



**OMS**™

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# Introduction

OMS is a software tool for computers that enables remote and centralized management of multiple large display devices by IT Administrators/technicians through a local area network (LAN).

OMS management capabilities include the ability to remotely monitor, control, diagnosis, alert and configure displays individually or as groups for both Optoma and Non-Optoma Display (with PJLink Class2 support).

## System requirements

OS (Operating system)	Windows 10 (32bit / 64bit) ※Microsoft .NET Framework 4.5.2 or later is required
CPU	Intel i5, or above
Memory	4GB or higher (8GB is recommended).
Hard disk space free	a. Drive C and Drive D. b. Available disk space: 100MB in Drive (C or D).
Display	1054x640 or higher It is suggested that the resolution for your computer is set to 1054x640 or higher with a standard size/ratio to ensure the best visualization of the OMS interface.
Connectivity	1. RJ45 Ethernet port & Network connection 2. DHCP (with Intranet IP Address)
Notes	1. Note that this does not guarantee that any computer satisfying the above requirements will be able to run the software. 2. For a display to support management via OMS the display must feature the following items: An RJ-45 Ethernet port with LAN control functionality

# Launching the Software

## Initial Setup

Before you can properly use OMS to manage your display(s) the following setup procedures must be completed:

- Connect the displays and computer to the same network
- Install OMS on your computer
- Configure display settings

## Connecting the display(s) and computer to a network

To connect the displays and computer to the same network, follow the steps below:

1. Connect the displays to an Ethernet LAN or WAN network via a hub, switch or router using RJ-45 cables.
2. Connect the computer to the same network using either an RJ-45 cable or via a wireless connection.

## Installing OMS

To install OMS on your computer, first ensure that the computer meets the minimum system requirements described in the System requirements section of this User Manual, then follow the steps below:


1. Download the OMS software from the following URL:

<https://www.optoma.com/support/download/world-wide/>  
<https://www.optoma.com.cn/support/download/>

2. Launch the installation file and follow the on-screen instructions to complete the installation.

- For details on the location of ports and connectors, please refer to the documentations for the computer and displays.
- It is suggested that you connect your computer to the network using a RJ-45 cable to ensure a stable connection.



To launch the software, simply double-click the software shortcut icon (  ) on the desktop. The main page will appear on the screen.

# Using the Software

This section describes how to set up and use the software for managing your device(s) remotely.

## Adding a Device

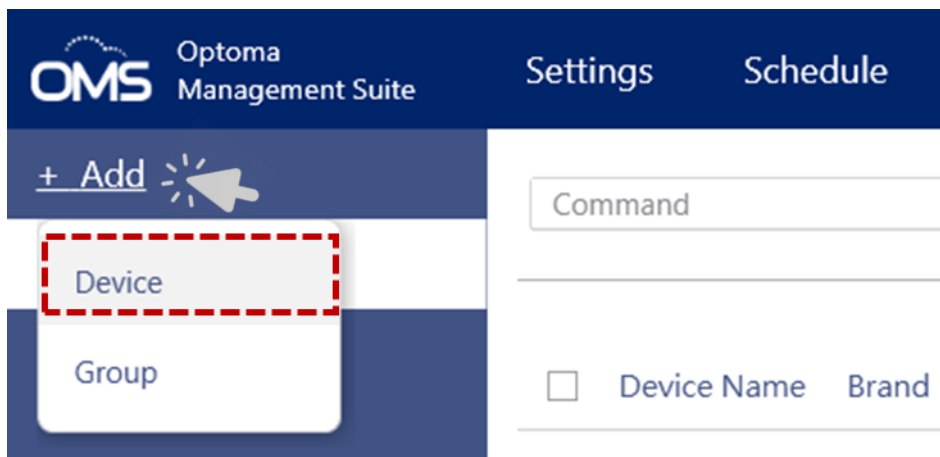
Before adding any device, ensure that you have properly configured the network settings on the device that you want to add.

**Note:**

1. For more information about the network configurations, please refer to the device documentation.
2. For Optoma devices, please
  - Remember that you must first setup the projector's password via the website, otherwise the connection will fail (no connection will be made).
  - Turn off the OSD security lock
  - Turn on Telnet OR PJLink in network settings and change the power mode to "Active Mode" or "Communication Mode".
  - \*\*QUAD LED Display, please power on the device first.
3. For Other devices, please turn on Telnet in network setting and change the power mode to "Network Standby Mode".

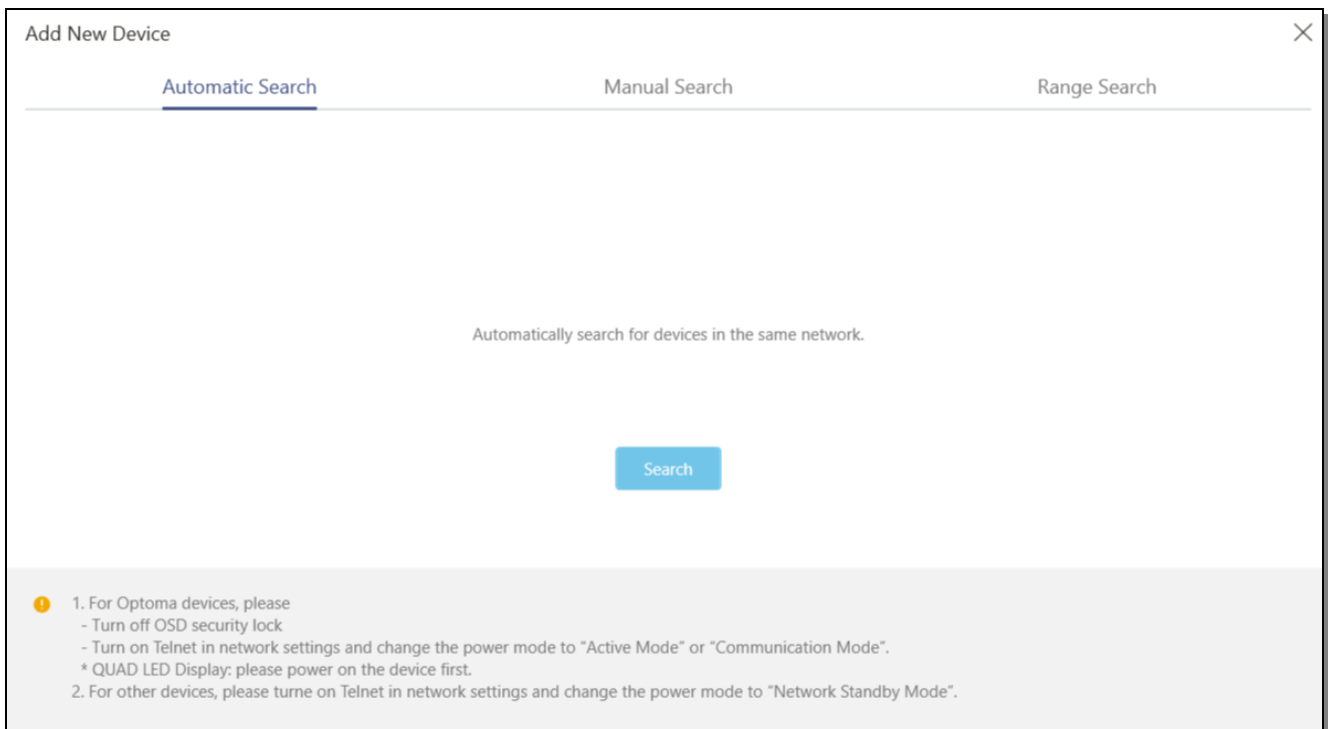
To add a device, do the following:

From the left panel, click **Add > Device**.



In "Add device" pop-up window, choose one of the following options:

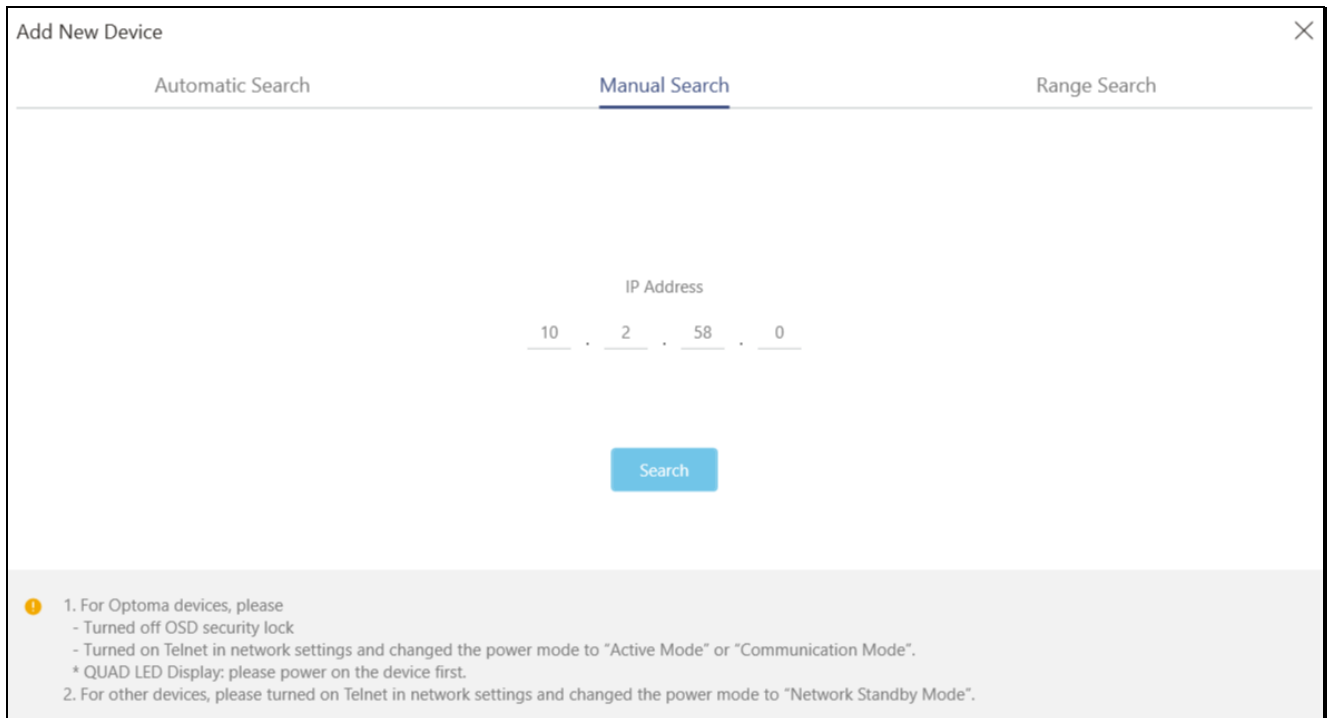
- Automatic Search: Search for devices on the same network. Click "**Search**".



**Note:**

For Non-Optoma Product, the Automatic Search function only supports PLink class 2.

- Manual Search: Search for devices by specifying the IP address. Enter an IP address.



- Range Search: Search for devices by setting an IP address range. Enter an IP address in Start IP address and End IP address, and then click **“Search”**.

Add New Device
✕

Automatic Search
Manual Search
Range Search

Start IP Address

10 . 2 . 58 . 0

End IP Address

10 . 2 . 58 . 255

Search

! 1. For Optoma devices, please

- Turned off OSD security lock
- Turned on Telnet in network settings and changed the power mode to "Active Mode" or "Communication Mode".
- \* QUAD LED Display: please power on the device first.

2. For other devices, please turned on Telnet in network settings and changed the power mode to "Network Standby Mode".

- After your search method finds devices connected on your network, you can check the box next to the device you wish to add to your device list.
- In the **"Device Name"** box, you may customize the name of each device as it will appear in your device list.
- You may also choose to select a **"Group"** for which each device will belong to and add additional notes in the **"Note"** section. Once ready to add devices, you will click the **"Add"** button.

Add New Device
✕

	IP Address	Brand	Device Name	Group	Protocol	PLink Password	Note
<input checked="" type="checkbox"/>	192.168.50.4	Optoma	<input type="text" value="IFP 5 RJ45"/>	<span>All</span> ▾	Optoma	--	<input type="text"/>
<input type="checkbox"/>	192.168.50.11	Optoma	<input type="text" value="192.168.50.117"/>	<span>All</span> ▾	Optoma	--	<input type="text"/>
<input checked="" type="checkbox"/>	192.168.50.23	Optoma	<input type="text" value="IFP 5 WiFi"/>	<span>All</span> ▾	Optoma	--	<input type="text"/>

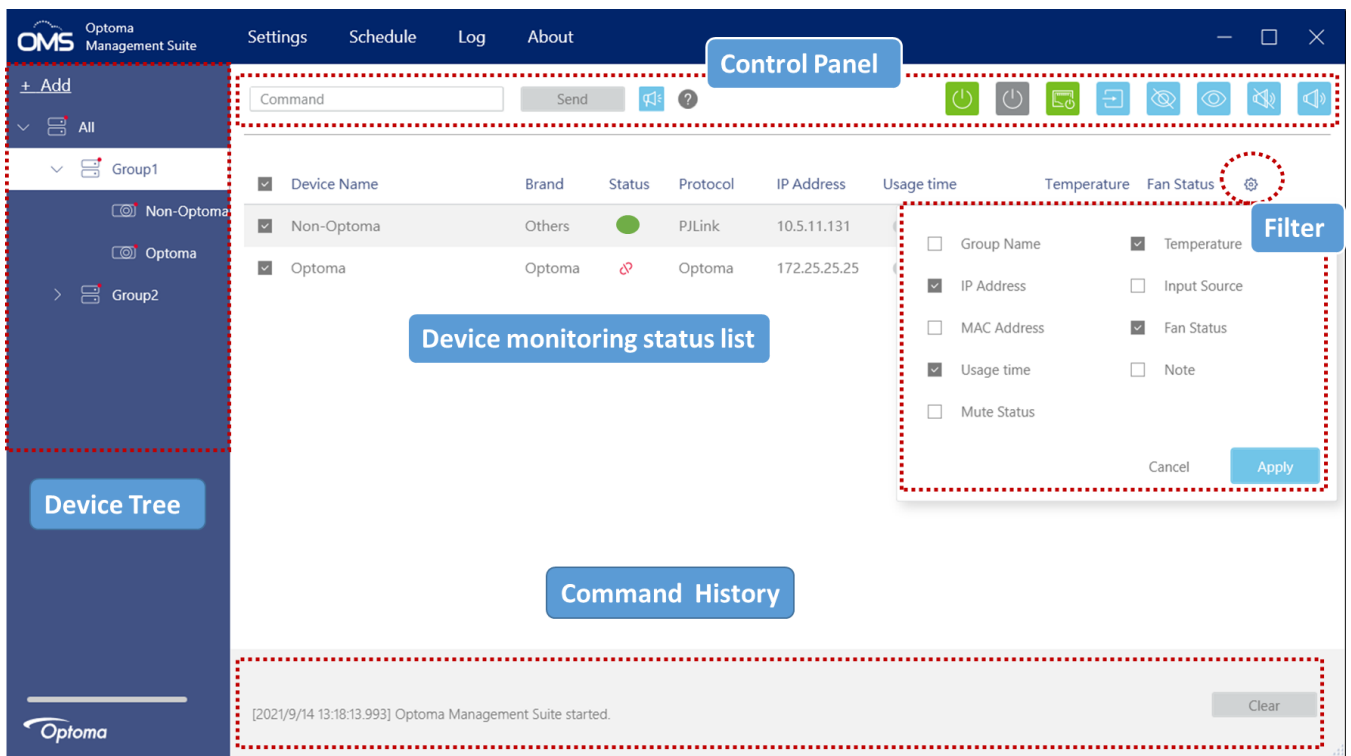
Cancel
Add



If you have successfully added the device(s), the device(s) will appear in the device list. From this page, you can view device information, including:

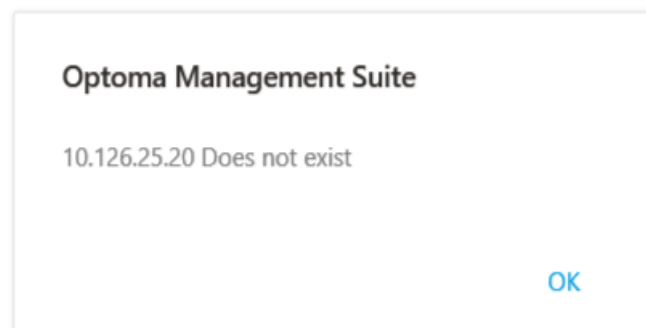
- (a) Device Name\* (b) Brand\* (c) Status\* (d) Protocol \* (e) IP address, (f) Usage time
- (g) Mute status (h) System temperature (i) Fan Status (j) Input source
- (k) Group Name (l) Note (m) command history

**Note:** "\*"The default value cannot be cancelled

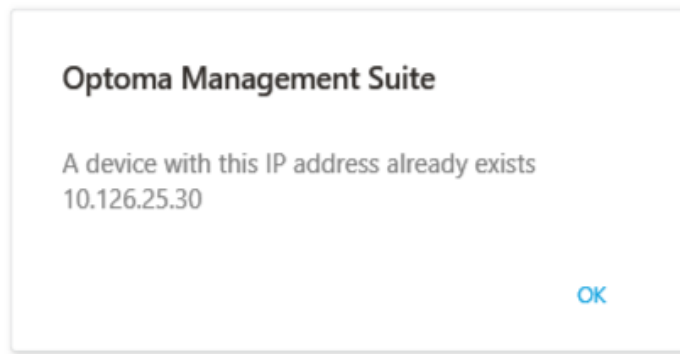



**Note:**


- ❖ If the message below appears on the screen when adding a device, follow the step below.



- ✓ Check the network configurations on the device.



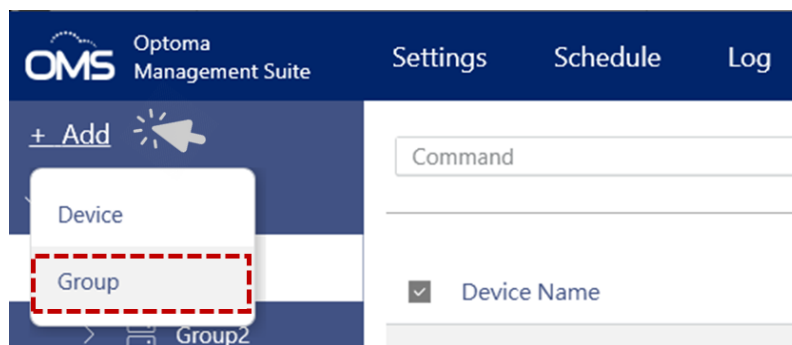
- ✓ Change the IP address of the device. You cannot add multiple devices with the same IP address.
- ❖ When the device is turned on and properly connected, the status indicator will appear 'green' (●). Otherwise, it will appear 'gray' (●) device off; (  )- device disconnected).

'green' (●)	Device power on and connected
'gray' (●)	Device power off and connected
	Device disconnected

## Creating a Group

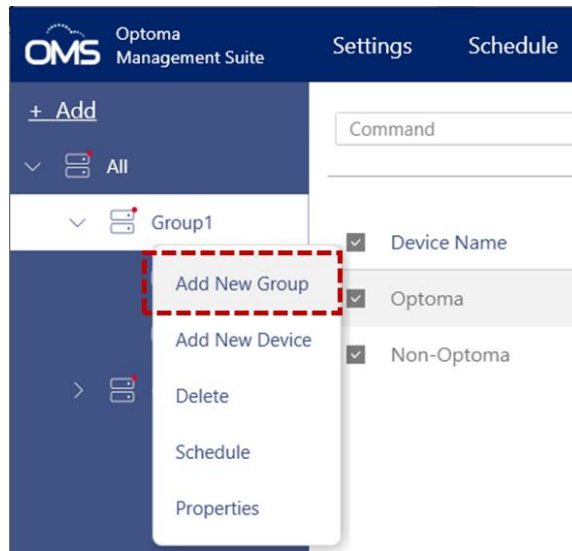
To create a group, do the following.

From the left panel, click **Add > Group**.



**Note:**

You can also add a group by right-clicking on the **Group** icon and selecting **Add New Group**.



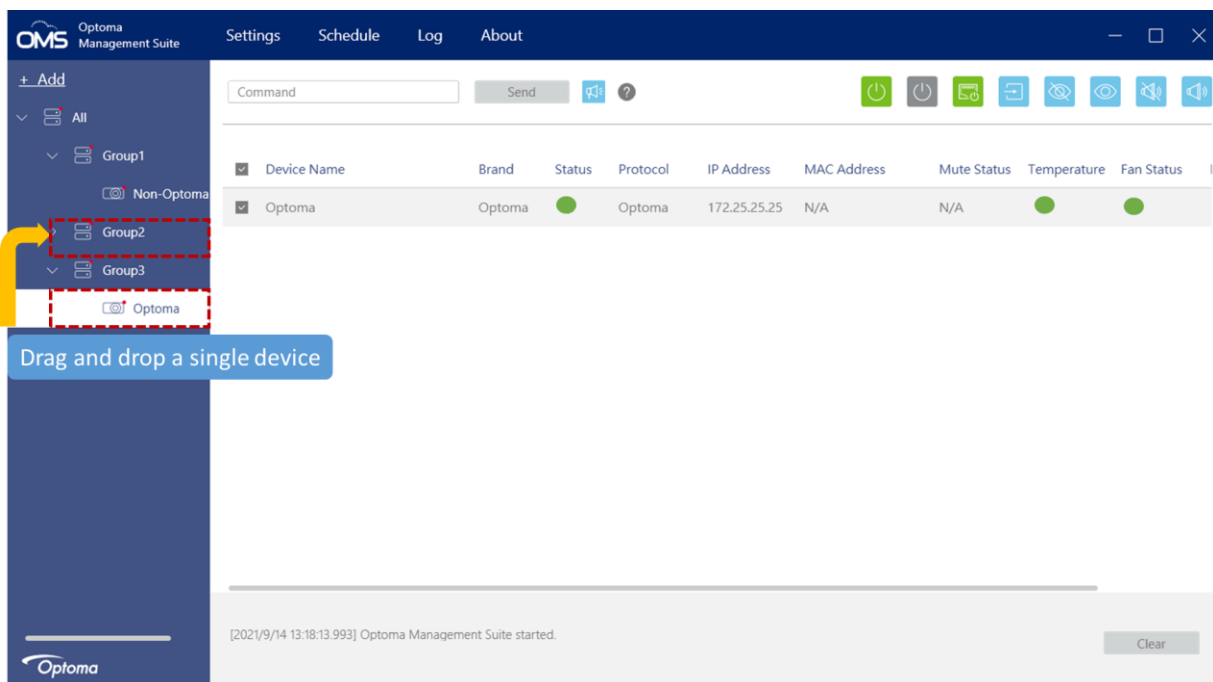
Enter the group name and its description (optional). Click **Add**.

**Add New Group**

Name

Note

**Note:** You can drag and drop a single device or a group of devices into the group.








# Controlling the Device

From the main page, you can access the **Control Panel** directly to control the device. Simply select the device and click the desired option.



No.	Item	Description
1		<p><b>Command:</b> Control the device by using the RS232 command or PJLink Command. Enter the command and click <b>Send</b>.</p> <p><b>Note:</b> For more information, please refer to <b>Optoma RS232 Protocol Function List</b> documentation or PJLink. **PJlink can only be used if the device supports it</p>
2		<p><b>Broadcast Message</b> Click to send the message function (Up to 30 English characters)</p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. The function only supports Optoma specific Products.</li> <li>2. Only supports English characters</li> </ol>
3		<ol style="list-style-type: none"> <li>a. <b>Power on:</b> Click to power on the device.</li> <li>b. <b>Power off:</b> Click to power off the device.</li> </ol>
4		<p><b>Wake on LAN</b> Click to enable Wake on LAN</p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. WOL compatibility depends on device conditions. For Optoma brand, only IFPD supports WOL.</li> <li>2. To use Wake-On-LAN, please <ul style="list-style-type: none"> <li>• Turned on the device and connect to the network via LAN (RJ45).</li> <li>• Re-add the device to OMS.</li> <li>• To Wake-On-LAN, please make sure your devices and computer are connected to the same local area network via LAN port.</li> </ul> </li> </ol>
5		<p><b>Input Source</b> Click to switch the input source.</p> <p><b>Note:</b> This command is not supported by PJLink</p>

6	 	<p>a. <b>AV Mute Off</b>: Click to disable the AV mute function.</p> <p>b. <b>AV Mute On</b>: Click to enable the AV mute function. When enabled, the system blanks the image and mutes the audio.</p>
7	 	<p>a. <b>Mute On</b>: Click to enable the mute function. When enabled, the system mutes the sound temporarily.</p> <p>b. <b>Mute Off</b>: Click to disable the mute function.</p>
8		<p><b>User Manual</b> Click to download the user manual and software</p>

## Managing Schedules

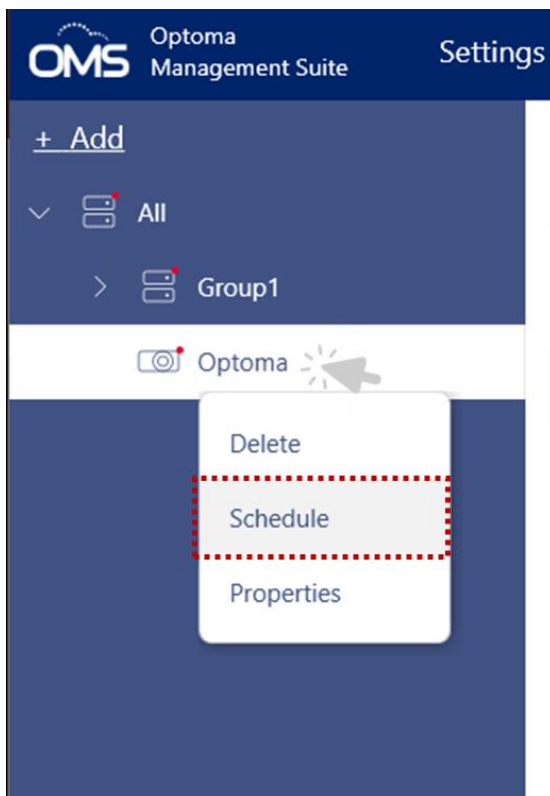
### Adding a Schedule

To add a schedule for a device, do the following:

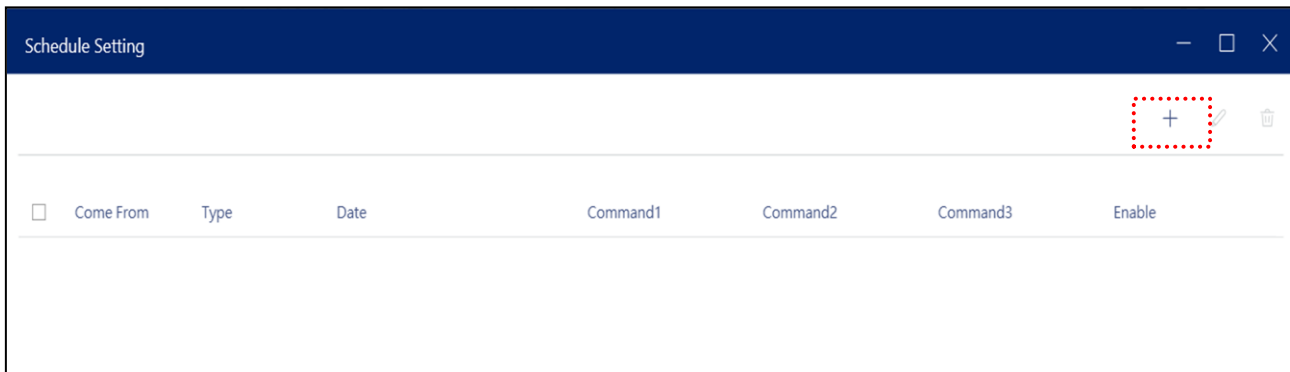
**Note:**

If you want to use the Schedule function, please make sure OMS and the affected devices are connected to the LAN at the scheduled time frame.

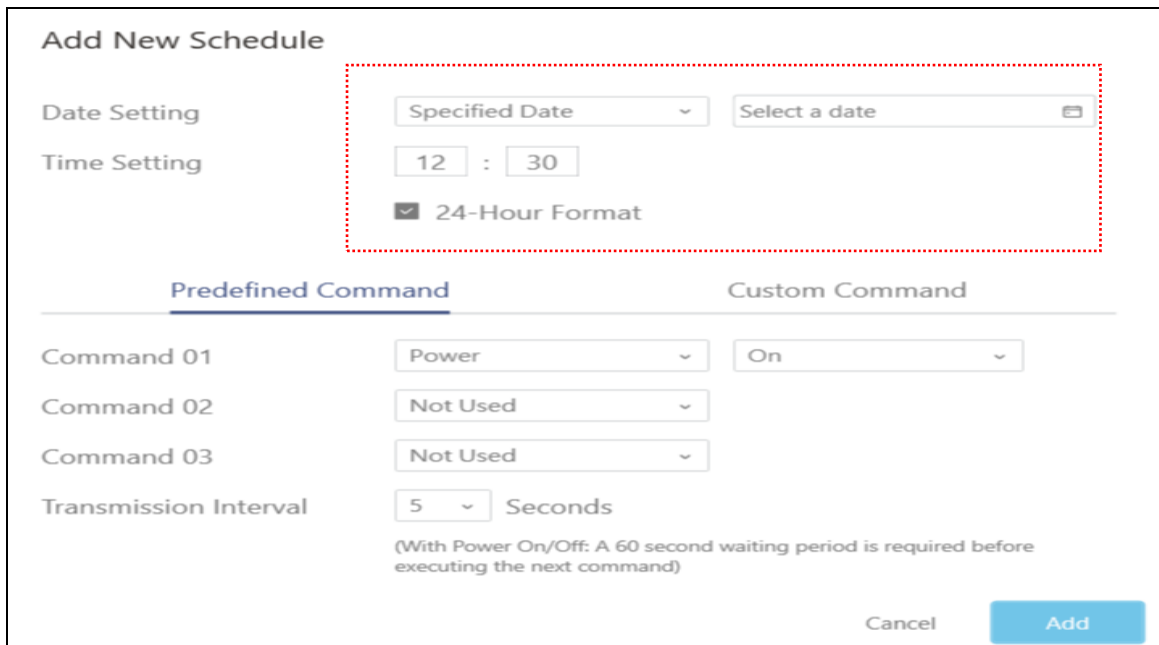
1. From the left panel, right-click on the device for which you wish to set the schedule, then Click **Schedule**



2. The **Schedule Setting** page opens, then click “+”



3. Set the date and time settings.



- Select **Specified Date** to set the schedule on a specific date.

**Add New Schedule**

Date Setting: Specified Date

Time Setting: 12 : 30  24-Hour Format

**Predefined Command**

Command 01: Power

Command 02: Not Used

Command 03: Not Used

February 2021

Su	Mo	Tu	We	Th	Fr	Sa
31	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	1	2	3	4	5	6
7	8	9	10	11	12	13

- Select **Every Day** to set the daily schedule.

**Add New Schedule**

Date Setting: Every Day

Time Setting: 12 : 30  24-Hour Format

Select Weekly to set the schedule on the selected day(s) of the week.

**Add New Schedule**

Date Setting: Weekly

Sun.  Mon.  Tue.  Wed.  Thur.  Fri.

Sat.

Time Setting: 12 : 30  24-Hour Format

On the **Predefined Command** tab, click the respective drop-down menu to select the command(s) to be activated at the preset schedule.

**Note:**

- ❖ You can also manually enter the RS232 or **PJLink** command by selecting the **Custom Command** tab.
- ❖ With Power On/Off command, a 60 second waiting period is required before execution of the next command.

- ❖ For more information, please refer to **Optoma RS232 Protocol Function List** documentation and **PJLink protocol documentation**.

Set the transmission interval time (period of time between sending each command).



Predefined Command
Custom Command

Command 01	Power	On	
Command 02	Not Used		
Command 03	Not Used		
Transmission Interval	<div style="border: 1px solid #ccc; padding: 5px;"> <div style="display: flex; align-items: center;"> <span style="border: 1px solid #ccc; padding: 2px 5px;">5</span> <span style="margin: 0 5px;">^</span> <span>Seconds</span> </div> <div style="font-size: 0.8em; margin-top: 5px;">             er On/Off: A 60 second waiting period is required before              the next command)           </div> </div>		
		Cancel	<span style="background-color: #00a0e3; color: white; padding: 5px 15px; border-radius: 3px; cursor: pointer;">Add</span>

Click **Add**. The added schedule appears in the list.

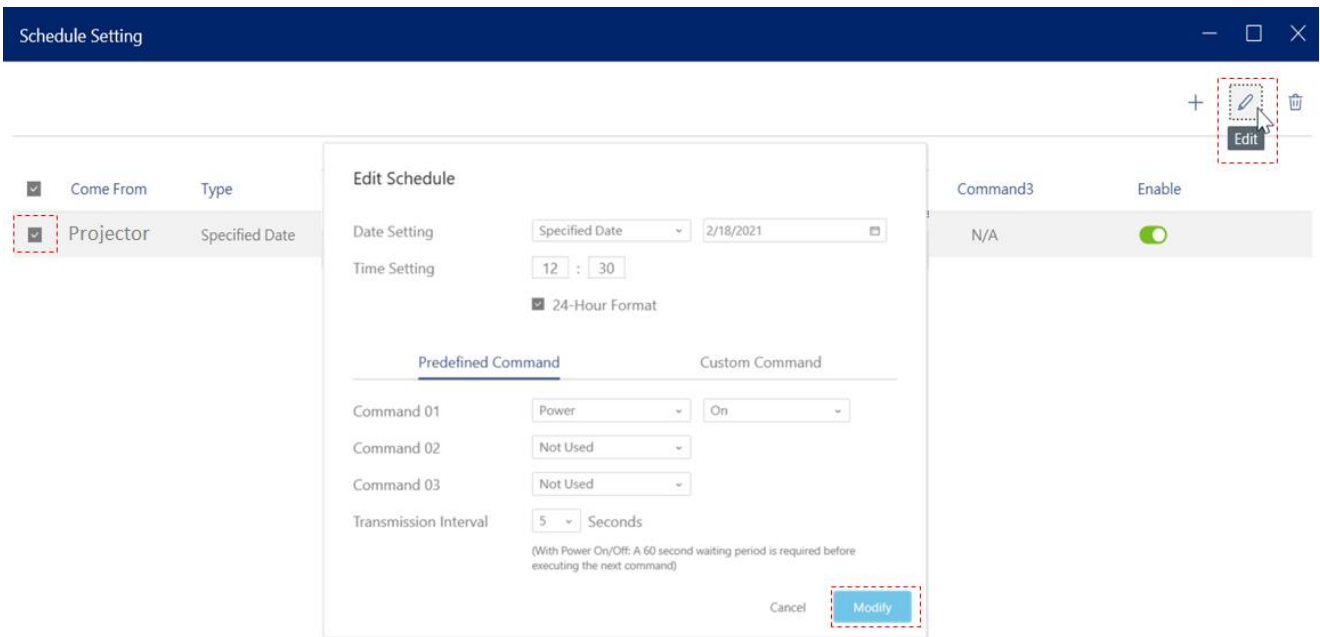
Schedule Setting							
	Come From	Type	Date	Command1	Command2	Command3	Enable
<input type="checkbox"/>	Projector	Specified Date	02/18/2021 12:30	<span style="color: green;">⏻</span> Power On	N/A	N/A	<span style="color: green;">⏻</span>

## Modifying a Schedule

To modify a schedule, do the following:

Select the schedule you want to modify, then click “ ” to Edit.

Change the necessary settings, then click “**Modify**” to apply the changes.

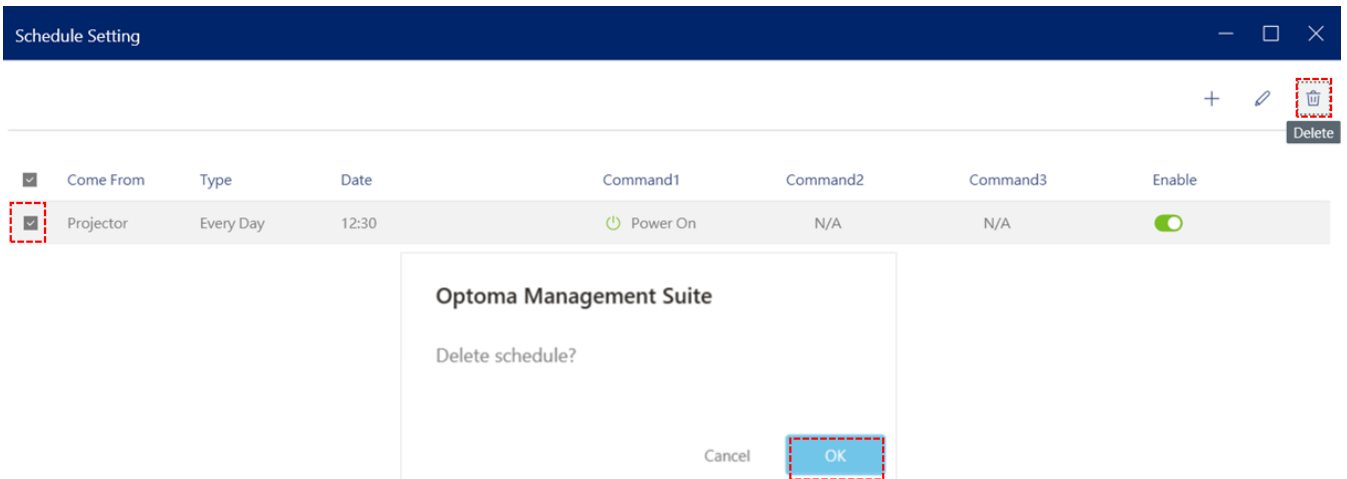


## Deleting a Schedule

To delete a schedule, do the following:

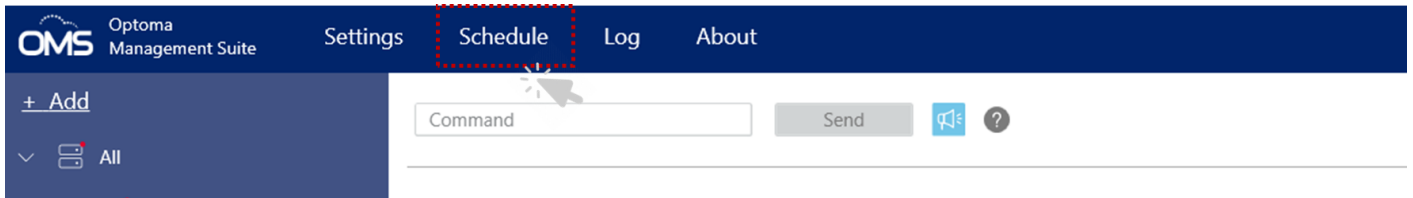
Select the schedule you want to delete, then click **Delete**.

A confirmation message appears on the screen. Click **OK** to delete the selected schedule.



## Viewing All Schedules

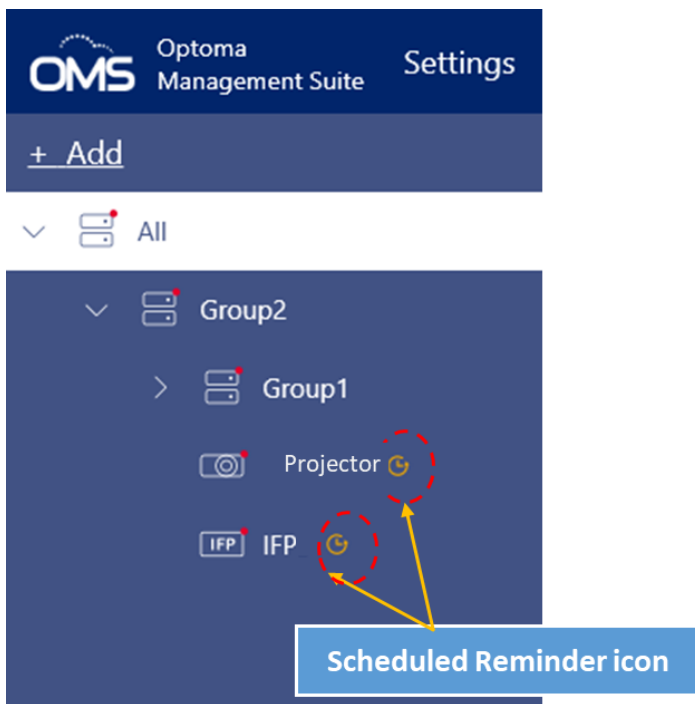
You can view all set schedules by clicking **Schedule** on the top menu panel.



The schedule list for all devices will appear on the screen.

Device	Come From	Type	Date	Command1	Command2	Command3
Projector	Projector	Specified Date	02/18/2021 12:30	Power On	N/A	N/A
IFP	IFP	Weekly	Tue., 12:30	AV Mute	N/A	N/A

The scheduled reminder icon will be displayed on the related device.

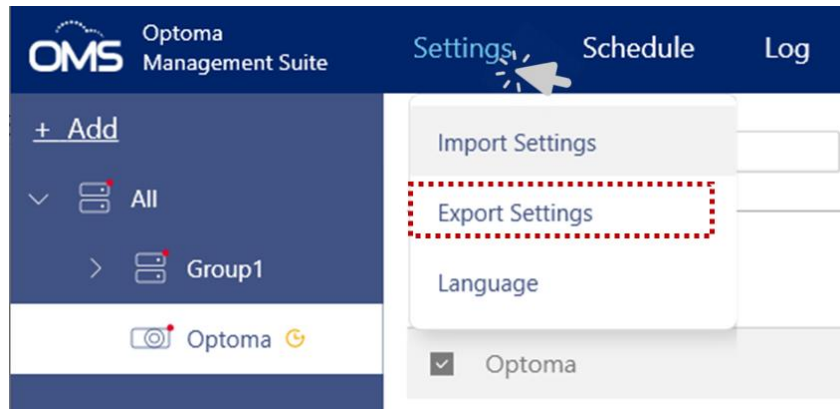


# Configuring Other Settings

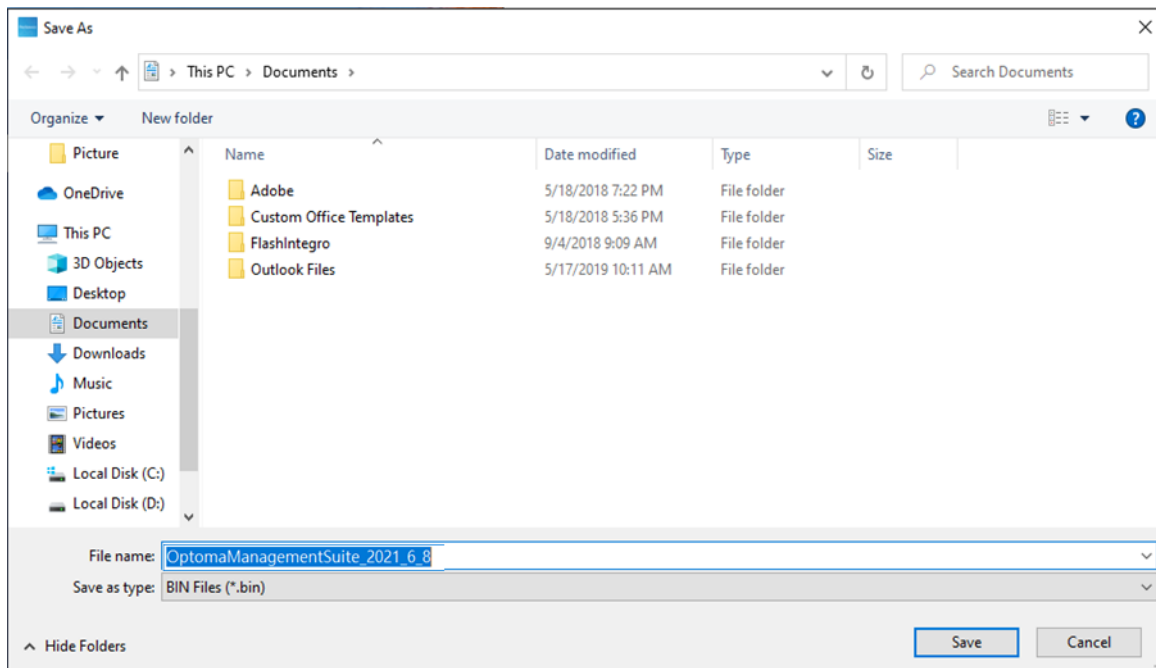
## Exporting Settings

To save the current settings configuration, do the following:

From the top menu panel, click **Settings**, then select **Export Settings**.



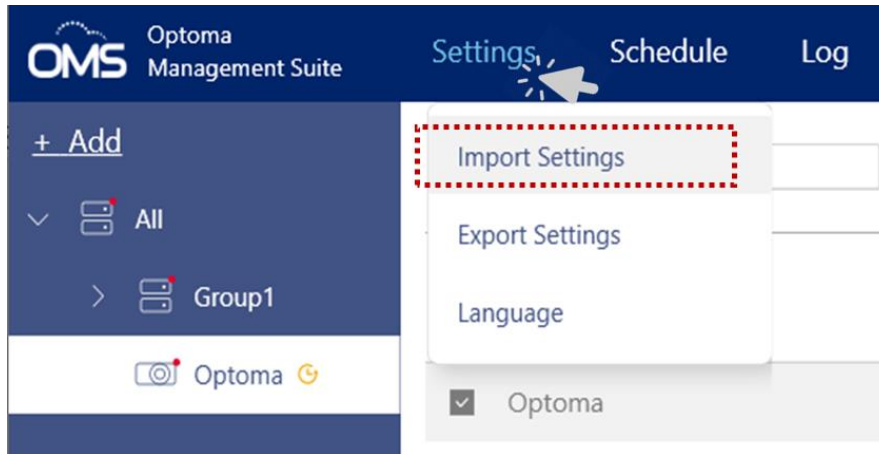
Select the location where you want to save the file, then confirm the file name and click **Save**.



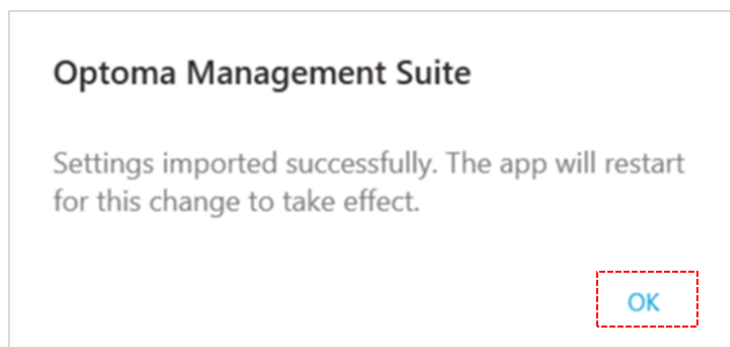
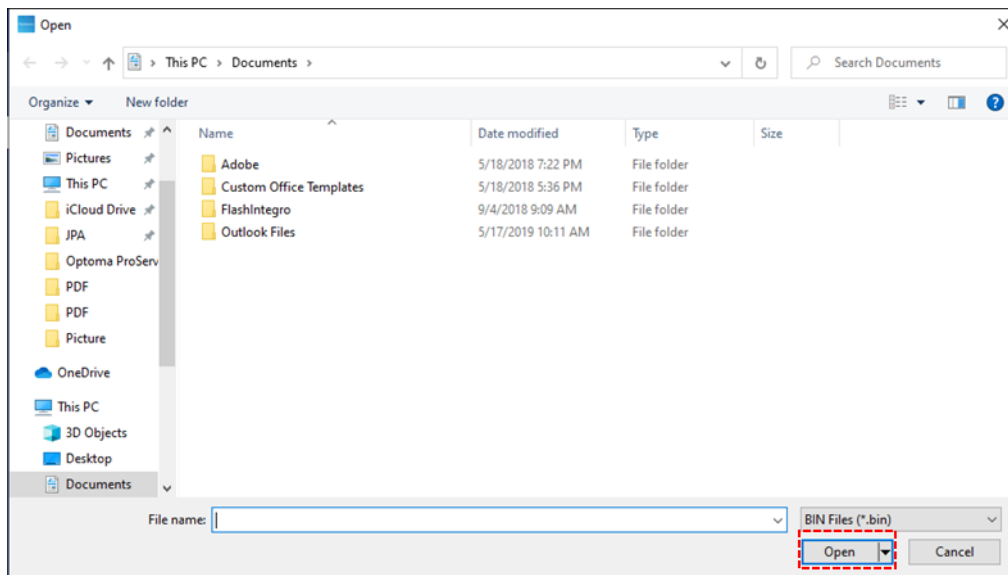
# Importing Settings

To load a previously saved configuration file, do the following:

From the top menu panel, click **Settings**, then select **Import Settings**.



Locate the file (\*.bin) on your computer and click **Open**.

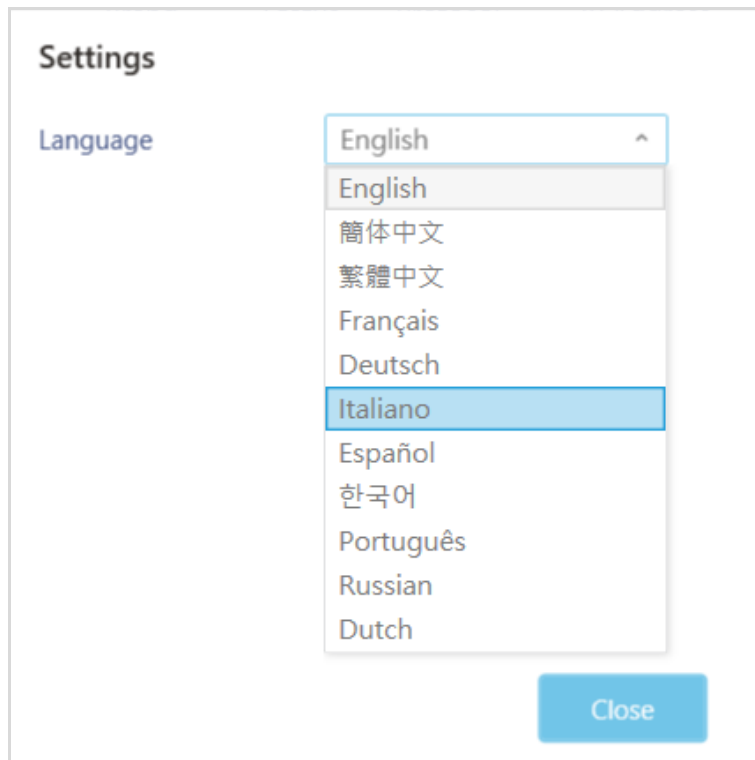


## Changing the Language

To change the language of the software, do the following:

From the top menu panel, click **Settings**, then select **Language**.

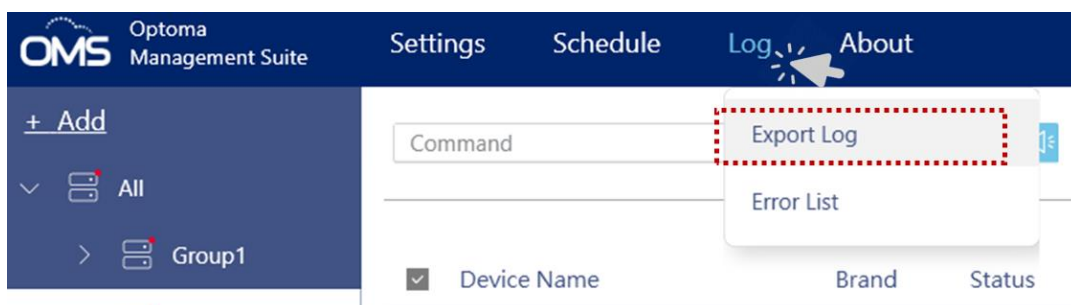
Select the desired language from the language drop-down menu.



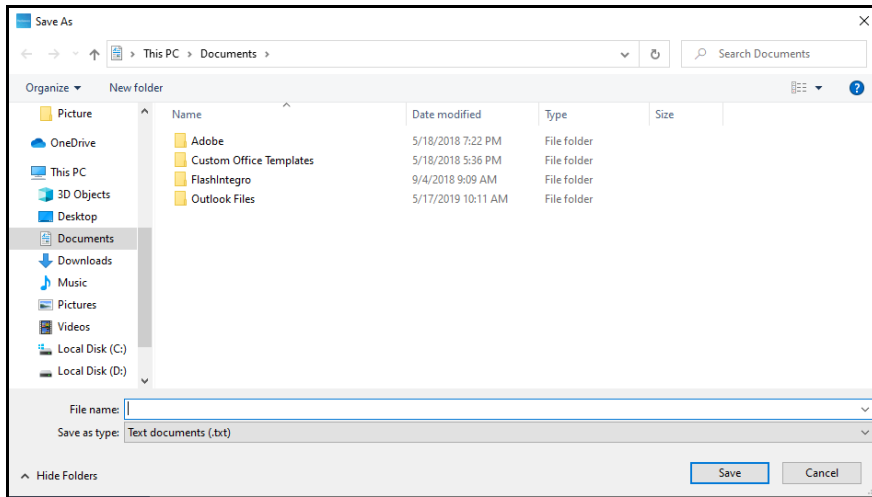
## Exporting the Log File

To save the log file (commands history), do the following:

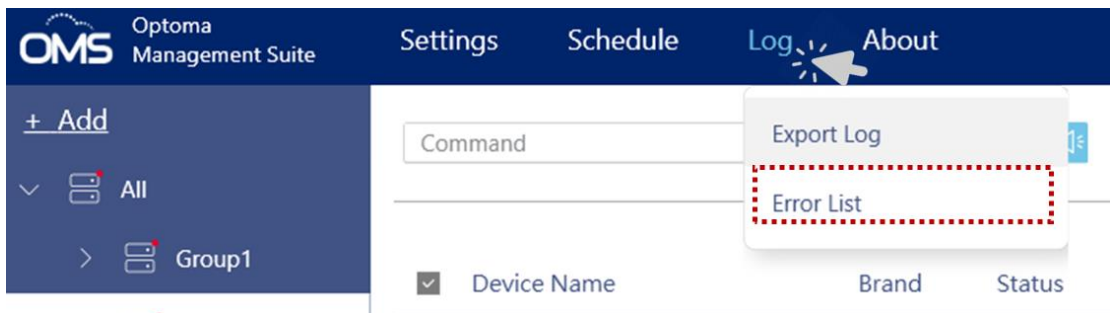
From the top menu panel, click **Log**, then select **Export Log**.



Select the location where you want to save the file, then enter the file name and click **Save**.



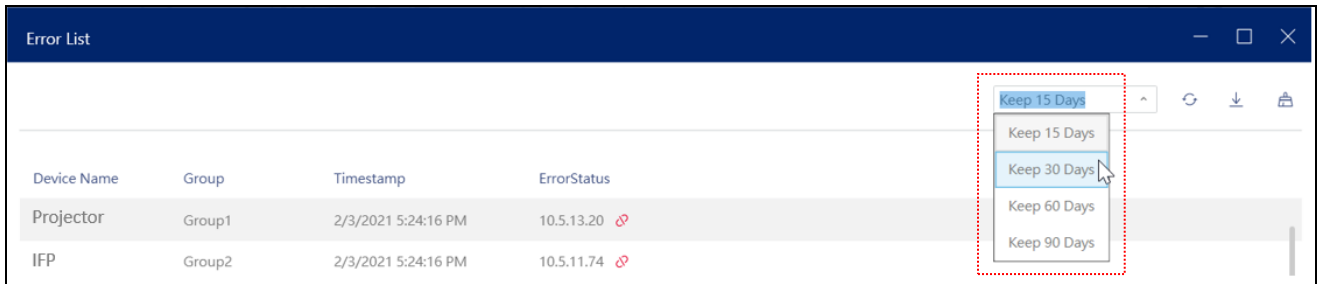
## Viewing the Error List






From this page, you can view information about the errors that are occurring on the device.

Error Icon	Definition
	System overheating
	Fan Error
	Light error
	Network Disconnected
	PJlink password error

To view the list of errors, click **Log** on the top menu panel, then select **Error List**.



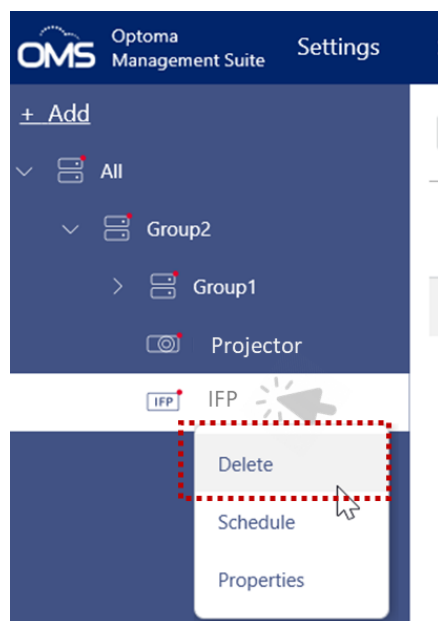
### Note:

- ❖ To refresh the page, click “  ” to **Refresh**.
- ❖ To save the error list, click”  ” to **Save**
- ❖ To Clear the error list, click”  ” to **Clear**
- ❖ To keep the error list for a specified number of days, select from drop-down menu : **15days / 30 days / 60days / 90days**

## Deleting a Device

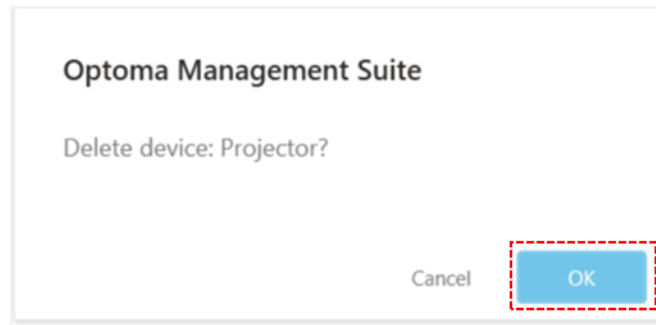
To delete a device from the list, do the following:

From the left panel, right-click on the device you want to delete, then click **Delete**.



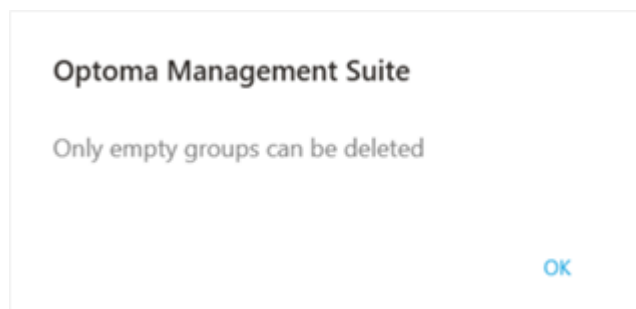


A confirmation message appears on the screen. Click **OK** to delete the selected device.



**Note:**

- ❖ When attempting to delete groups, only empty groups (groups with NO devices listed) can be deleted.

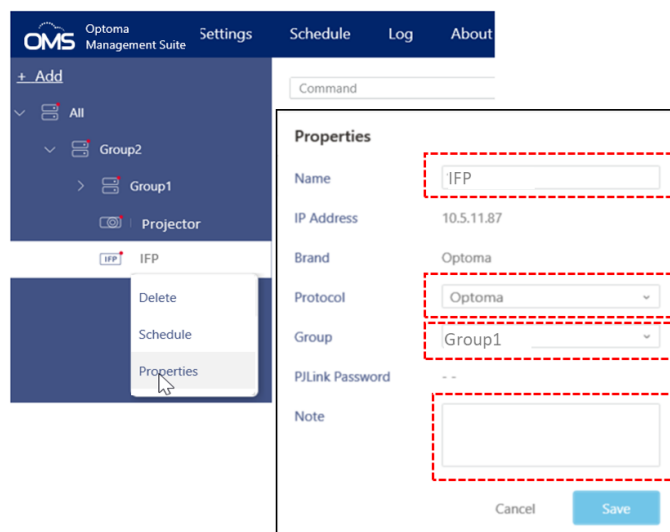


## Changing the Device Properties

To modify a devices information, do the following:

From the left panel, right-click on the name of the device whose information you would like to change, then click **Properties**.

Information modification includes : Device name, Protocol, Group name, Note



# Troubleshooting

## “Adding Device is Unsuccessful”

### *Wrong IP*

Read device IP address from OSD.

- Press [Menu] key from device panel to open OSD.
- Select [Network] -> [LAN].
- Read [IP Address]

Make sure all columns have been filled with a valid IP address.

*IP Address Does not exist.*

This occurs when your device did not respond to PING packet.

Make sure it is a valid IP address.

Check to see if there is a firewall intercepting or blocking PING packets between your PC/Laptop and the device.

## “Response from device not recognized.”

This occurs when your device did not respond to a communication request on TCP port 23.

Make sure [Telnet] function has been enabled.

- Press [Menu] key from device panel to open OSD.
- Select [Network] -> [Control].
- Select [Telnet] and make sure the option is [On].

## “Cannot connect to the device”

This occurs when your device does not respond to control codes correctly.

Make sure your device is not connected or operated by any other software.

Change device IP address to a new one to prevent the accidental interruption of communications by any unknown software.

- Press [Menu] key from device panel to open OSD.
- Select [Network] -> [LAN].
- Select [DHCP] and change the option to [OFF].
- Select [IP Address] and change it to a new one.

**Note:** The path to query IP and network settings will vary depending on product types. It is recommended that you determine or obtain the correct path through the user manual for each model.

# Q&A

## Commands history

[TIMESTAMP] IPAddress DeviceName <MENU> SEND COMMAND

[TIMESTAMP] IPAddress DeviceName <MENU> RECV

This occurs when device is busy and could not respond in two seconds (network timeout).

Wait a couple seconds and check if the device responded to the last command; if not, execute the command again.

## Device status does not update immediately.

Status polling period: every 12 seconds.

If a devices status could not be updated in this period, it will have to wait 6~12 seconds to fetch (obtain) the latest status again.

## Scheduled job(s) were not triggered.

After you add/modify a job, you must close the list window in order to save it.

Make sure application is running/open.

## Can I use other telnet control tools at the same time?

No, please do not use any other telnet control tools when using OMS tool.

## PJLink Monitoring and Control Limitations

The following features are not available when you monitor or control the projector using the PJLink.

- Automatic search (PJLink class1 projectors)
- Switches the projector's input source
- Message Broadcasting

