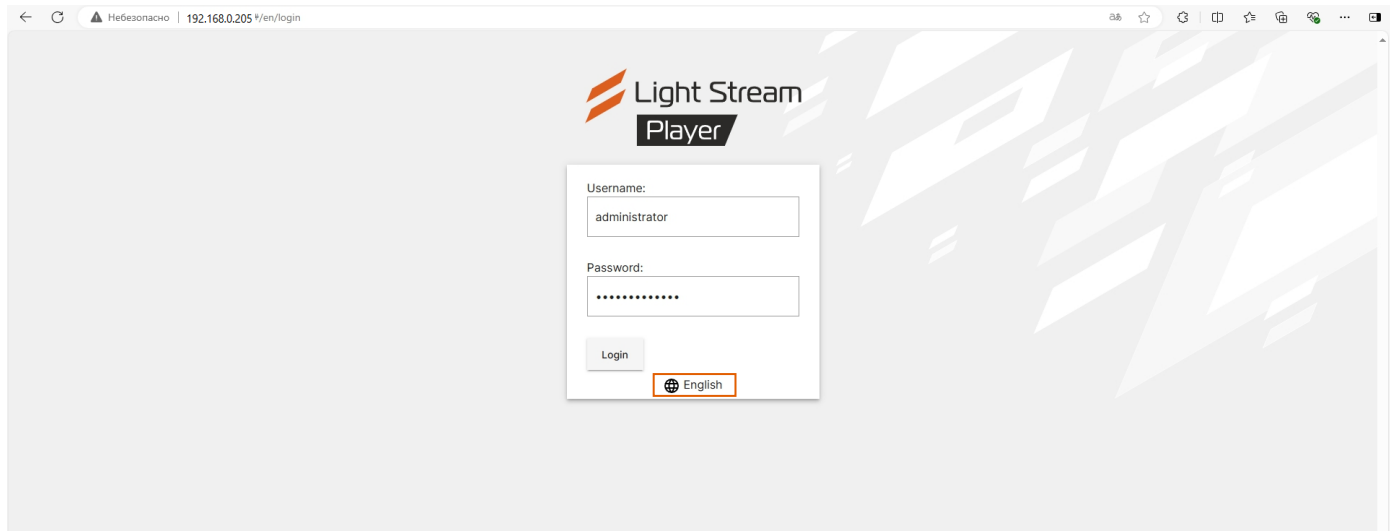
which is also connected to the router.

To configure the Converter and change its IP address, use the Player's web interface or via the Light Stream programme.



2) Web-interface. Authorisation.

Access to Player is carried out using a web-browser at the specified IP address from a stationary computer or phone (tablet, the IP address for access to Player should be specified by the IT service. computer or phone (tablet, the IP address for access to Player should be clarified with the IT service). The Player interface login page is loaded. If it turns out that you have selected any other language, you can click on  and change it to English.



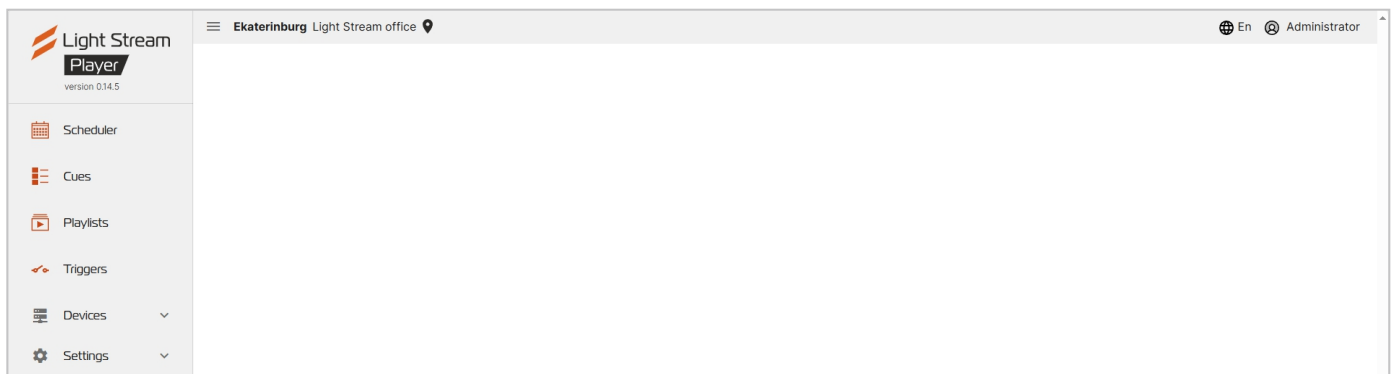
Access details:

IP address: _____

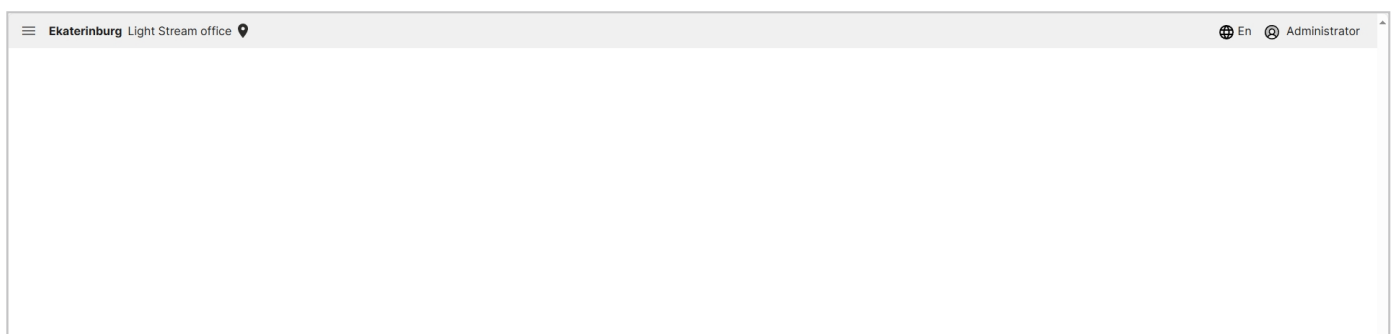
User name: administrator (by default)

Password: administrator (by default)

Then you get to the interface of Light Stream Player.



The main menu can be hidden, if desired, by pressing the button .



3) «Schedule» tab

In the window of this tab, you can configure the schedule for launching playlists.

The screenshot shows the Light Stream Player Scheduler interface. The top bar includes the Light Stream Player logo (version 0.14.5), the location 'Ekaterinburg Light Stream office', and user information 'En Administrator'. The main area is titled 'November 2024' and features a calendar grid. The grid shows days of the week (Mon to Sun) and dates. Event slots are visible, with times ranging from 18:00 to 02:00 and event IDs like 'exe4e4e4'. Navigation buttons for 'month', 'week', 'day', and 'today' are present. At the bottom, a digital clock shows '14:39' on '11 November 2024' and a 'no playback' status.

The list of all events is presented in calendar form by default, as well as there is an opportunity to view the list of events for a week or a certain day, using buttons **month** **week** **day** to switch between window views. To switch between months (weeks or days) use buttons **<** **>**. The button **today** returns the calendar to the current day.

You can also view the list of events as a sheet by pressing the button **Event list**.

The screenshot shows the Light Stream Player Scheduler interface in the 'Event list' view. The top bar is the same as in the previous screenshot. The main area displays a table with the following columns: Event, Frequency, Start, End, From, To, and Playing. The table contains one event entry with the following details: Event: exe4e4e4, Frequency: 8 марта DAILY, Start: 2024-11-08, End: ∞, From: 18:00, To: 02:00, and Playing: cue: Composition003.cue.

On this tab you can view and edit all events created on the Player at once

- **Event** - event name
- **Start** - event start date
- **End** - event end date
- **From** - time when the event will be triggered on the specified dates
- **To** - the time when the event will end on the dates indicated
- **Playlist** - the selected playlist that will be played when this event is triggered
- **Priority** - the priority of the order of triggering events (the higher the priority - the more important it is when triggering)

To create a new event, press **+ Add event** .

In the window that opens, enter the name of the event, select a previously created playlist.

To create an event scheduled on a specific date and time, select **On-time** , then click on the "Date" section to assign a date for the event in the opened calendar.

The screenshot shows the 'New Event' form with the following details:

- Title:** *Title (empty text input)
- Play:** animation playlist (dropdown menu shows 'Playlist')
- Repeat:** On-time recurrent (Priority: 1)
- From:** Start Date: 2024-11-11, Time: 00:00
- To:** Date: Mon, Nov 11, Time: 00:00
- Calendar:** November 2024, with the 11th selected.
- Buttons:** Cancel, Save


After selecting the date, it is necessary to set the event operation mode, which can be configured in three ways:

1. By set time

To configure the event to play at a given time, you just need to set the desired start time and cut-off time in the fields next to the clock «From» and «To». In this case the event will run in the selected time interval.

From  Time 17:30 To  Time 23:30

If you select an end time after 00:00, the event will automatically advance to the next day.



From  Time 18:00 To  Time 02:00

If the start time is later than the off time, the event will start at the set time and set day, then automatically reschedule to the next day and play until the set time.

From  Time 20:00 To  Time 18:00

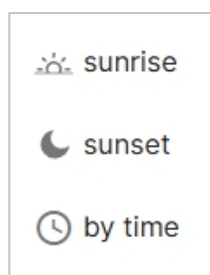
2. Throughout the day

To have the event played all day long, you must specify the start time of the event as 00:00 and the end time as 00:00 of the next day.

From  Time 00:00 To  Time 00:00

3. By astronomical relay

To set the astronomical relay event playback, you need to press on one of the clocks, then the menu will open. one of the clocks to open a menu of choices.



To enable the event:

From Time To Time

When is the event? date repetitions never

End Date Time

To deactivate the event:

From Time To Time

When is the end? date repetitions

End Date Time

Let's consider the most popular variant of triggering an event: Start at sunset and switch off at sunrise. To set this mode of operation, select «sunset»(moon icon) in the left field, and in the right field «dawn» (sun icon).

From Offset To Offset

When selecting options other than time-based switching, the selected time of day input field is replaced by a numeric time input field in which the on/off shift time can be specified.

The shift time is set in minutes.

By default, the 'Shift' fields are set to 0 minutes. With such values and such setting (as on the screenshot below) switching on and switching off will occur simultaneously with sunset and sunrise respectively.

The time in these fields can be either positive or negative.

From Offset To Offset

For example, when the shift time settings are set above:

Astronomical time is scheduled to start at 21:36, and this parameter is set to -30 (minutes), with this setting the event will start at 21:06 (30 minutes before sunset) The astronomical time is scheduled to end at 05:32, and this parameter is set to 60, with this setting the event will shut down at 06:32 (60 minutes after sunrise)

The astronomical relay start variants can be combined with each other and configured in different ways

For example, you can set the event triggering mode to start at sunset and switch off by time, e.g. at 22:00:

From  Offset 0 To  Time 22:00

Conversely, make the event switch on time at 18:00 and switch off at dawn:

From  Time 18:00 To  Offset 0

Important, if you set the values the other way round, switching on at dawn and switching off at dusk, then accordingly the event will work only during daytime.

From  Offset 0 To  Offset 0

Note. In order for the astronomical relay to work correctly based on the location of the object, in the Player settings you need to specify its exact coordinates, or the coordinates of the city where the object is located.

To do this, go to the **Settings - Location** menu and set the required **Latitude** and **Longitude** parameters.

Location	
Name	<u>Ekaterinburg</u>
Address	<u>Light Stream office</u>
Latitude	<u>56.821019190097616</u>
Longitude	<u>60.59559633825783</u>
Geolocation	<input type="button" value="Open in Google Maps"/>

You can find out the coordinates of any object or city using any online maps or internet search. For example, the city of Yekaterinburg is located at coordinates 58.8519, 60.6122 and the city of Moscow at coordinates 55.7522, 37.6156

After the configuration of the event is complete, press the button **Save** .
 After that the event will appear in the calendar on the appointed day.

21	22
18:00 - 02:00 eke4e4e4	
	18:00 - 02:00 eke4e4e4

To create a recurring event, after pressing , enter the name of the event and select a playlist and selecting a playlist, select recurrent .

Next, you need to enter the required parameters.

- **Title** - the name of the event
- **Play** - here you can choose whether to play an animation or a playlist from previously created playlists in the Playlists section
- **Repeat** - here you can select the number of of event repetitions and prioritise them
- **Start date and Time** - time and date on which the event becomes operational (this is the date from which the following conditions will be fulfilled)
- **Frequency** - periodicity mode selection
- **From** - start time of this event
- **To** - event end time
- **When is the end?** - event termination parameters

New Event

*Title

Play animation playlist

Repeat On-time recurrent Priority:

Start Date Time

Frequency:
 YEARLY MONTHLY WEEKLY DAILY HOURLY

Every day

From To

When is the end? date repetitions never

*indicates required field

There are several modes for selecting the frequency of a recurring event (Frequency):

- **Yearly** - the event will be launched every year on the specified month and day and time (so you can create events for major holidays, for example, every year on the 8th of March will be every year on 8 March).

Frequency:

YEARLY MONTHLY WEEKLY DAILY HOURLY

Every year

on

From To

- **Monthly** - the event will be launched every month on the specified days and time (e.g. every new month on the 1st of the month some unique animation will play)

Frequency:

YEARLY MONTHLY WEEKLY DAILY HOURLY

Every month

1 2 3 4 5 6 7 8 9 10 11

12 13 14 15 16 17 18 19 20 21 22

23 24 25 26 27 28 29 30 31

From To

- **Weekly** - the event will be launched every week on the selected days of the week at the specified time (so you can create a unique event for all weekends, which will play only on Sat. and Sun).

Frequency:

YEARLY MONTHLY WEEKLY DAILY HOURLY

Every week

mo tu we th fr sa su

From To

- **Daily** - the main parameter that is likely to be used most often the others. The event will be triggered every day at the specified time, if Each = 1, then the event will be triggered every day.

Frequency:

YEARLY MONTHLY WEEKLY DAILY HOURLY

Every day

From To

- **Hourly** - repetition at hourly intervals. The time interval is set on a minute-by-minute basis.

Frequency:

YEARLY MONTHLY WEEKLY DAILY HOURLY

Every hour

from to minutes

For each of the periodicity modes (Frequency) you can set the «When is the end?» option, to indicate when the event should end.

- **Date** - definite end date

When is the end? date repetitions never

End Date Time

- **Repetitions** - selection of the number repetitions

When is the end? date repetitions never

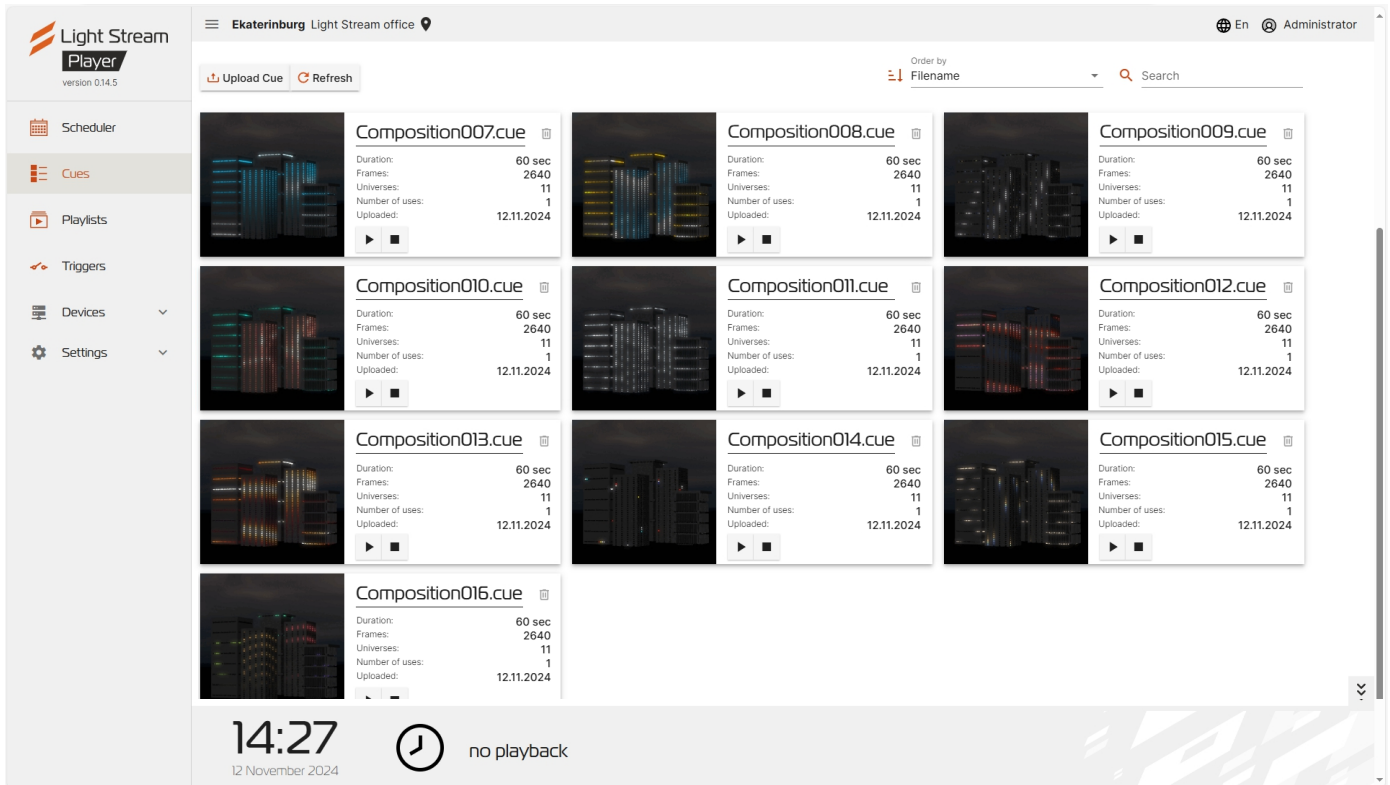
Repetitions:

- **Never**

When is the end? date repetitions never

After the event configuration is complete, you should press the **Save** button. The event will then appear on your calendar on the designated day.

4) «Cues» tab.



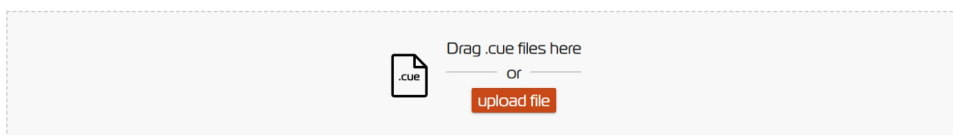
The window of this tab contains a list of animations downloaded to the Player.

The list provides information about the animations that have been downloaded:

- **Duration** – animation duration;
- **Frames** – animation frame count;
- **Universes** – the number of universes involved in the animation;
- **Number of uses** – playlist usage;
- **Uploaded** – download date.

The button is used to load animations  **Upload Cue** .

To select files in the opened window, click on any place in the selection field,



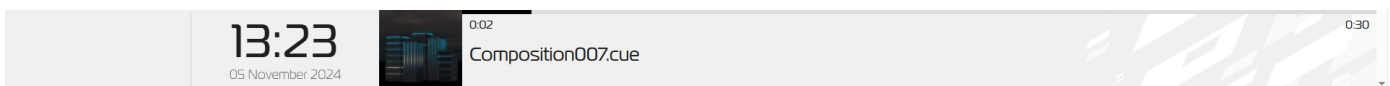
after the list of files to be downloaded appears, click on **Upload** .

To delete the loaded animation, press the button  .

The button is used to update the animations  **Refresh** .

On the tab  **Filename** it is possible to organize animations by their characteristics.

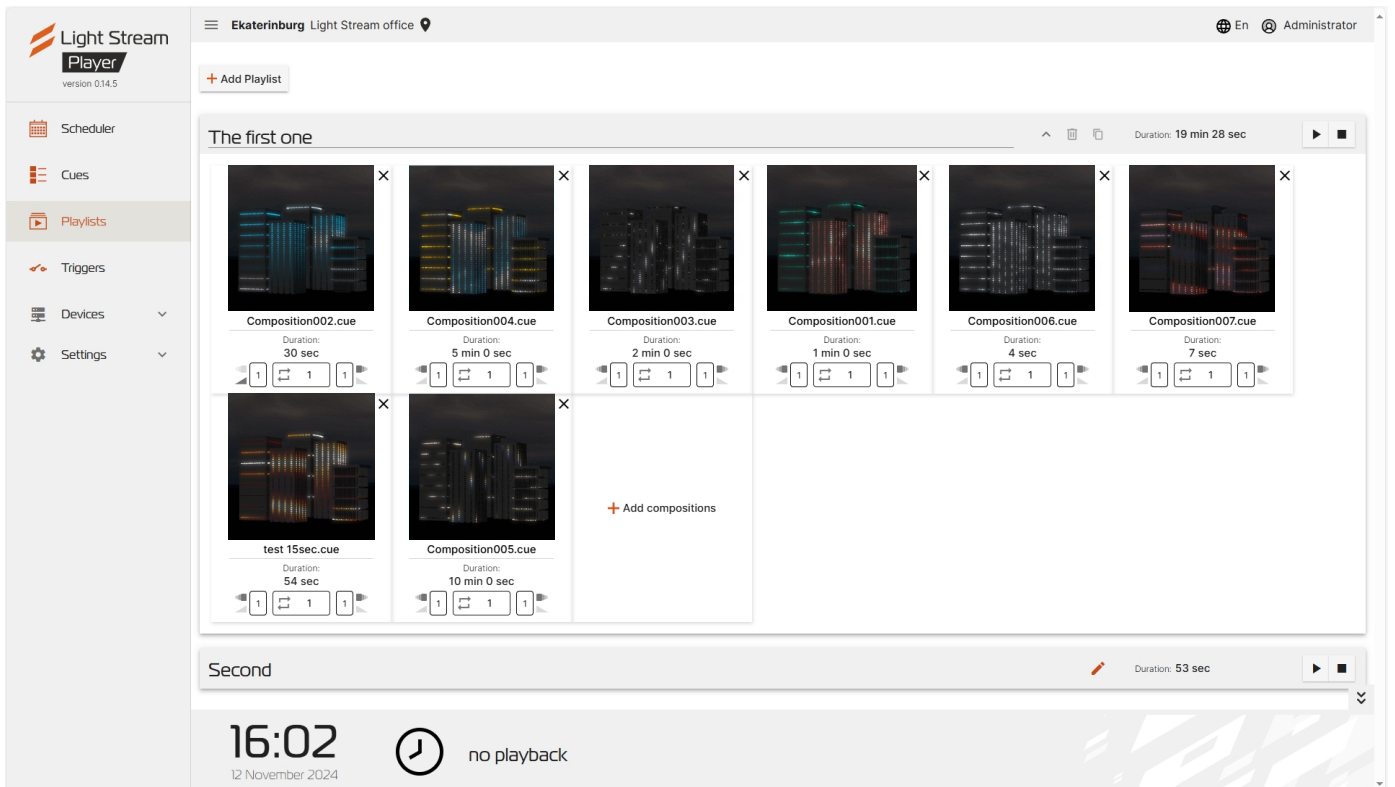
At the bottom of the interface is the animation playback timeline.



When you press the button  animation starts.

When you press the button  animation turns off.

5) «Playlists» tab.



This tab window contains a list of playlists.

When you click on the button  all animations installed in this playlist with a demo picture will appear.

To create a playlist, press the button **+ Add Playlist**, in the window that opens enter a name and click **Save**.

Для добавления анимации в плейлист необходимо нажать **+ Add compositions**.

In the window that opens, select an animation from the previously loaded animations by clicking on **+**.

Then it is necessary to click on the button **Add**.

To add multiple animations to a playlist

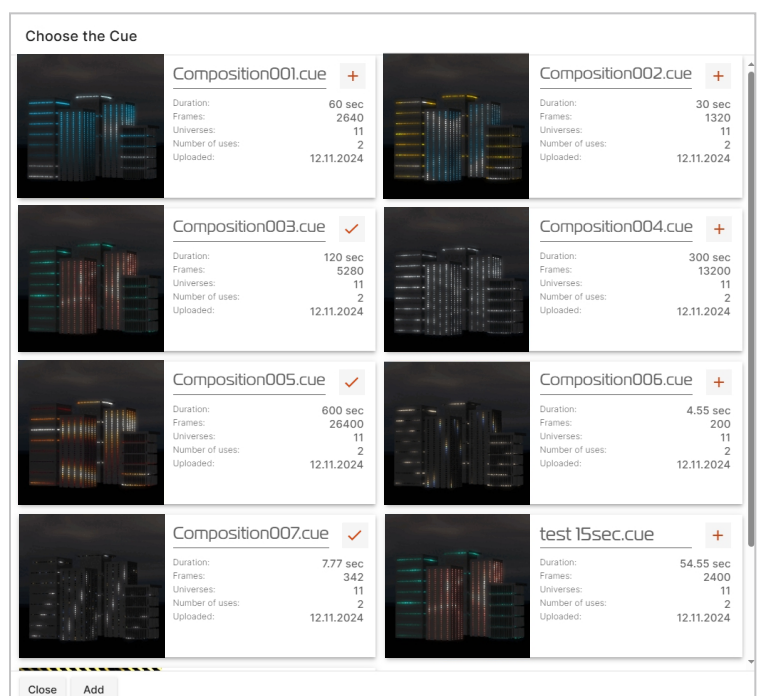
you need to mark desired ones

by clicking on **+**, the selected ones

will display image .

Next, click on the button **Add**

and the animations will load into the playlist.



6) «Triggers» tab

The screenshot shows the Light Stream Player interface. The top bar includes the logo, version (0.14.5), location (Ekaterinburg Light Stream office), language (En), and user (Administrator). The sidebar on the left contains navigation icons for Scheduler, Cues, Playlists, Triggers (highlighted), Devices, and Settings. The main content area is titled 'Triggers' and features a table with columns for Check, Name, Type, and Action. Below the table are two control panels: 'DI' with 'State' indicators for Port 1, 2, and 3, and 'DO' with 'Off/On' toggle switches for Port 1, 2, and 3. A footer bar shows the time (16:43), date (12 November 2024), and playback status (no playback).

Check	Name	Type	Action
<input type="checkbox"/>	test	DI	Add action
<input type="checkbox"/>	сценарий	RawUDP	Add action
<input type="checkbox"/>	стоп	RawUDP	Add action

The Player provides the ability to trigger downloaded animations or playlists by external triggers

- triggering by Art-Net signal from Converter (or other Art-Net device);
- triggering on Raw UDP message on a specific port.

To add a trigger, press the button [Add trigger](#).

In the window that opens, enter a name (an explanatory name for the list), select the appropriate trigger type.

Art-Net trigger:

In the opened window it is necessary to fill in all trigger parameters:

- **Listen port** – default 6454 (port change must be coordinated with the control device with the control device);
- **Universe** – number of the universe from which the signal will be received;
- **Channel** – number of the channel from which the signal will be received (from 1 to 512);
- **Min Level** – minimum signal level, after reaching which trigger;
- **Max Level** – maximum signal level, after reaching which the trigger is not activated.

New Trigger

Name

Trigger type
ArtNet

Listen port
6454

Universe
1

Channel
1

Min Level
1

Max Level
255

After filling in all trigger parameters, you should save the settings by pressing

Raw UDP trigger:

The following fields are filled in for this type of trigger:

- **Listen port** – default 1025 (port change must be coordinated with the control device agreed with the control device);
- **Data** – UDP message content.

New Trigger

Name

Trigger type
RawUDP

Listen port
1025

Data

DI trigger:

The following fields are filled in for this type of trigger:

- **DI port** – port number
- **Port state** – activated or deactivated.


New Trigger

Name

Trigger type
Di

Di port
1

Port state
Activated

After adding a trigger, it must be assigned an action, you can do this by pressing  **Add action** .

In the window that opens, fill in the line with the name of the action and select the action itself (play, stop and set DO port state):

New action

Action type
Play

cue playlist

Cue

repeat infinity

repeat

The “play” action involves selecting whether to play an animation or a playlist. cue playlist

Also in this window you can specify the number of repetitions, or set the infinite playback mode.

- repeat
- infinity

New action

Action type
Stop

Cancel Save

You can use this action to stop playback.

New action

Action type
Set DO port state

DO port
1

Port state
Activated

Cancel Save

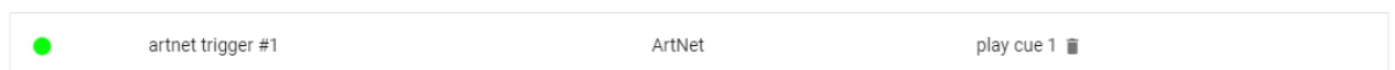
The «Set Do port state» action allows you to select the port number of the device, and assign the «Activated» and «Deactivated» states to it.

Once you have filled in all the action parameters, you must save the settings by pressing **Save**.

You can delete an action by pressing the .

You can delete a trigger by clicking on the line with its name in the list and in the opened window click the button «Delete».

Triggering is indicated by a green signal in the corresponding trigger line.



DI	State
Port 1	<input type="radio"/>
Port 2	<input type="radio"/>
Port 3	<input type="radio"/>

DO	Off/On
Port 1	<input type="checkbox"/>
Port 2	<input type="checkbox"/>
Port 3	<input type="checkbox"/>

This tab also displays the status of Di and Do ports.

The DI window shows the port status by colour indication.

You can manually enable/disable any port in the Do window.

7) «Devices» tab.

Ekaterinburg Light Stream office

En Administrator

ArtNet devices

Name	Ip	Type	Firmware	Status	Ports	Rdm devices	Actions
LightStream Player v1	192.168.0.201	Lighting console	0.14	Power On Tests successful	1	0	...
LightStream Player v1	192.168.0.200	Lighting console	0.14	Power On Tests successful	1	0	...
Converter 6-767B0A	192.168.0.27	Dmx converter	OS-G v1.9.10.22	Power On Tests successful	6	0	...
Converter 6-756725	192.168.0.44	Dmx converter	OS-G v1.9.10.19	Power On Tests successful	6	0	...
Converter 6-4F6E29 DemoPanel	192.168.0.100	Dmx converter	OS-G v1.9.10.18	Power On Tests successful	6	0	...
Converter 6-915421	2.145.84.33	Dmx converter	OS-G v1.9.10.22	Power On Tests successful	6	0	...

Rows per page: 10 1-6 of 6

11:51
13 November 2024

no playback

With Player you can detect and control Art-Net devices.

Ekaterinburg Light Stream office

En Administrator

ArtNet devices

Converter 6-767B0A

Identify

Long name: Converter 6-767B0A

Type: Dmx converter

Status: Power On Tests successful

IP address: 192.168.0.27

Firmware: OS-G v1.9.10.22

Merge type: SINGLE

Nº	Name	Out signal	Universe	Rdm	Tx
1	#DMXOUT1	DMX	5	off	●
2	#DMXOUT2	DMX	6	off	●
3	#DMXOUT3	DMX	7	off	●
4	#DMXOUT4	DMX	8	off	●
5	#DMXOUT5	DMX	9	off	●
6	#DMXOUT6	DMX	10	off	●

Break time: 90 Mab time: 8 Chan time: 48 Pause time: 48 Channel count: 512

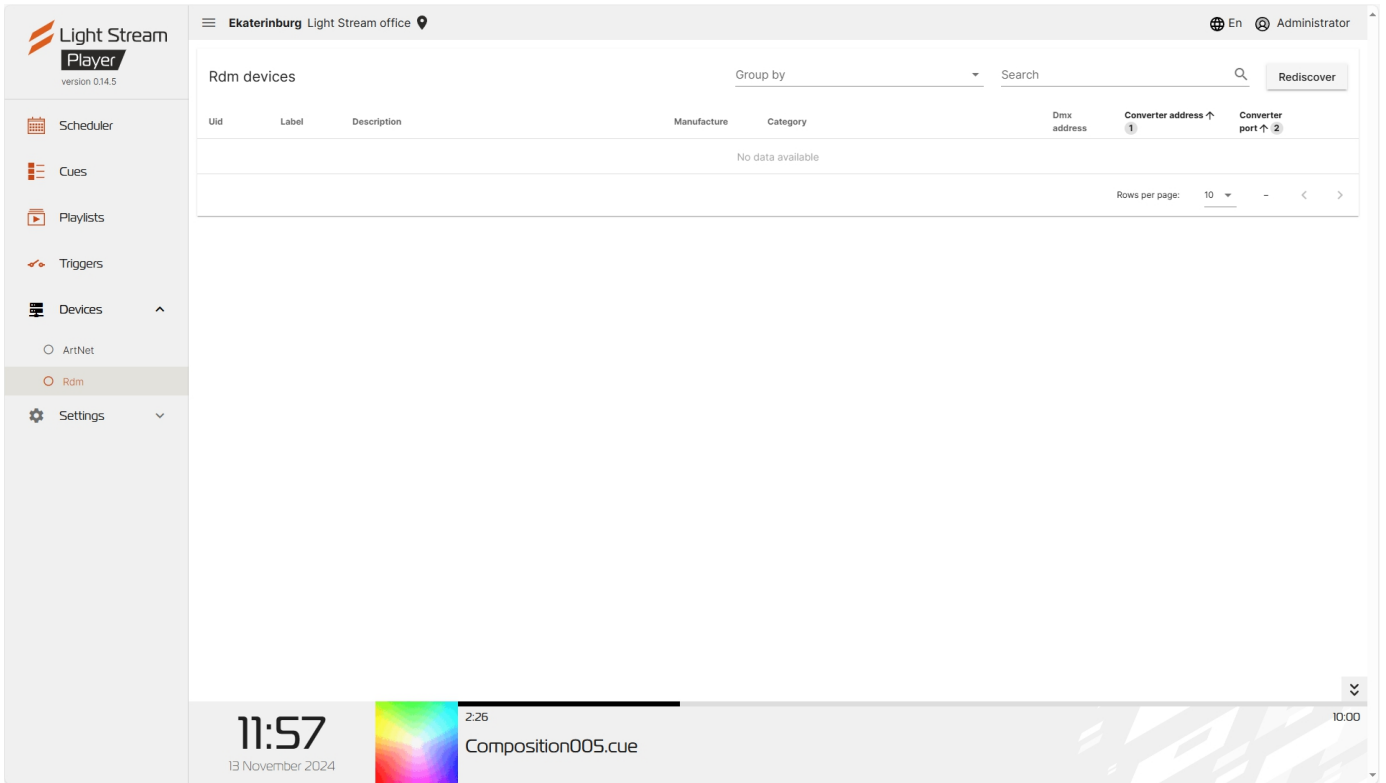
Max FPS: 40

Key: 55 Subkey: 27 Data:

Send macros:

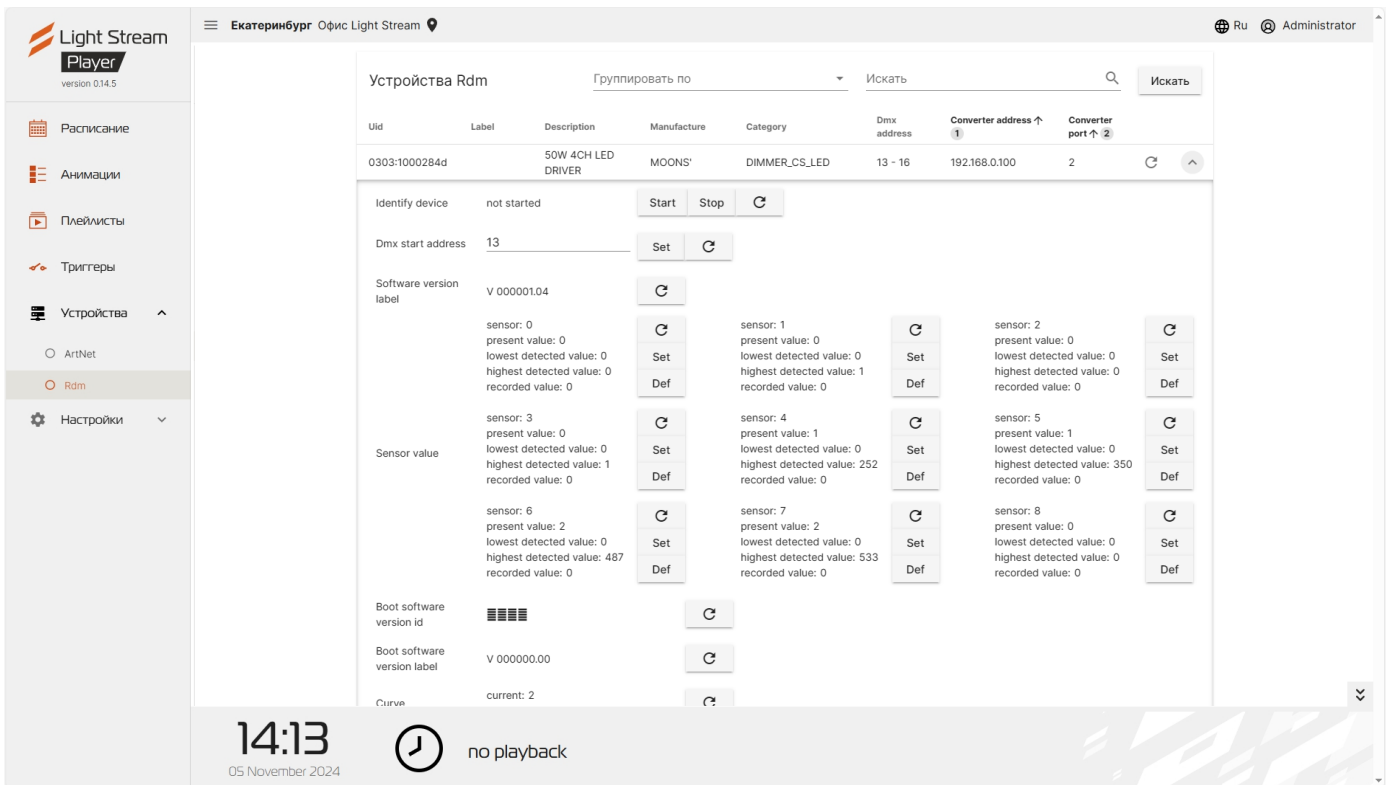
16:23
14 November 2024

no playback



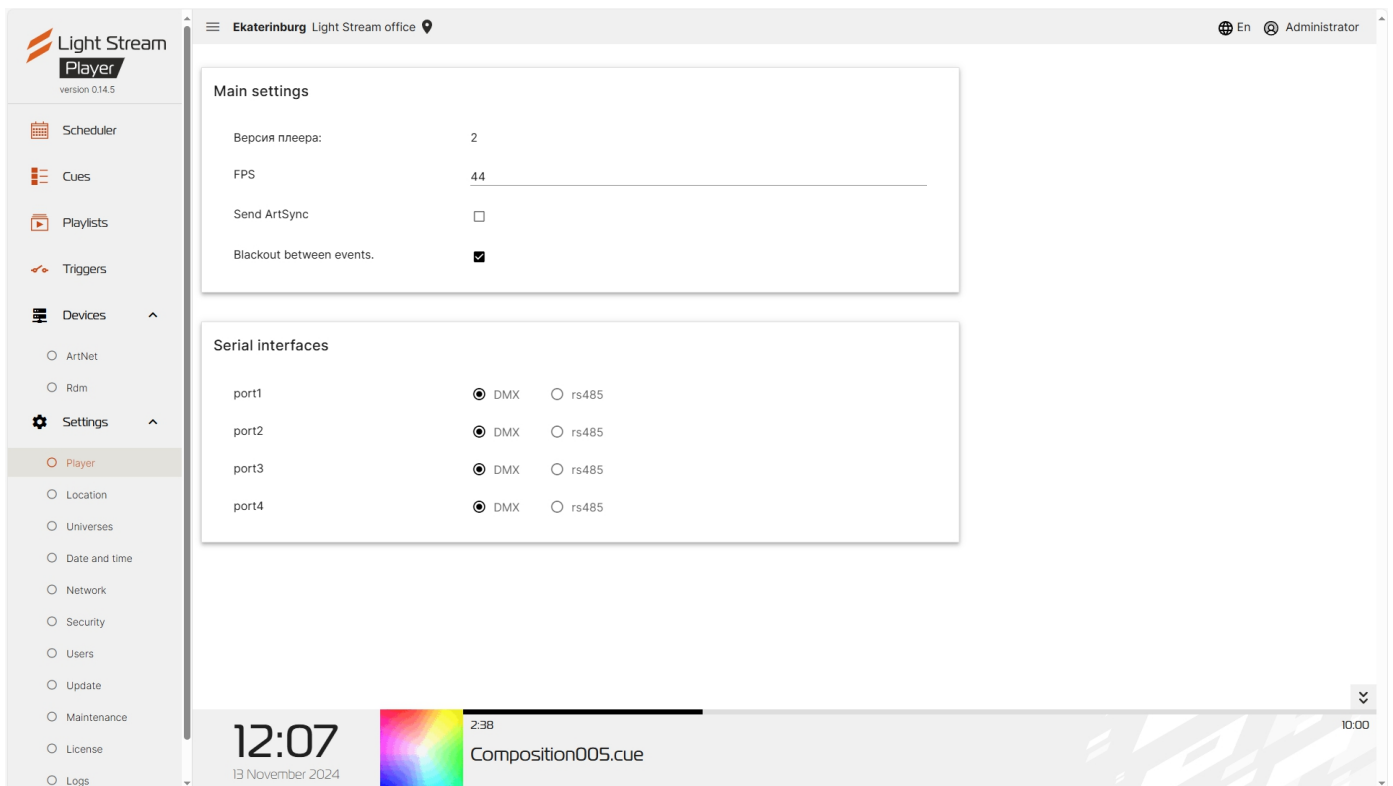
You can also use Player to detect and control Rdm devices.

To detect Rdm devices, press the button **Rediscover**.



8) Main menu of the interface. «Settings» tab.

«Player» tab.

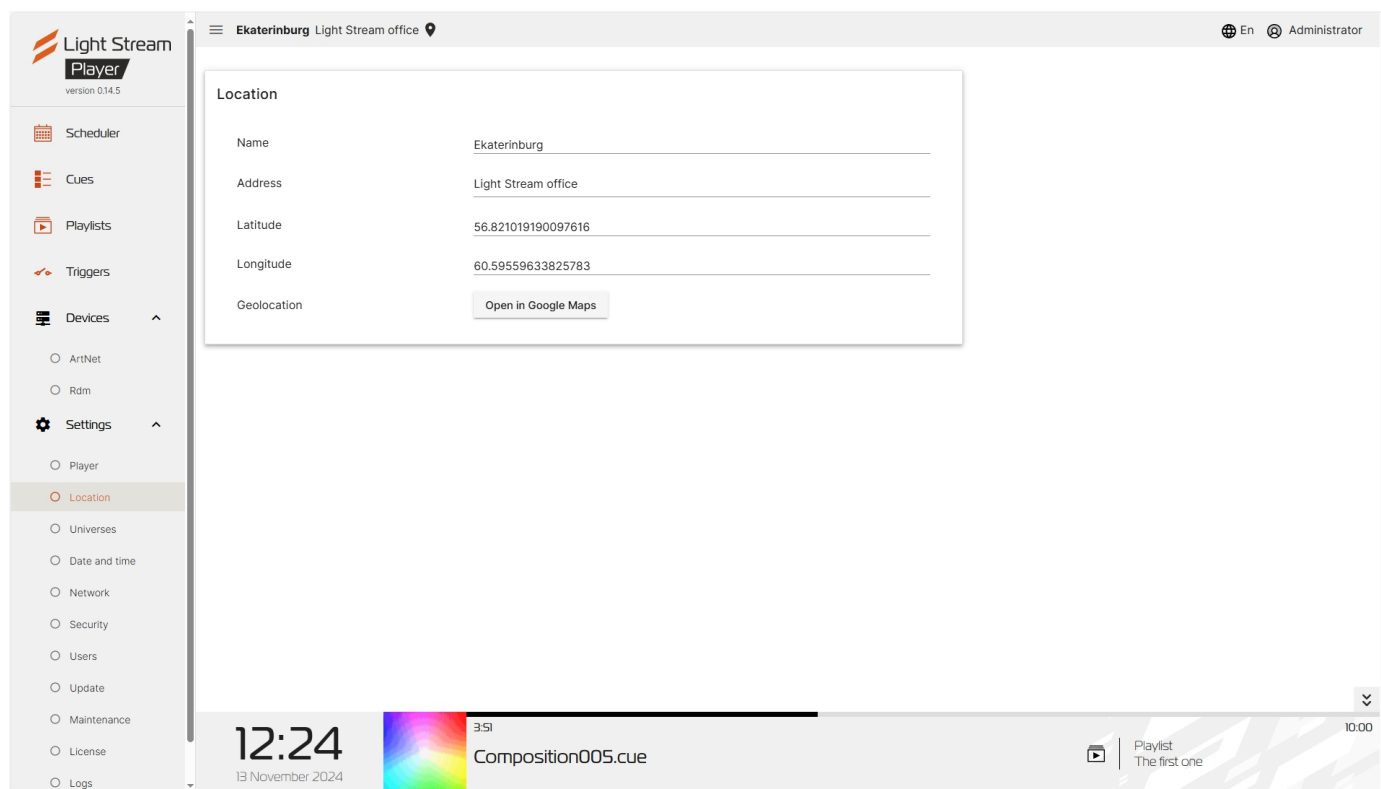


On the Player tab in the Basic settings window it is possible to specify the frame rate per second of animation playback.

Warning! The FPS parameter will affect the animation itself, the playback of which may be distorted from the concept originally conceived by the designer (creator of the animation), as well as may affect the performance of Player. It is recommended to use the default value of 44.

In the Serial Interfaces window you can switch between DMX and rs485 modes on the device ports.

8.1) «Location» tab.



On this tab you can specify the name, address, latitude and longitude of the object.

It is also possible to mark its geolocation using Google Maps, to do this, click on the button **Open in Google Maps**.

8.2) «Universes» tab.

Art-Net devices and universes are added on this tab.

To add a device, press the button **Add ArtNet converter**.

Then in the opened window you should fill in the following fields.

- **Name** (randomly selected)
- **Network Mode** – broadcast или unicast
- **Ip address** – device network address;
- **Port** – by default 6454
- **Description** – additional description device, e.g. name of the panel in which it is located

New Device

Name	Network Mode broadcast ▼	ip address
Port 6454	Description	

Cancel
Save

Next, to save the configuration, press **Save**.

The added device will appear in the list below:

Name	Network Mode	ip	Port	Description	Actions
Light Stream Converter001	unicast	192.168.0.100	6454	Light Stream Converter001	✎ 🗑
111	unicast	192.168.0.53	6454		✎ 🗑
LS Converter 6	unicast	192.168.0.101	6454	Shield 1	✎ 🗑

Use the buttons to edit the configuration of the added Art-Net device or remove it from the list.

The «Universes» field is used to add universes.

1 0.0.1	2 0.0.2	3 0.0.3	4 0.0.4	5 0.0.5	6 0.0.6	7 0.0.7
8 0.0.8	9 0.0.9	10 0.0.10	11 0.0.11	12 0.0.12	13 0.0.13	14 0.0.14
15 0.0.15	16 0.1.0	17 0.1.1	18 0.1.2	19 0.1.3	20 0.1.4	21 0.1.5
22 0.1.6	23 0.1.7	24 0.1.8	25 0.1.9	26 0.1.10	27 0.1.11	28 0.1.12
29 0.1.13	30 0.1.14	31 0.1.15	32 0.2.0	33 0.2.1	34 0.2.2	35 0.2.3
36 0.2.4	37 0.2.5	38 0.2.6	39 0.2.7	40 0.2.8	+ Добавить Вселенную	

To add a universe, you must click on  «Add a Universe» and fill out the following form.

Add Universe

number
25

Port address: 0.1.9

ArtNet Device

Light Stream Converter001

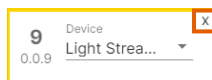
111

LS Converter 6

«Number» field indicates the number of the universe (numbering is end-to-end in accordance with the ArtNet v.4 protocol), additionally the number of the universe according to ArtNet v.3 protocol (Net.Subnet.Universe) is shown.

In the "ArtNet Device" field, you select the appropriate device for this universe from the list of entered ArtNet Devices. To save the universe settings, press the button .

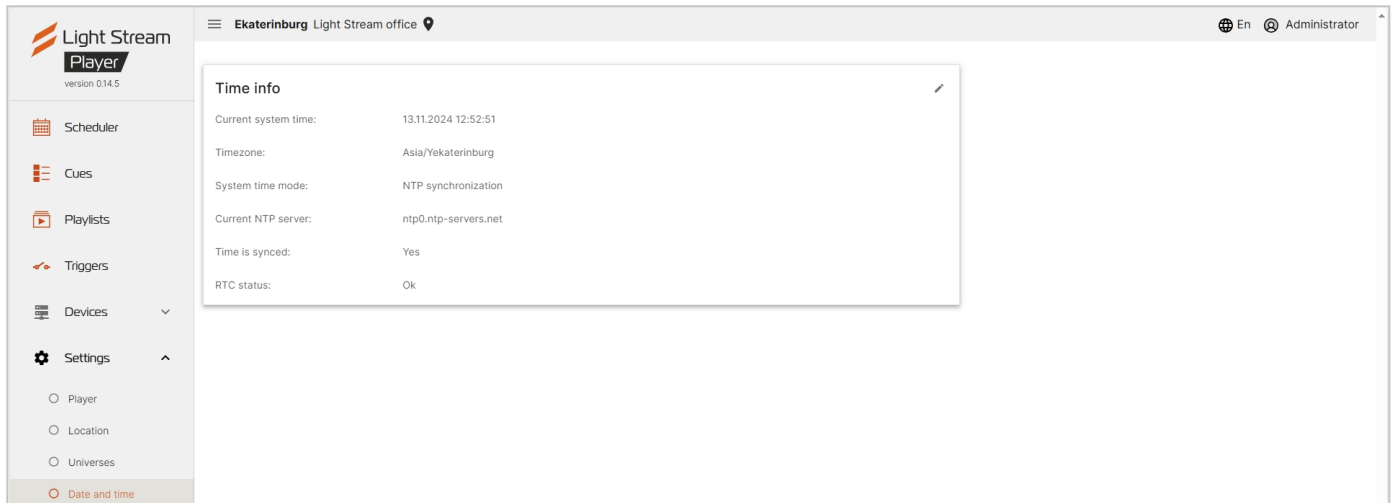
To delete a universe, you must use the button



The configuration of ArtNet devices and universes can be imported from the LightStream animation software. LightStream animation software.


Warning! It is not recommended to change the configuration of devices and universes without the designer's recommendations. This may affect the overall animation playback.

8.3) «Date and time» tab.



On this tab there is a field with configuration of date and time settings "Time info".

- **Current System Time** – current date and time;
- **Timezone** – time zone;
- **System Time Mode** – configuration of the system clock (synchronisation via NTP server or manual setting, operation from the built-in RTC real-time clock);
- **Current NTP Server** – current NTP server;
- **Time is synced** – synchronisation status
- **RTC status** – operation from the inbuilt real-time clock.

To edit the settings, press the button .

Timezone:


Manual NTP synchronization

Primary NTP server:

Secondary NTP server:

In the fields that appear, if necessary, select the time zone, enter the addresses of the required NTP servers (primary and secondary), and also set the date and time manually by selecting the "Manual" mode.

Manual NTP synchronization

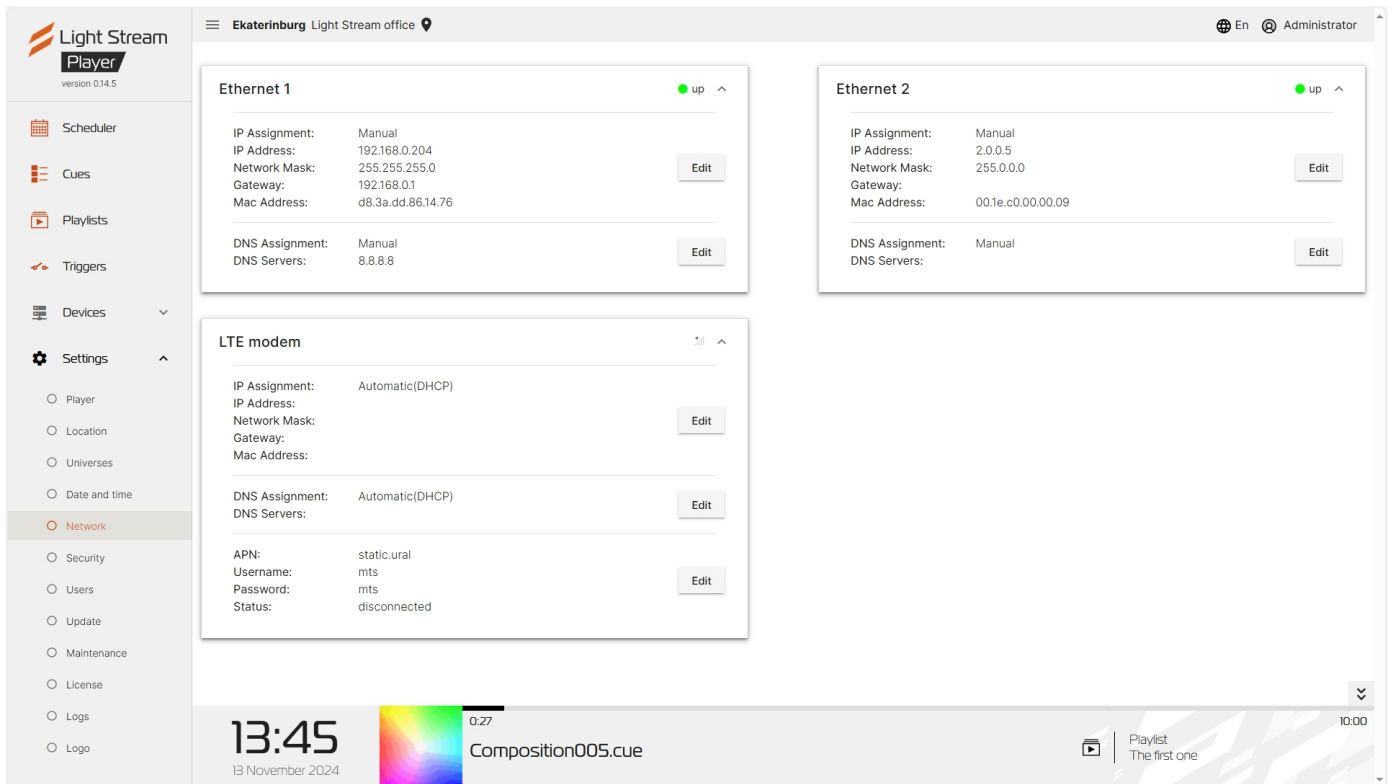
System date: 

System time:

After changing the settings, you should press the button **Apply**.

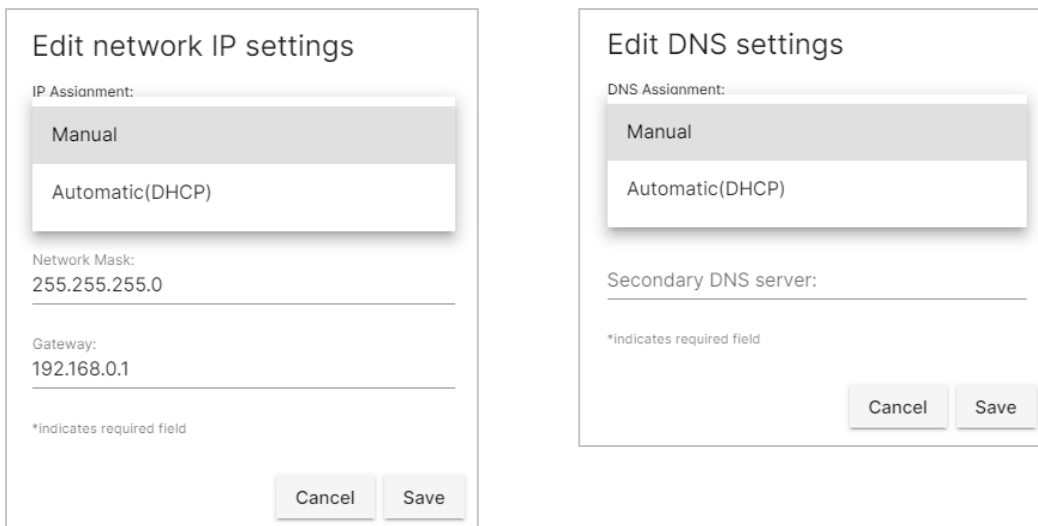
Attention! These settings may affect the operation of the Schedule mode.

8.4) «Network» tab.



This tab contains fields with basic settings for the Player network interface.

In the Ethernet window, you can edit network settings both manually and automatically.



The LTE modem window is used optionally (if the user has an LTE modem)

In the LTE modem window you can also edit network settings both manually, or in automatic mode.

In the Change APN settings window, you need to enter the operator data manually.

Changing the network settings on the player.

To set up backup access via modem it is necessary that the sim card issued by the telecom operator has a static «white» address. It is necessary to obtain connection details (apn server, user name and password) from the telecom operator who issued the sim card.

To change the settings, follow the steps below.

On the modem interface card in the APN settings block, click on the **Edit** button.

LTE modem

IP Assignment: Automatic(DHCP)
IP Address:
Network Mask: **Edit**
Gateway:
Mac Address:

DNS Assignment: Automatic(DHCP)
DNS Servers: **Edit**

APN: static.ural
Username: mts
Password: mts
Status: disconnected **Edit**

The **Edit APN settings** form opens.

Edit APN settings

APN:
static.ural

Username:
mts

Password:
mts

*indicates required field

Cancel **Save**

Specify the settings you received from your service provider.

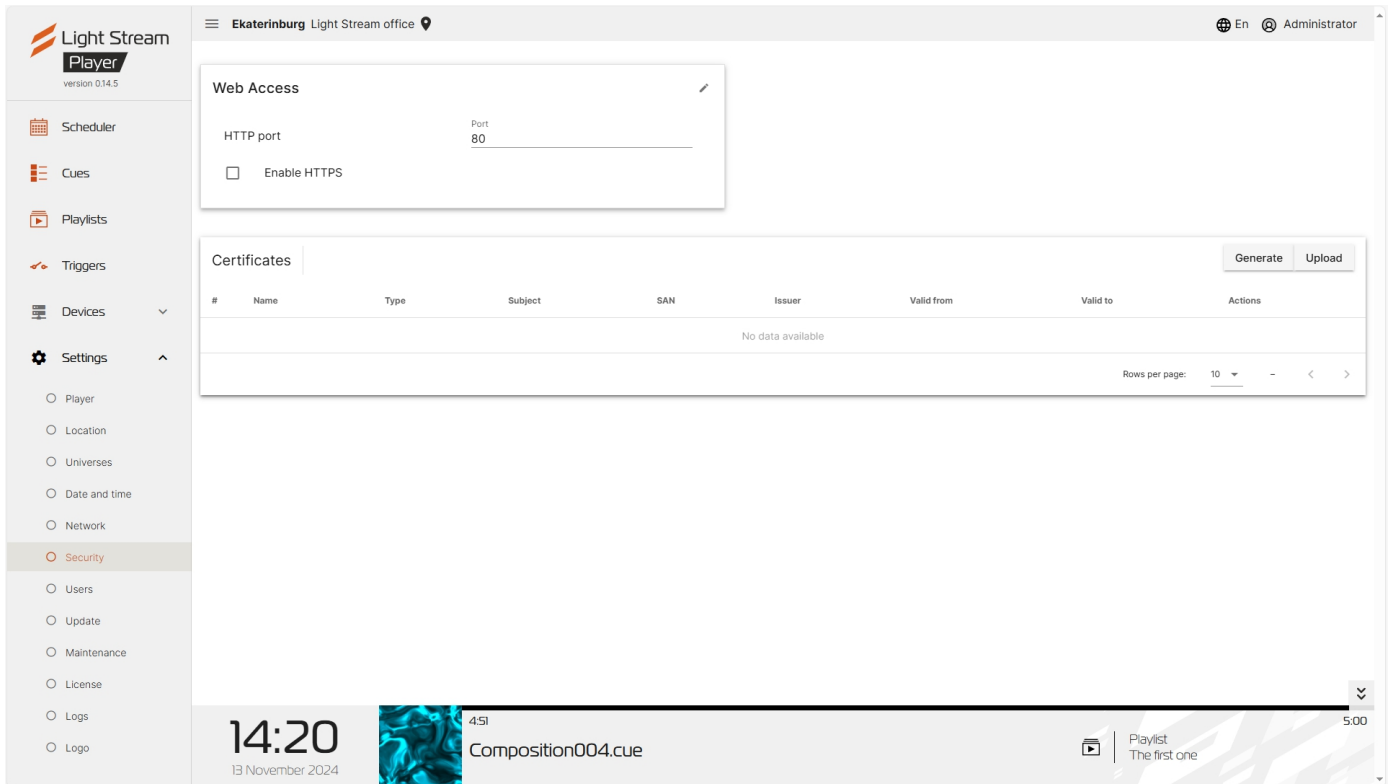
Click the **Save** button.

(Optional) In rare cases it is required to set the ip address manually.

Please check with your service provider. T

o set the ip address, please refer to the corresponding instructions.

8.5) «Security» tab.



This tab is intended for advanced Player customisation and protecting access to the interface by to the interface by encrypting the HTTPS network connection:

HTTPS protocol provides secure and confidential information exchange between the player's web interface and the user's device. the player's web interface and the user's device. Thanks to HTTPS-protocol the data you leave on the website will be securely protected and will not fall into the hands of fraudsters. data you leave on the site will be securely protected and will not fall into the hands of fraudsters.

The «Web Access» field - HTTPS activation, port and certificate selection.

To edit, press , after the change, press the button **Apply**.

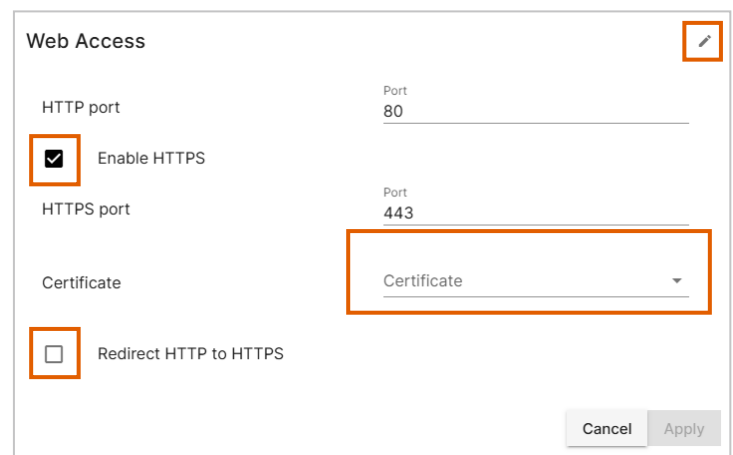
To enable HTTPS in the Web Access field click .

Tick the **Enable HTTPS** check box.

In the **Certificate** field, select a pre-generated or downloaded SSL certificate. a pre-generated or downloaded SSL certificate.

To redirect and prevent access to the player's web interface via http, tick the **Redirect HTTP to HTTPS** checkbox.

Click the button **Apply** then refresh the page.



Downloading a certificate from an external certificate authority.

An SSL certificate is a digital certificate that authenticates a website and allows you to use an encrypted connection. to use an encrypted connection. SSL stands for Secure Sockets Layer, a security protocol that creates an encrypted connection between a web server and a web browser. SSL stands for Secure Sockets Layer, a security protocol that creates an encrypted connection between a web server and a web browser

The certificate and private key files must be in pem format.

The private key file must not be password protected.

«**Certificates**» field - downloading or creating certificates.

To download the ssl certificate, click on the button **Upload** after which a window for downloading certificates will open.

#	Name	Type	Subject	SAN	Issuer	Valid from	Valid to	Actions
No data available								
Rows per page: 10								< >

Select **New Certificate**.

Fill in the **Name** field. The name of the certificate must be unique and not used by previously downloaded or generated certificates.

Click the **Certificate File** field and select the ssl certificate file.

Click the **Private Key** File field and select the private key file.

Click the form button **Save** .

Upload Certificate

New certificate Certificate corresponding csr

Name

Certificate file

Private Key File

Intermediate or chain certificate file (optional)

Cancel Save

A newly downloaded certificate should appear in the certificate list, which can be used later to configure the https protocol.

Creating a self-signed ssl certificate.

A self-signed certificate is a special type of digital certificate signed by its subject.. Technically, such a certificate is no different from a certificate signed by a certification centre (CA), except that instead of sending it to the CA for signing, the user creates his own digital signature.

The self-signed certificate is issued for a period of three years.

Select the **Certificates field** - download or create certificates

In the **Certificates** block, click the **Generate** button

#	Name	Type	Subject	SAN	Issuer	Valid from	Valid to	Actions		
No data available										
							Rows per page:	10	<	>

In the opened form **Certificate Request** form it is necessary to fill in the **Name** field and putmarker in the Certificate type section to the value **Self-sign**. Fields **Common name** and **Subject alternative name** will be filled in automatically.

The rest of the fields are filled in as desired.

Click the form button **Save** .

The newly created certificate should appear in the list of certificates, which canbe used later for configuration https protocol

Certificate Request

Name

Certificate type: Self-sign CSR

Common name

Subject Alternative Name (optional)

Organization (optional)

Organization Unit (optional)

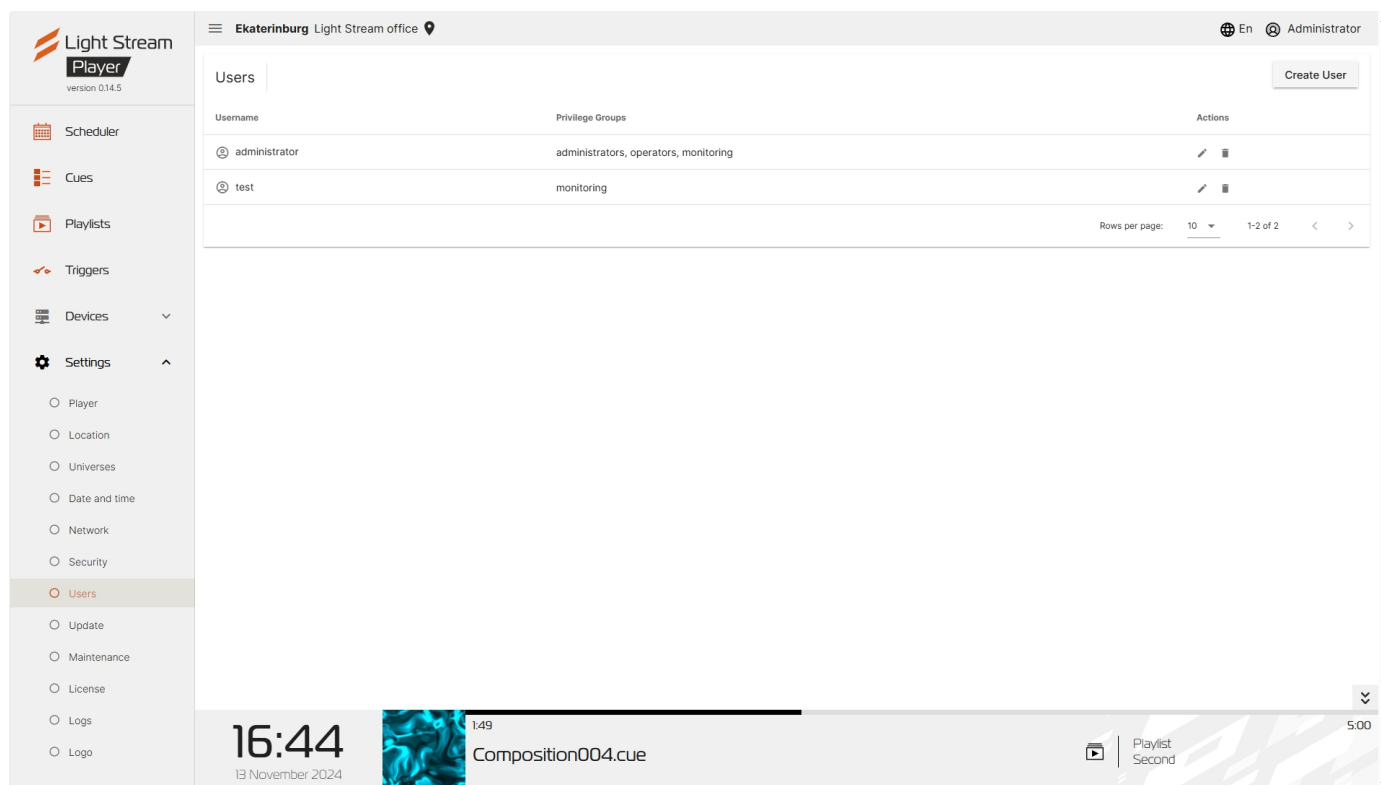
Country (optional)

State/Province (optional)

Local address (optional)

Cancel **Save**

8.6) «Users» tab.



There are 3 groups of Player user privileges:

- **Administrator** - user who has access to all Player settings.
- **Operator** – user, who has the ability to work with animations, create playlists and scripts, change the Player operation mode (Schedule / Manual control). Access to the settings is closed.
- **Monitoring** – user with monitoring capabilities. All settings, including working animations are closed.

In this tab you can create a user with the possibility to change its access details. This tab allows you to create a user with the possibility to change its access details.

To create a user, press the button **Create User**.

In the opened window it is necessary to enter the user name in the "Name" column, in the "Privilege groups" submenu select the user type, then enter the password in the "Password" column and confirm it in the "Confirmation" column and confirm it in the "Confirm password" column.

After entering the data it is necessary to press the button **Create**.

The user will be displayed in the general list.

User details can be changed by clicking on .

You can remove a user from the list by clicking on .

Create user

Username

Privilege Groups

administrators

operators

monitoring

Confirm password

Cancel Create

8.7) «Update» tab.

The screenshot shows the Light Stream Player interface. The top bar displays 'Ekaterinburg Light Stream office' and 'Administrator'. The sidebar on the left contains navigation options: Scheduler, Cues, Playlists, Triggers, Devices, and Settings. The 'Update' tab is selected in the Settings section. The main area shows the 'Updates' section with an 'Update list' table. The table has columns for Name, Version, Status, Description, and Actions. One update is listed: 'Imp_000014005.update' with version '0.14.5' and status 'installed'. The 'Actions' column for this update contains 'Rollback' and 'Delete' buttons. An 'Upload' button is located in the top right corner of the update list area. The bottom status bar shows the time '16:08', the date '13 November 2024', and the current playlist 'Composition005.cue'.

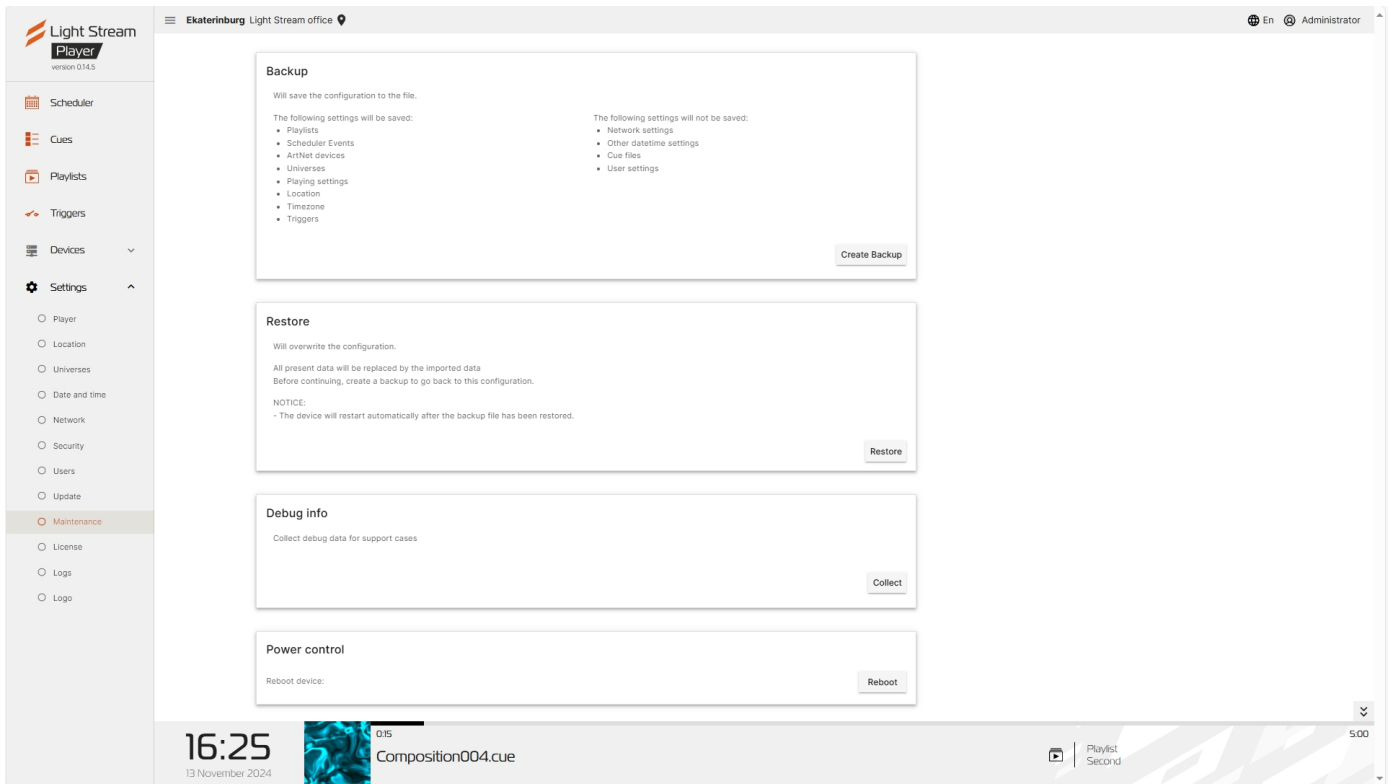
This tab window allows you to update the Player software.

To do this, press the **Upload** button, after which a window for downloading the received update will open.

The screenshot shows a dialog box titled 'Upload an update file'. It contains a file upload icon (a paperclip) and a text input field. At the bottom of the dialog, there are two buttons: 'Cancel' and 'Upload'.

After that the update file will appear in the list. To check the downloaded updates, click the "Check" button, After checking, the "Install" button will appear, after clicking on it the installation will start. It will take a few minutes, after which Player will reboot. The installed update can be rolled back with the "Rollback" button and uninstalled with the "Delete" button.

8.8) «Maintenance» tab.



Player has the ability to create and upload configuration backups

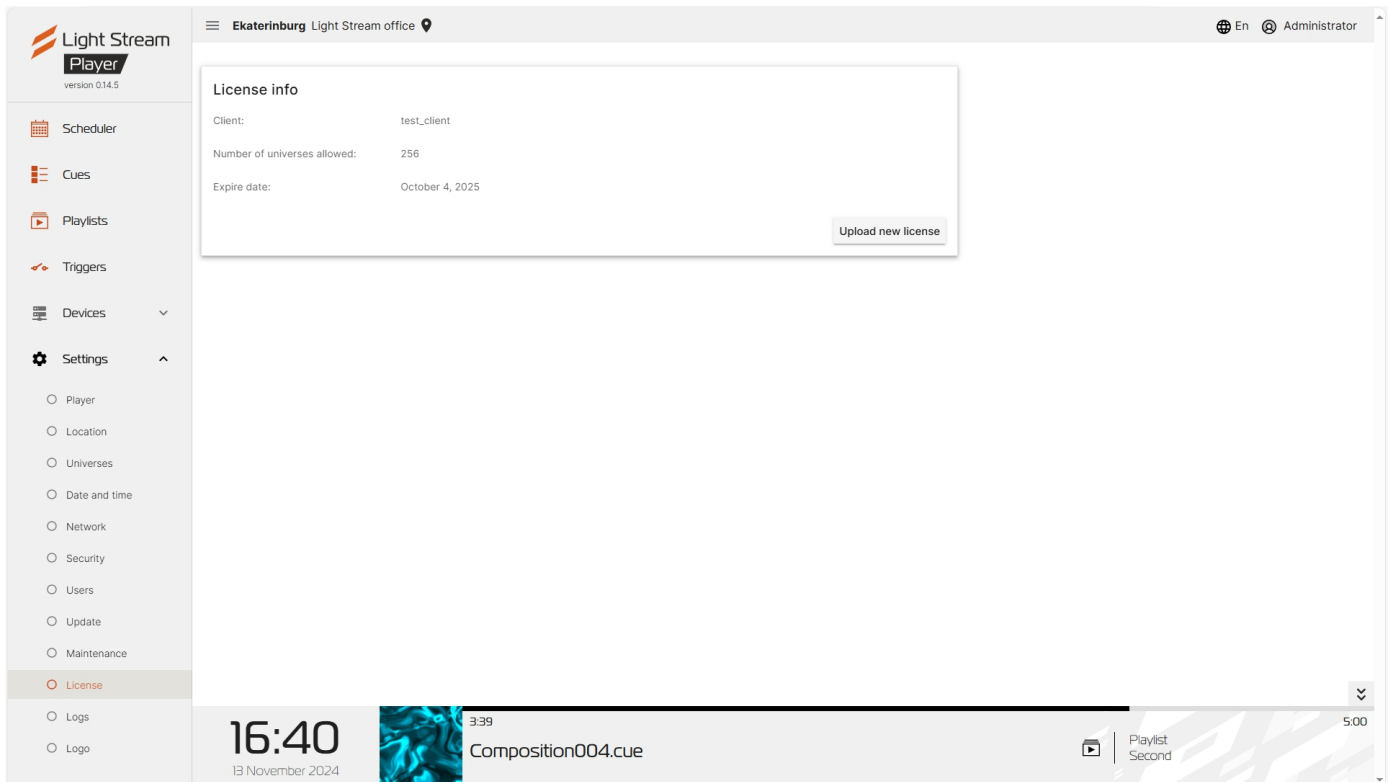
To create and load a configuration file, press button **Create Backup** , after that you will be offered to save the file with *.backup extension.

If you need to restore the Player configuration, you need to press the button **Restore** then select the previously created configuration file. After loading Player will restart.

In the **Debug info** window you can collect debugging data for calls to the support team. To do this, press **Collect** .

In the **Power control** window, you can reboot the device. To do this, press **Reboot** .

8.9) «License» tab.



The screenshot shows the Light Stream Player interface. The top bar displays the location "Ekaterinburg Light Stream office" and the user "Administrator". The left sidebar contains navigation options: Scheduler, Cues, Playlists, Triggers, Devices, and Settings. The Settings menu is expanded, showing options like Player, Location, Universes, Date and time, Network, Security, Users, Update, Maintenance, License (selected), Logs, and Logo. The main content area shows the "License info" window with the following details:

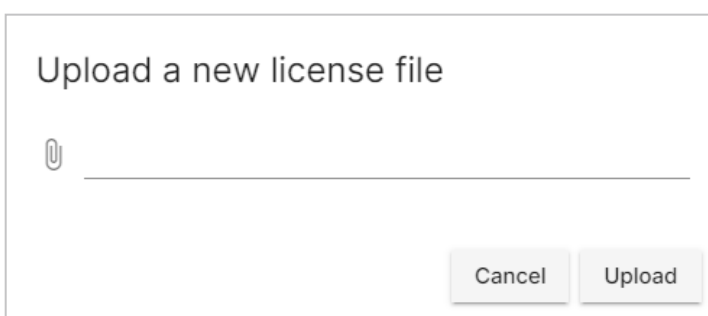
License info	
Client:	test_client
Number of universes allowed:	256
Expire date:	October 4, 2025

An "Upload new license" button is located at the bottom right of the license info window. The bottom status bar shows the time "16:40" on "13 November 2024", a video thumbnail, the track name "Composition004.cue", and the playlist name "Playlist Second" with a duration of "5:00".

The window of this tab provides information about the current licence.

It is also possible to upload a new licence file if necessary.

To do this, press the button **Upload new license**, after which a window will open with a choice of licence file with *.lic extension.



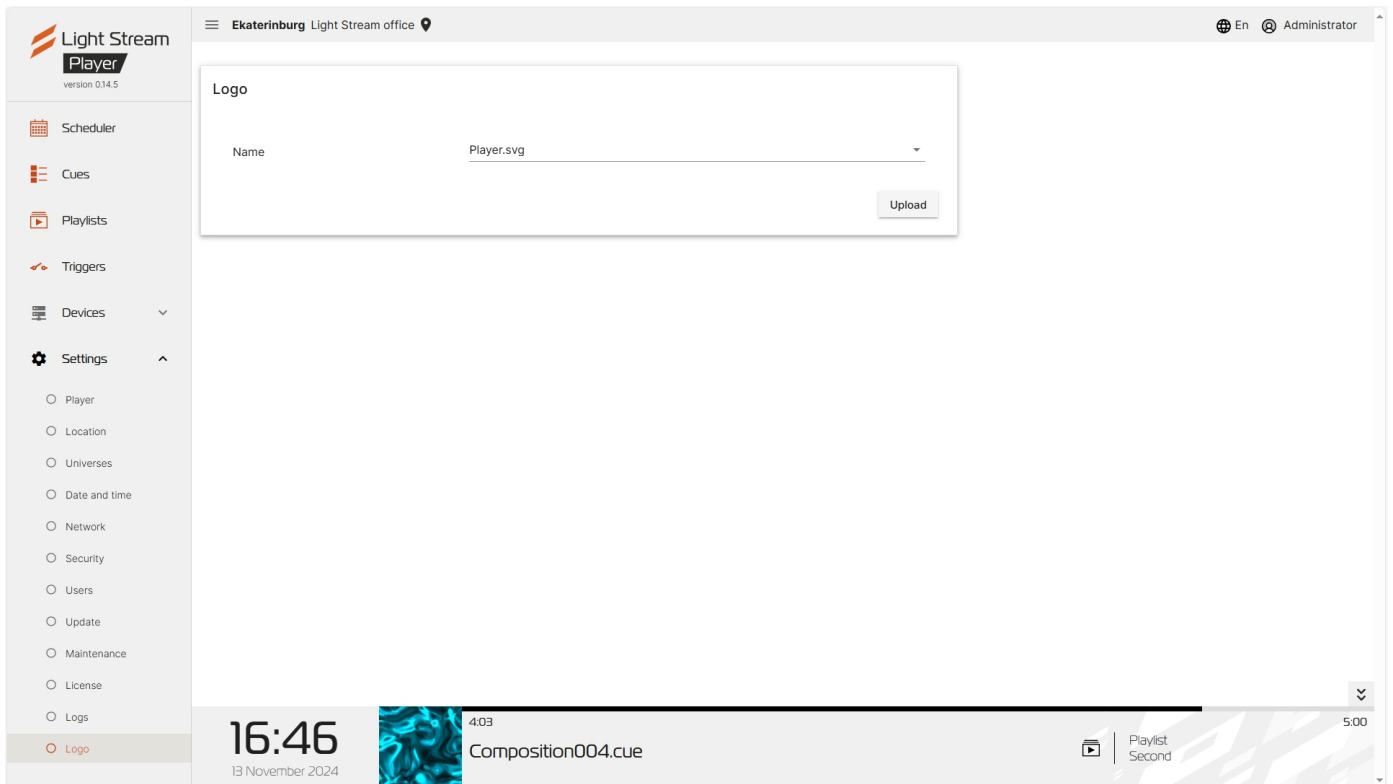
The dialog box titled "Upload a new license file" features a paperclip icon on the left and a horizontal line for file selection. At the bottom, there are two buttons: "Cancel" and "Upload".

8.10) «Logs» tab.

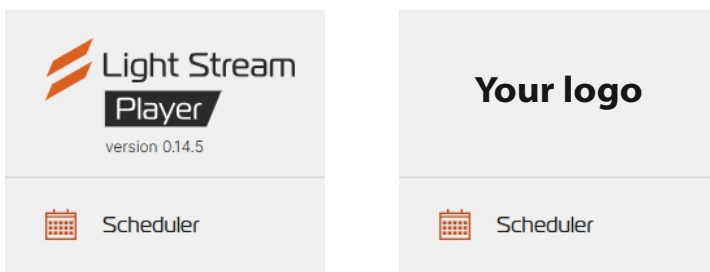
The screenshot shows the Light Stream Player interface. The top bar displays the location 'Ekaterinburg Light Stream office', language 'En', and user 'Administrator'. The sidebar on the left contains navigation items: Scheduler, Cues, Playlists, Triggers, Devices, Settings (expanded), and Logs (selected). The main content area is titled 'service log' and contains a list of log entries. Each entry follows a similar pattern: a timestamp, a severity indicator (E for Error, W for Warning), a message, and a URL. The messages include '404 Client Error: Not Found for url: http+unix://%2Frun%2Fgunicorn.sock/api/cue/3/' and '404 Client Error: Not Found for url: http+unix://%2Frun%2Fgunicorn.sock/api/cue/4/'. The bottom status bar shows the time '16:42', the date '13 November 2024', and the current cue 'Composition004.cue'. There is also a 'Playlist Second' indicator and a '5.00' value.

The logged events are shown in the window of this tab.

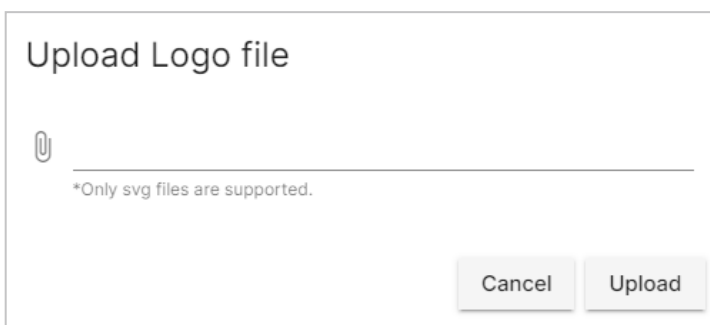
8.11) «logo» tab.



On this tab the user can change the logo, located in the upper left corner to any other logo.



To do this, press the button **Upload** and in the opened window select the required logo in SVG format.



9) Configuring the GSM module.



To set up remote access via GSM module, it is necessary that the sim card, issued by the telecom operator has a static 'white' address. It is necessary to obtain connection details (apn server, user name and password) from the telecom operator that issued the sim card. Having obtained these settings we proceed to further steps.

Setting up the access point (APN)

To change the settings, follow the steps below

1. Log in to the player's web interface using an account with administrator privileges.
2. From the side menu, select **[Settings]** -> **[Network]**.
3. On the modem interface card in the APN settings block, click the button **Edit**.
The form will open **Edit APN settings**.

Edit APN settings

APN:
realip.ural

Username:
mts

Password:
mts

*indicates required field

Cancel Save

4. Specify the settings received from the service provider.
5. Press the button **Save**.
6. (Optional) In rare cases it is required to set the ip address manually.
This can be checked with your service provider.
To set the ip address, please use the corresponding instructions in the «Changing the network settings on the player» section of this manual.



When using a white IP address, and therefore access from the Internet, we strongly recommend using an SSL certificate for security reasons and enable HTTPS protocol. (How to do this is described below)

Creating a self-signed ssl certificate

A self-signed certificate is a special type of digital certificate signed by its subject. Technically, such a certificate is no different from a certificate signed by a certification centre (CA), except that instead of sending it to the CA for signing, the user creates his own digital signature.

The self-signed certificate is issued for a period of three years.

Steps to create a self-signed certificate.

1. Log in to the player's web interface using an account with administrator privileges.
2. From the side menu, select **[Settings]** -> **[Security]**.
3. In the block **Certificates** click on the button **Generate**.



4. In the opened form **Certificate Request** form it is necessary to fill in the **Name** field and put a marker in the Certificate type section to the value **Self-sign**. Fields **Common name** and **Subject alternative name** will be filled in automatically. The rest of the fields are filled in as desired.

Certificate Request

Name

Certificate type: Self-sign CSR

Common name

Subject Alternative Name (optional)

Organization (optional)

Organization Unit (optional)

Country (optional)

State/Province (optional)

Local address (optional)

Cancel Save

5. Click the form button **Save**.

6. The newly created certificate should appear in the list of certificates, which can be used later for configuration https protocol

Downloading a certificate from an external certification authority

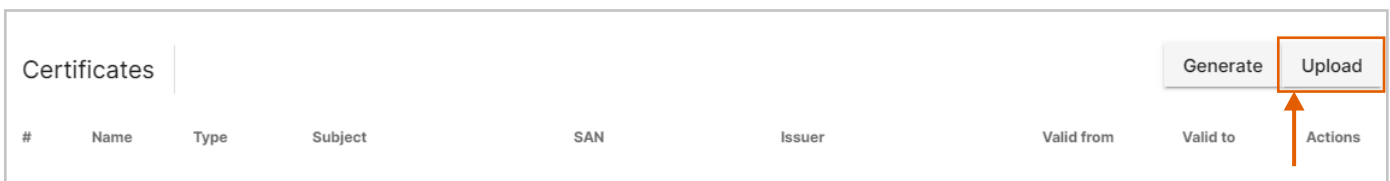
An SSL certificate is a digital certificate that authenticates a website and allows you to use an encrypted connection. to use an encrypted connection. SSL stands for Secure Sockets Layer, a security protocol that creates an encrypted connection between a web server and a web browser. SSL stands for Secure Sockets Layer, a security protocol that creates an encrypted connection between a web server and a web browser



The certificate and private key files must be in pem format.
The private key file must not be password protected.

Steps to download an ssl certificate

1. Log in to the player's web interface using an account with administrator privileges.
2. From the side menu, select **[Settings]** -> **[Security]**.
3. In the block **Certificates** click on the button **Upload** which will open form **Upload Certificate**.



4. Fill in the **Name** field. The name of the certificate must be unique and not used by previously downloaded or generated certificates.

5. Click on the field **Certificate file** and select the ssl certificate file.

6. Click on the field **Private Key File** and select the private key file.

7. Click the **Save** form button.

8. In the list of certificates you should see a newly downloaded certificate that can be used later to https protocol configuration.

Upload Certificate

New certificate Certificate corresponding csr

Name

Certificate file

Private Key File

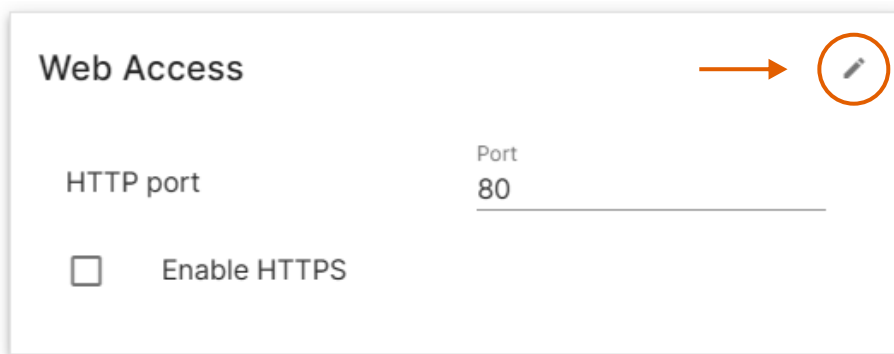
Intermediate or chain certificate file (optional)

Enabling HTTPS

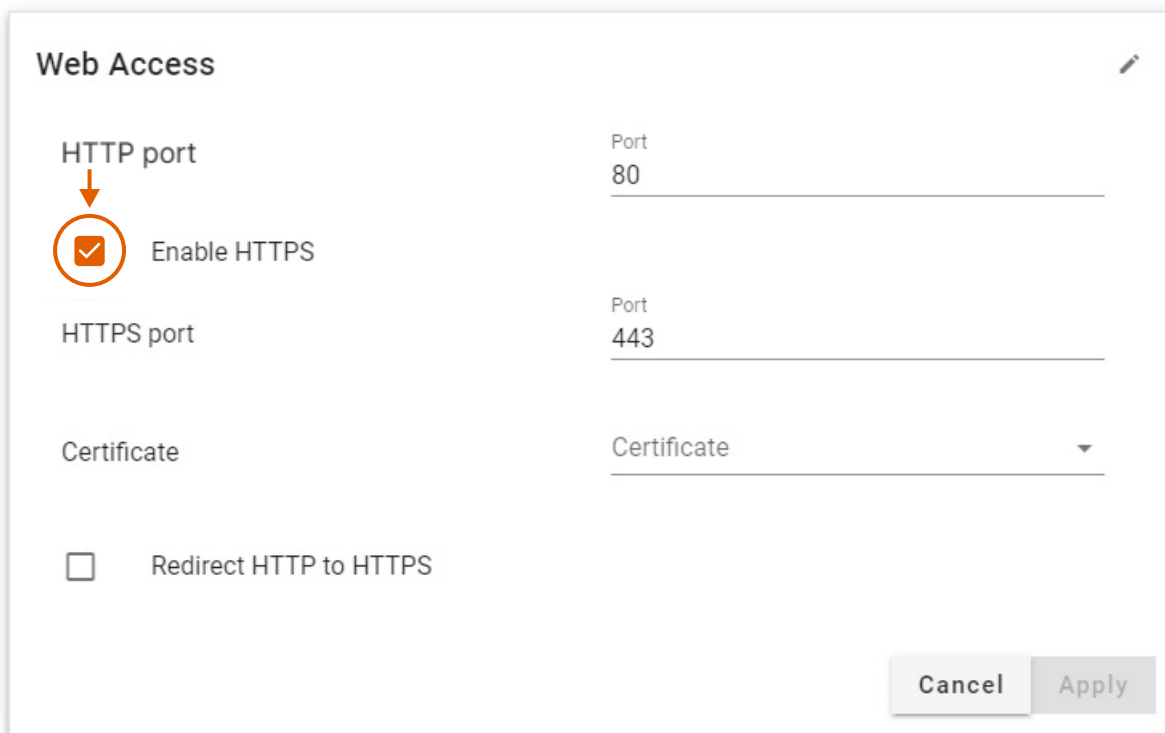
HTTPS protocol provides secure and confidential information exchange between the player's web interface and the user's device. Thanks to HTTPS-protocol the data you leave on the website will be securely protected and will not fall into the hands of fraudsters. data you leave on the site will be securely protected and will not fall into the hands of fraudsters.

Steps to activate HTTPS

1. Log in to the player's web interface using an account with administrator privileges.
2. From the side menu **[Settings]** -> **[Security]**.
3. In the **Web Access block** click on the edit icon.



4. Tick the box **Enable HTTPS**.



5. In the **Certificate field** select a pre-generated or downloaded SSL certificate.

The screenshot shows the 'Web Access' configuration panel. It includes fields for 'HTTP port' (80) and 'HTTPS port' (443). The 'Enable HTTPS' checkbox is checked. The 'Certificate' dropdown menu is highlighted with an orange box and an arrow pointing to it. The 'Redirect HTTP to HTTPS' checkbox is unchecked. 'Cancel' and 'Apply' buttons are at the bottom right.

6. To redirect and prevent access to the player's web interface via http, tick the **Redirect HTTP to HTTPS**.

The screenshot shows the 'Web Access' configuration panel. The 'Redirect HTTP to HTTPS' checkbox is circled in orange with a downward arrow pointing to it. The 'Enable HTTPS' checkbox is checked. The 'Certificate' dropdown menu is visible but not highlighted. 'Cancel' and 'Apply' buttons are at the bottom right.

7. Click **Apply** then refresh the page.

Changing the network settings on the player

The network interface settings are divided into two parts:

- ip addressing settings
- DNS server settings

To change the settings, follow the steps below

1. Log in to the player's web interface using an account with administrator privileges.
2. From the side menu, select **[Settings]** -> **[Network]**.
3. On the card of the interface to which you want to change the settings in the block ip addressing click on the **Edit** button.

The **Edit network IP settings** form opens.

Edit network IP settings

IP Assignment:
Manual ▼

IP Address:
192.168.0.205

Network Mask:
255.255.255.0

Gateway:
192.168.0.1

*indicates required field

Cancel Save

4. In the **IP Assignment** field select the method of ip addressing assignment.

Addressing settings can be set manually or received via DHCP.

If you choose DHCP, go directly to point 6.

5. Fill in the IP Address, **Network Mask and Gateway** fields
6. Press the **Save** button.
7. (Optional) If you selected the manual method of setting the settings, on the interface card to which you have changed addressing in the DNS block, click the **Edit** button.
The **Edit DNS settings form** will open.

Edit DNS settings

DNS Assignment:
Manual ▼

Primary DNS server:
8.8.8.8

Secondary DNS server:

*indicates required field

Cancel Save

8. In the **DNS Assignment** field, select **manual**.
9. Specify current dns servers.

GSM module configuration is complete.