OBScheduler User Manual

1. Introduction

Welcome to OBScheduler!

OBScheduler is a powerful tool designed to fully automate your production in OBS Studio. It allows you to plan in advance what content will be displayed and when, creating a programming schedule similar to a TV channel.

The system works with a very intuitive web calendar where you can add, move, and edit events. Once the schedule is saved, OBScheduler takes care of changing the sources in OBS automatically, accurately, and without visual cuts, ensuring continuous 24/7 operation.

Who is this manual for?

This manual is intended for the end-users of OBScheduler. We will guide you step-by-step, from the initial setup to the daily management of your schedule, without requiring any technical programming knowledge.

2. Quick Start Guide

This section is to get you up and running as quickly as possible. Follow these 4 steps:

Step 1: Preparation in OBS

- Enable WebSocket: In OBS, go to the Tools -> WebSocket Server Settings menu. Enable the server, note the port (e.g., 4455), and set a password.
- Create Scenes: In OBS, create two new, empty scenes. Name them, for example, _MAIN and _TEMP.

Step 2: Minimum Configuration

- Unzip the .zip file you downloaded.
- Open the **config.json** file with a text editor.
- Mandatorily fill in these four fields in the "obs" section:

```
"obs": {
    "port": 4455,
    "password": "your_obs_password",
    "scheduleScene": "_MAIN",
    "scheduleSceneTmp": "_TEMP"
}
```

Step 3: Execution

- Double-click on **obscheduler.exe**. A status window with logs will open. **Do not close it**.
- Open your web browser and go to the address: http://localhost:8080.

Step 4: Essential Workflow

- 1. **Load**: In the calendar interface, click the ... menu and select **Get from Server** to load the current schedule.
- 2. Edit: Click on the calendar to create events, or double-click to edit them.
- 3. **Save**: When you are finished, go back to the ... menu and select **Commit to Server**. The changes will be applied automatically in OBS.

3. Installation and Initial Setup

To get OBScheduler running, follow these detailed steps.

Step 1: Unzip the files

You will receive a .zip file. Unzip it into a folder on your computer. Inside, you will find three essential files:

- obscheduler.exe: The main program.
- config.json: The configuration file we will edit next.
- schedule.json: The file where your calendar is saved. It will be nearly empty at first.

Step 2: Configure the connection (config.json)

Open the config.json file with a text editor (like Notepad). This file tells OBScheduler how to connect to OBS and other basic parameters.

3.1. Connection with OBS (obs)

This is the most important section.

Before you start:

- 1. Open OBS Studio.
- 2. Go to the Tools -> WebSocket Server Settings menu.
- 3. Make sure the "Enable WebSocket server" option is checked.
- 4. Set a port (default is 4455) and a password.
- 5. Create two **empty** scenes in OBS. Name them exactly as you will define them in the configuration (e.g., "MAIN SCENE" and "TEMP SCENE").
- **host**: The address of the computer where OBS is running. If it's the same computer, leave it as "localhost".
- **port**: The port you configured in OBS's WebSocket settings.
- password: The password you configured in OBS.
- scheduleScene: (Required) The name of the main, visible scene you created in OBS.

• scheduleSceneTmp: (Required) The name of the temporary scene you created in OBS.

3.2. Web Server (webServer)

Configures access to the web calendar interface.

- **port**: The port to access the web interface. Default is 8080.
- **user / password**: If you want to protect access to the calendar with a username and password, enter them here.

3.3. Scheduler (scheduler)

Defines what OBS should display when no event is scheduled.

• **defaultSource**: A backup source. You can configure an image, a video, etc., with its name, inputKind, and uri (path to the file).

3.4. Live Preview (mediaSource)

Configures the low-latency live preview.

Before you start: In OBS, click "Start Virtual Camera".

- videoDeviceIdentifier: The name of your virtual camera, usually "OBS Virtual Camera".
- To find the exact names of your devices, use the command-line tool described in the appendix.

3.5. File Paths (paths)

Defines where important files are saved.

- logFile: The name of the file where logs will be saved.
- schedule: The name of your schedule file.

4. Getting Started and The Main Interface

4.1. Starting OBScheduler

Double-click obscheduler.exe. A status window will appear, and the web server will start.

Important: The application will keep running as long as the status window is open. **To stop OBScheduler completely, simply close this window.**

4.2. The Status Window: Your Control Panel

This window informs you in real-time about the status of the entire application:

- **Top Bar**: OBS connection status and a clock.
- **Services**: Status of the web server (with its IP and port for remote access), live preview, and number of connected users.
- **Program Panels**: Shows the **current** and **next** event in the schedule.

• Activity Log: A detailed log of all operations and errors.

4.3. Accessing the Web Calendar

Open your web browser and go to the address you configured. By default: http://localhost:8080.

4.4. Important Note: Software Expiration

This version of OBScheduler is designed to work until **January 1, 2026**. After that date, the application will show an error message on startup and will not function.

5. Managing Your Schedule

5.1. A Look at the Web Interface

- 1. Preview Panel (Top Left): Live view of what OBS is broadcasting.
- 2. Information Panel (Bottom Left): Server messages and connection status.
- 3. Calendar Panel (Right): Your main workspace.

5.2. The Actions Menu (...)

- New Schedule: Clears the calendar completely.
- Load from File / Save to File: Saves and loads the schedule from/to a .json file on your PC.
- Get from Server: (Main Action) Loads the currently active schedule from the server.
- Commit to Server: (Main Action) Saves your changes to the server to be applied in OBS.

5.3. Creating and Modifying Events on the Calendar

- Create: Single-click or click-and-drag on an empty time slot.
- Edit: Double-click an event to open the detailed editor.
- Move: Drag and drop the event to a new position.
- Change duration: Drag the bottom edge of an event.

5.4. The Edit Modal: Tab by Tab

"General" Tab

Defines the event's appearance on the calendar: **Title**, **Enabled**, **Description**, **Tags**, and **Colors**.

"Source" Tab (The most important)

Defines what content OBS will show.

- Input Name: Technical and unique name for the source in OBS.
- Input Kind: Source type (ffmpeg_source for video, browser_source for web,

- image_source for image, etc.).
- URI: Path to the content (local file or URL).
- **Settings / Transform (JSON)**: Advanced fields for specific OBS configurations (can often be left empty).

"Timing" Tab

Configures when the program airs.

- Start / End: Date and time for single events.
- Recurring: Enables repetition, defining a date range and the days of the week. For recurring events, only the time part of the Start/End fields is used.

"Behavior" Tab

Defines automatic behaviors (for future use).

6. How Program Switching Works (Technical Details)

Switching from one program to another is designed to be safe and without visual artifacts. It follows a strict 5-step sequence:

- 1. **STAGING (Preparation)**: The new source is created and configured in the hidden temporary scene. If this step fails, the process stops.
- 2. **PROMOTION**: The prepared item is duplicated to the main visible scene, but remains hidden. If it fails, a rollback is performed.
- 3. **ACTIVATION**: The new item is made visible in the main scene. **This is the moment of change for the audience**. If it fails, a full rollback is performed.
- 4. **CLEANUP**: The item from the temporary scene is deleted.
- 5. **RETIREMENT**: The previous program is hidden and removed from the main scene.

7. Appendix and Troubleshooting

A.1. Complete config.json File Reference

Key (Section)	Description	Required	Default Value
host (obs)	Address of the OBS PC.	No	"localhost"
port (obs)	OBS WebSocket port.	No	4455
password (obs)	OBS WebSocket password.	No	

scheduleScene (obs)	Name of the main visible scene.	Yes	N/A
scheduleSceneTmp (obs)	Name of the internal temporary scene.	Yes	N/A
port (webServer)	Port for the web interface.	No	"8080"
schedule (paths)	Path to the schedule file.	No	"schedule.json"

A.2. Command-Line Tool: -list-devices

To find the exact names for videoDeviceIdentifier and audioDeviceIdentifier:

- 1. Open a terminal or CMD.
- 2. Navigate to the OBScheduler folder.
- 3. Run: ./obscheduler.exe -list-devices
- 4. Copy the Friendly Name or DeviceID into your config.json.

A.3. Complete config.json Example

```
"scheduler": {
 "defaultSource": {
  "name": "DefaultBackupSource",
  "inputKind": "image source",
 "uri": "C:/path/to/backup image.png"
}
},
"mediaSource": {
 "videoDeviceIdentifier": "OBS Virtual Camera"
},
"webServer": {
"port": "8080",
 "user": "admin",
"password": "admin"
},
"obs": {
"host": "localhost",
 "port": 4455,
 "password": "mypassword123",
```

```
"scheduleScene": "_OBSCHEDULER",
   "scheduleSceneTmp": "_OBSCHEDULER_TMP"
},
   "paths": {
    "logFile": "logs.txt",
    "schedule": "schedule.json"
}
```

A.4. Common Troubleshooting

- **Application closes on launch:** Error in config.json. Check the syntax and ensure scheduleScene and scheduleSceneTmp fields are defined.
- Cannot access the web calendar: Make sure the status window is open and you are using the correct port from config.json.
- It doesn't change scenes in OBS: Verify that OBS is open and that the WebSocket port and password match in OBS and config.json. Check the status window for connection errors.