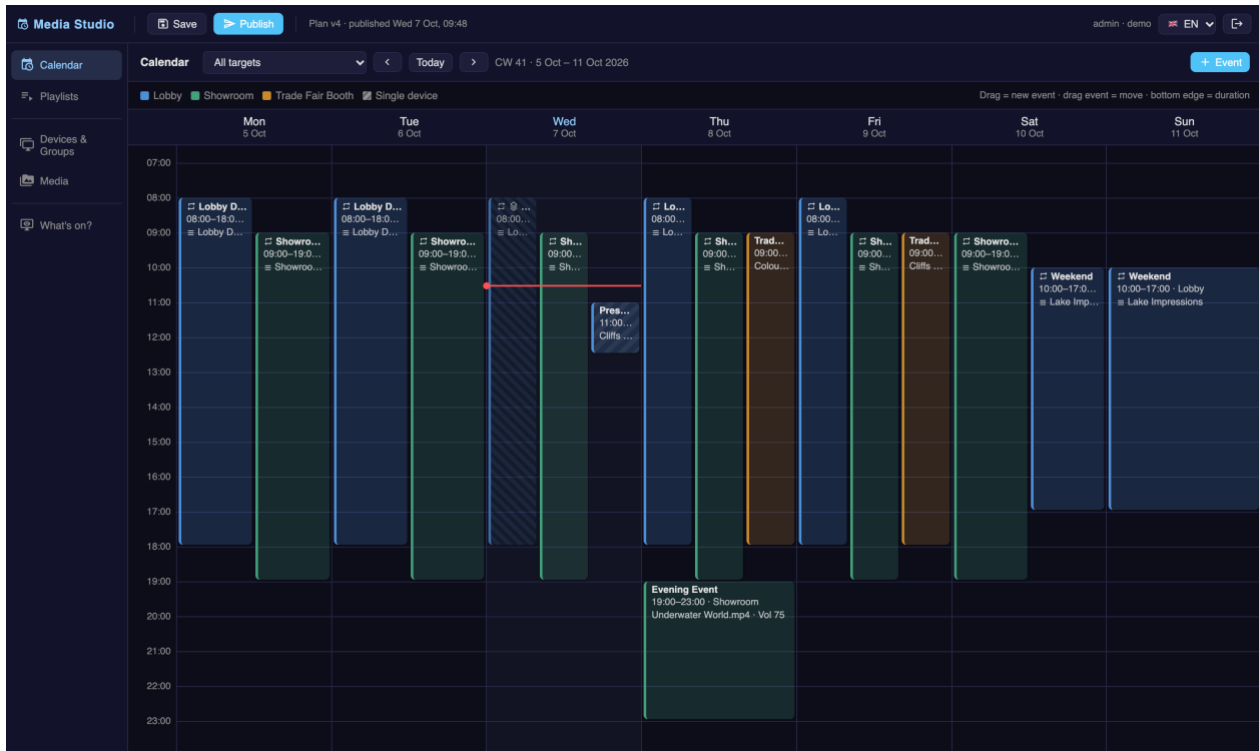


# //nanobblue

## nanobblue® Media Studio

Scheduled video and image playback on nanobblue media players – planned centrally, for one player or hundreds



Media Studio: weekly calendar with recurring and one-time events per group and device, current-time line and overridden events hatched.

## What it is about

Media Studio schedules which videos and images play on which nanobblue media players, and when. Events are created in a calendar in the browser – one-time for a trade fair or a presentation, recurring for the daily loop in the lobby. One click on “Publish” distributes the plan and its media to all players concerned.

The players run their plan on their own, full screen via HDMI. An interrupted internet connection does not stop playback, and after a restart the player plays exactly what the plan says it should – at the right position. Planning is done centrally via the nanobblue portal, with the same login as DS Studio.

## Key features

### Calendar and scheduling

- **Weekly calendar with drag & drop:** draw events, move them and change their length.
- **One-time and recurring events** – weekdays, time, validity period, exceptions such as public holidays, also across midnight.
- **Default content per group** for the time without an event – or “free”: the device’s video player then remains operable as usual.

- **Clear priorities:** one-time before recurring, single device before group, freely selectable priority. When an event ends, the one underneath automatically continues at the right position.
- **Overlaps made visible:** the event dialog shows which event takes priority where; overridden sections are hatched in the calendar.

**Edit event**

Name: Press Event

Target: Lobby left · 497146

Content: ▶ Cliffs 4K.mp4 · 3840x2160

Type: One-time (selected) | Recurring

Start: 07.10.2026, 11:00

End: 07.10.2026, 12:30

Volume: ☒ custom [slider] 70

Options: ☒ repeat until event end ☐ disabled Priority: 0

Check:

- ▲ Cliffs 4K.mp4 is 3840x2160 (more than needed, high CPU load → "Convert 1080p")
- ▲ Overlaps "Lobby Daily Loop" on Lobby left, Wed 7 Oct, 11:00–12:30 – this event takes priority (one-time beats recurring)

Buttons: Delete, Duplicate, Cancel, Apply

*Event dialog with check: 4K notice and detected overlap including the reason.*

## Playlists and volume

- **Playlists of videos and images** with display duration for images, order by click, loop on/off.
- **Volume per event**, default volume per group and globally.
- **Thumbnails** for every file – including real still frames from videos.

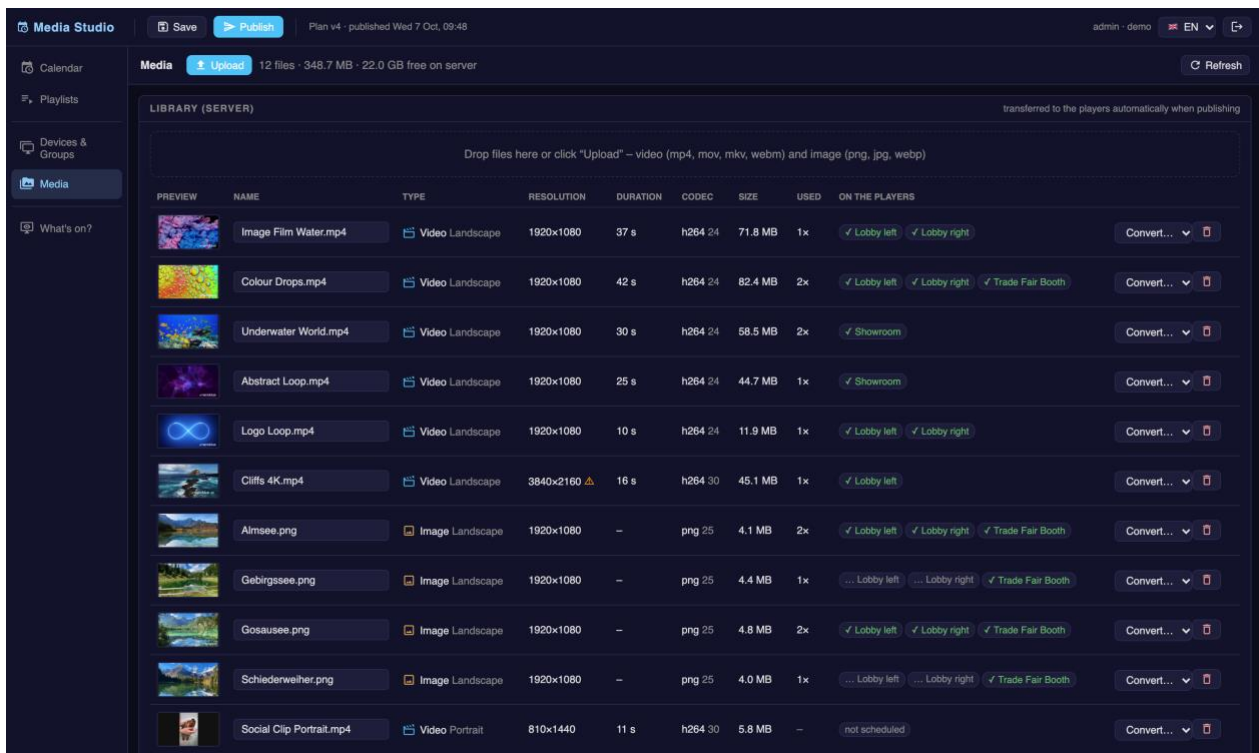
| # | FILE                               | TYPE            | DURATION |
|---|------------------------------------|-----------------|----------|
| 1 | ▶ Image Film Water.mp4 · 1920x1080 | Video 1920x1080 | 37 s     |
| 2 | ■ Almsee.png · 1920x1080           | Image 1920x1080 | 8 s      |
| 3 | ▶ Colour Drops.mp4 · 1920x1080     | Video 1920x1080 | 42 s     |
| 4 | ■ Gosausee.png · 1920x1080         | Image 1920x1080 | 8 s      |

Total: 1:35 min · used in 1 event(s)/default(s)

*Playlist with thumbnails, image duration and total running time.*

## Central media library

- **Upload via drag & drop**, even for large videos – after a connection drop the upload resumes where it stopped.
- **Automatic analysis** of resolution, format, duration and codec; duplicate files are detected.
- **Convert with one click** to 1080p or 720p (H.264); portrait stays portrait – the original is kept.
- **Import files from a player:** files already stored on a player move into the library with one click and can then be distributed to all.
- **Automatic distribution:** players download the files they need, verify them by checksum and clean up unused ones. For every file and player you can see: ready, transferring (with percentage) or error.



Media library with thumbnails, technical data and transfer status per player.

## Content check before playback

Every piece of content is checked against the display actually connected to each target player – before anything goes wrong:

| Check                 | Result in the studio                                                                       |
|-----------------------|--------------------------------------------------------------------------------------------|
| Portrait or landscape | Error if the format does not match the display (including rotation on the device)          |
| Aspect ratio          | Notice about bars, e.g. a 21:9 video on a 16:9 display                                     |
| Resolution            | Notice about upscaling of small files and about unnecessarily large 4K material (CPU load) |
| Codec / colour depth  | Notice about 10-bit material                                                               |
| Availability          | File missing on the player, not yet transferred, no longer in the library                  |
| Schedule              | Overlaps with other events – including which event takes priority                          |

## Manage many players centrally

- **Groups and single devices:** events apply to a whole group or to one specific device.
- **Live status per player:** online, what is playing now, what comes next, transfer status of the media.
- **Versions:** every publication gets a number – the player confirms which version it has. Offline devices automatically receive the plan later.
- **Display details** from the EDID: manufacturer, model, screen size, current and supported resolutions, rotation on the device.
- **Device info** as in the portal: identity, system, network and USB at a glance.

Media Studio

Save

Publish

Plan v4 - published Wed 7 Oct, 09:48

admin · demo

EN

Calendar

Playlists

Devices & Groups

Media

What's on?

Devices & Groups

Default volume 60

Status

GROUPS

+ Group

| NAME             | DEFAULT (WHEN NO EVENT)       | VOLUME | DEVICES |
|------------------|-------------------------------|--------|---------|
| Lobby            | Logo Loop.mp4 - 1920x1080     | 30     | 2       |
| Showroom         | free – video player as before | 60     | 1       |
| Trade Fair Booth | Lake Impressions              | 60     | 1       |

DEVICES

Device ID, e.g. 497146

+ Device

| DEVICE                                                 | GROUP            | DISPLAY                                                                                                                                                      | STATUS                                                                                        | PLAYING NOW                                                                                                               | UP NEXT                                                    |
|--------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Lobby left<br>497146 · 10.80.0.46<br>Device info       | Lobby            | HDMI-A-1 · 1920x1080 Landscape<br>Acer Technologies EK251Q G · 60 Hz<br>Rotation on device: 0° (mpv)<br>Details / EDID<br>Check format: automatic (from dev) | online<br>active<br>Plan: v4 sent<br>Device has v4<br>mpv connected<br>7/7 server media ready | Lobby Daily Loop<br>Image Film Water.mp4<br>Aimsee.png<br>Colour Drops.mp4<br>Gosausee.png<br>40 · until Wed 7 Oct, 18:00 | Wed 7 Oct, 11:00<br>Press Event<br>Cliffs 4K.mp4<br>70     |
| Lobby right<br>497147 · 10.80.0.47<br>Device info      | Lobby            | HDMI-A-1 · 1920x1080 Landscape<br>Acer Technologies EK251Q G · 60 Hz<br>Rotation on device: 0° (mpv)<br>Details / EDID<br>Check format: automatic (from dev) | online<br>active<br>Plan: v4 sent<br>Device has v4<br>mpv connected<br>5/5 server media ready | Lobby Daily Loop<br>Image Film Water.mp4<br>Aimsee.png<br>Colour Drops.mp4<br>Gosausee.png<br>40 · until Wed 7 Oct, 18:00 | Wed 7 Oct, 18:00<br>Default content<br>Logo Loop.mp4<br>30 |
| Showroom<br>497152 · 10.80.0.52<br>Device info         | Showroom         | HDMI-A-1 · 1920x1080 Landscape<br>Acer Technologies EK251Q G · 60 Hz<br>Rotation on device: 0° (mpv)<br>Details / EDID<br>Check format: automatic (from dev) | online<br>active<br>Plan: v4 sent<br>Device has v4<br>mpv connected<br>2/2 server media ready | Showroom Loop<br>Underwater World.mp4<br>Abstract Loop.mp4<br>55 · until Wed 7 Oct, 19:00                                 | Wed 7 Oct, 19:00<br>free – video player as before          |
| Trade Fair Booth<br>497158 · 10.80.0.58<br>Device info | Trade Fair Booth | HDMI-A-1 · 1920x1080 Landscape<br>Acer Technologies EK251Q G · 60 Hz<br>Rotation on device: 0° (mpv)<br>Details / EDID<br>Check format: automatic (from dev) | online<br>active                                                                              | Default content<br>Lake Impressions                                                                                       | Thu 8 Oct, 09:00<br>Trade Fair Day 1                       |

Devices & Groups: default content per group, display, status, current and next content per player.

HDMI-A-1 · Media Studio output

connected

Manufacturer

Acer (ACR)

Model

EK251Q G · Product no. 3567

Serial number

A451028293W01

Manufactured

CW 51 / 2024

Screen size

54 × 31 cm · 24.5"

Current mode

1920 × 1080 @ 60 Hz

Preferred (EDID)

1920 × 1080 @ 60 Hz

Frequency range

V 48–120 Hz · H 24–150 kHz · max. 300 MHz

Capabilities

HDMI · Audio · YCbCr 4:4:4

Rotation on device

0° mpv video-rotate 0° (dashboard "Rotation HDMI 1")

Area (logical)

1920 × 1080 → Content 1920 × 1080 Landscape

Running on it

mpv – video player / Media Studio

EDID version

1.3 · 1 extension(s)

Supported resolutions (15)

1920x1080 120/100... Hz

1680x1050 60 Hz

1280x1024 75/60 Hz

1440x900 60 Hz

1280x960 60 Hz

1280x800 60 Hz

1152x864 75 Hz

1280x720 60/50 Hz

1024x768 75/70/60 Hz

832x624 75 Hz

800x600 75/72/60... Hz

720x576 50 Hz

720x480 60 Hz

640x480 75/73/67... Hz

720x400 70 Hz

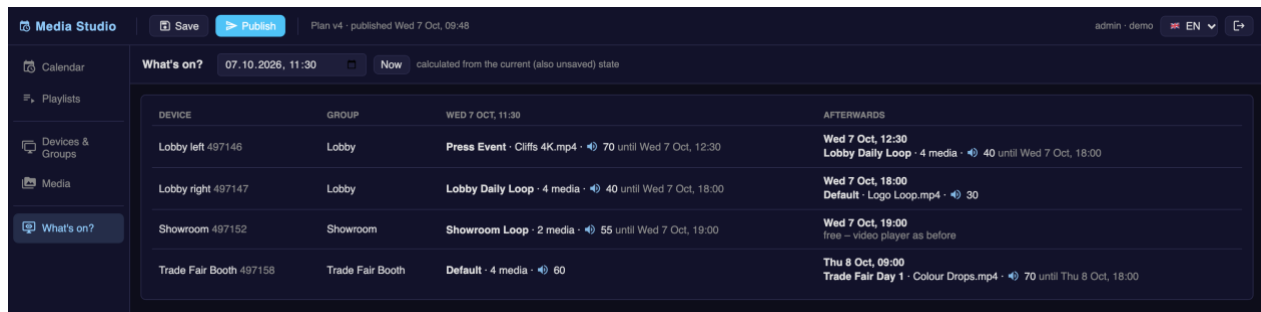
Copy EDID (hex)

Display details of a player from the EDID, including all supported resolutions.

nanoblu Media Studio – Feature Overview · Page 4

## “What’s on?” – preview for any point in time

- For any point in time, the studio shows per player what will play and what comes next – even for changes not yet saved.



The screenshot shows the 'Media Studio' interface with a sidebar on the left containing 'Calendar', 'Playlists', 'Devices & Groups', 'Media', and 'What's on?'. The main area is titled 'What's on?' and shows a schedule for 'WED 7 OCT, 11:30'. The schedule is organized into columns for 'DEVICE', 'GROUP', and 'AFTERWARDS'. The 'AFTERWARDS' column shows the next scheduled content for each device.

| DEVICE                  | GROUP            | WED 7 OCT, 11:30                                        | AFTERWARDS                                                                          |
|-------------------------|------------------|---------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lobby left 497146       | Lobby            | Press Event - Cliffs 4K.mp4 · 70 until Wed 7 Oct, 12:30 | Wed 7 Oct, 12:30<br>Lobby Daily Loop · 4 media · 40 until Wed 7 Oct, 18:00          |
| Lobby right 497147      | Lobby            | Lobby Daily Loop · 4 media · 40 until Wed 7 Oct, 18:00  | Wed 7 Oct, 18:00<br>Default - Logo Loop.mp4 · 30                                    |
| Showroom 497152         | Showroom         | Showroom Loop · 2 media · 55 until Wed 7 Oct, 19:00     | Wed 7 Oct, 19:00<br>free - video player as before                                   |
| Trade Fair Booth 497158 | Trade Fair Booth | Default · 4 media · 60                                  | Thu 8 Oct, 09:00<br>Trade Fair Day 1 - Colour Drops.mp4 · 70 until Thu 8 Oct, 18:00 |

Preview: press event on one player, daily loop and default content on the others.

## Reliable in operation

- **Autonomous:** plan and media are stored on the player – playback continues even without a connection to the cloud.
- **Restart-proof:** after a power failure or restart, the right content continues at the right position – only once the player’s clock is synchronised.
- **Works alongside the video player:** outside events, the video player remains operable as usual; manual operation during an event is detected.
- **Dry run:** a player can first just calculate and log the plan without actually playing it.

## Technology in brief

- Full-screen playback via HDMI with mpv and hardware decoding – very low CPU load.
- Scheduler engine as a flow in the nanoblue editor on the player; plan and media are stored permanently on the device.
- Studio and media library run on the nanoblue Core; distribution to the players is encrypted via the nanoblue VPN, files are verified by checksum.
- Web-based, integrated into the nanoblue portal, same login as DS Studio; multi-tenant with permissions per device.
- User interface in German, English and Spanish.

## Typical applications

- Lobbies and reception areas with a daily loop, weekend programme and special content for events.
- Showrooms and retail spaces with playback controlled by opening hours.
- Trade fairs and events: prepare content for each fair day and switch automatically.
- Museums and visitor centres with several stations played together or individually.