



AV Central

PLATFORM

Platform Setup Guide

Installing AV Central, starting it, signing in, and keeping it updated —
written for the person who runs the system.

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AV Central

How to install AV Central, start it, sign in, and keep it updated. Written for the person who runs the system, not a developer. Covers macOS and Windows.

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2026****DEFAULT ADDRESS****http://localhost:4600****PLATFORMS****macOS ·
Windows****WHAT'S INSIDE**

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1 What AV Central is

AV Central is the technical production platform. The Hub home screen is the front door; each module opens from there.

- AV Drawings — venue drawings: floor plans, rack elevations, signal flow, cable schedules, patch sheets, video walls and lighting.
- Service Dashboard — a link across to the service dashboard.
- Remote System Monitoring — see and control building screens, KVMs and remote computers, plus Stream Deck Companion buttons. On the roadmap, visible as a Coming Soon card.
- SOP & Training — standard operating procedures and volunteer onboarding. On the roadmap, visible as a Coming Soon card.

2 Requirements

AV Central is plain Node with zero npm packages, so the same files run on macOS and Windows without a separate build.

- Node 18 or newer. Check with:

```
node --version
```

- macOS — install Node from nodejs.org, or with Homebrew.
- Windows 10 or 11 — install the Node LTS build from nodejs.org. Take the default options, which put node on your PATH.
- There is no npm install step. Nothing to fetch, and nothing to break when a package updates.

3 Installing

- 1 Copy the AV Central folder wherever you want it to live. On macOS that has been the Desktop; on Windows, somewhere like C:\AV Central or your Documents folder works exactly the same.
- 2 That is the whole install. There is no installer and no build step.

For a brand-new machine use the file ending in -install.zip, which unzips to an av-drawings folder. The -update.zip is only for updating an install that already exists.

4 Starting it — macOS

Double-click Start AV Central.command at the root of the AV Central folder, or run:

```
npm start
```

5 Starting it — Windows

Double-click Start AV Central.cmd at the root of the AV Central folder. It checks Node is installed, then runs the same launcher macOS uses. From Command Prompt or PowerShell you can also run:

npm start

Two things Windows does on first run:

- SmartScreen may warn that the .cmd file is unsigned. Choose More info, then Run anyway. You can also right-click the file, choose Properties, and tick Unblock.
- Windows Firewall may ask whether to allow Node to accept connections. Allow it on private networks if other machines on your network need to open AV Central. Decline if only this computer will use it.

6 Opening it

Either platform, once it is running:

`http://localhost:4600`

The first account you create becomes the permanent administrator. Every account added afterwards starts as an editor or a viewer, and you then tune what each one can reach, module by module.

7 Access

There are two separate things, and keeping them separate is the point.

The administrator is global and there is exactly one: the first account. Only the administrator manages accounts, the Service Dashboard link, the sign-on secret, software updates and the server restart button. This cannot be granted to anyone else, and the administrator cannot delete themselves or lock themselves out.

Module access is per person, per module. Each account gets one of four levels on each of AV Drawings, Service Dashboard, Remote System Monitoring and SOP & Training:

- Hidden — the module's card does not appear on their Hub at all, and its API answers 403 if anything asks.
- Viewer — read-only. They can open and look at everything in that module and change nothing.
- Editing — can create and change things inside that module.
- Admin — full control of that module, including deleting venues and library entries. This is admin *of that module only*; it does not touch accounts or platform settings.

Someone with Admin on AV Drawings runs the drawings; they still cannot add a user or apply an update. That is deliberate.

Every one of these is enforced on the server, not just hidden in the interface. Editing the page in a browser console changes nothing.

› Upgrading from an earlier version

Nobody's access changes when you update. An existing admin becomes the administrator with full access everywhere; existing editors get Editing on every module; existing viewers get Viewer on every module. From there you can narrow anything you want to narrow.

› Service Dashboard role

If someone has any access to the Service Dashboard, you also pick which production role they arrive as — Producer, Audio, Video, Lighting or Stage. That is a job function during a service, not a permission level, and it is what the dashboard uses to decide what to show them.

For that hand-off to work, generate a signing secret in Settings → Service Dashboard, then paste the same value into the dashboard's own admin page. The secret is generated on this Mac and never shown in the browser — read it out of `server/data/hub.json`. Until you do this, the Service Dashboard card still opens normally; it just cannot know who is arriving.

8 Settings

Settings live behind the gear icon in the top-right corner of the Hub home screen, and are administrator-only. From there you can add or remove accounts, set each person's module access and production role, set the Service Dashboard URL, generate the sign-on secret, review the platform activity log, choose how you are told about updates and restarts, manage venue templates, apply a software update, and restart the server.

9 Being told about updates and restarts

The activity log records what happened to the platform. Notifications are how you find out without opening it.

Settings → Notifications takes two kinds of destination:

- Webhook — anything that accepts a JSON POST. Slack and Discord incoming webhooks both work as-is.
- ntfy — a topic on ntfy.sh or your own ntfy server, which arrives as a phone notification.

There is no email or SMS option, and that is deliberate rather than an oversight: AV Central carries no mail relay and no texting service to send them with.

Each destination subscribes to the events you tick — software update, server restart, sign-on secret changed. **A destination with nothing ticked sends nothing.** Saving a webhook URL is telling AV Central where a message could go, not agreeing to receive traffic, so tick at least one event or it stays silent.

Send test delivers one message immediately, ignoring the ticks, and prints the answer it got back beside the button — including the HTTP status when a destination rejects it. Use it after every change; a webhook URL that has been rotated fails silently otherwise.

Two honest limits. Delivery is best-effort and never retried: on the restart and update paths, the server sends the message and then exits a fraction of a second later, so a slow or unreachable destination can miss one. And there is no queue — if the network is down, that notification is gone. The activity log remains the durable record; notifications are the tap on the shoulder, not the audit trail.

10 Using AV Central on a tablet

AV Central works on an iPad, with full editing — you can drag devices, fixtures, trusses and panels with a finger, not just look at drawings.

It is designed against an **iPad Pro 11-inch in landscape**. Other tablets that are at least 1024 points wide work too; below that the side panels crowd the canvas out.

What changes on a touchscreen:

- Every button, tab and input grows to at least 44 points so it can be hit reliably with a finger.
- One finger drags — a device, a fixture, a panel, or the canvas itself.

- Two fingers pinch to zoom and pan together.
- Press and hold acts as the right-click: on the floor plan it opens actions for whatever is under your finger, on the lighting plan it starts a selection box, and on the cable schedule it opens the export menu.

Some things on a desktop are done by holding a modifier key that an iPad does not have — Shift to multi-select, Alt to delete a cable. Press-and-hold is the replacement for those; where it is not, the action needs a keyboard. A Bluetooth keyboard works normally and gives you every shortcut back.

This has not been tested on a physical iPad. It was built and verified against a simulated tablet — the layout, the hit sizes and the gestures are all exercised automatically, but nothing here has been held in a hand. Palm rejection and Apple Pencil behaviour in particular are unverified.

11 Signing in to the Service Dashboard from AV Central

If both apps are set up, you never type the dashboard's PIN.

- 1 In AV Central, open Settings → Service Dashboard and generate a signing secret.
- 2 Copy that value out of `server/data/hub.json` on this Mac and paste it into the dashboard's Admin → General → AV Central sign-on card, then press Push live.
- 3 In that same dashboard card, put AV Central's address in the **AV Central URL** field.

After that, clicking the Service Dashboard card on the AV Central home screen takes you straight there, already set to your production position. If AV Central says you are an admin on the Service Dashboard module, you can also perform the dashboard's admin actions without the PIN.

It works in the other direction too: if you are already sitting at the dashboard and it asks for the PIN, it offers to sign you in through AV Central instead.

The PIN never stops working. That is deliberate — if AV Central is switched off, the dashboard is still fully administrable.

Two things worth knowing. The secret is copied by hand, once, and never travels between the two apps; neither app will ever show it in a browser. And the hand-off means the dashboard trusts AV Central to say who is an admin, so the list of people who can bypass the dashboard PIN is maintained in AV Central's Settings, not on the dashboard.

12 Updating

Identical on both platforms — the updater is built into AV Central and does not rely on anything outside it.

- 1 Put the release's update zip somewhere you can find it.
- 2 Open Settings from the Hub gear icon.
- 3 Under Software update, choose Upload update zip and pick the file ending in -update.zip.
- 4 The server applies it and restarts itself. The page reloads on the new version a few seconds later.

Your drawings, accounts and settings live in server/data and are never touched by an update.

13 Restarting the server

Settings has a Restart server button. It restarts the AV Central process only — not the computer, and not the software version. Anyone editing a drawing briefly disconnects and reconnects, and you land back on the Hub without signing in again.

If AV Central was started without the supervisor, the button says so and refuses, because nothing would bring the app back.

14 What differs between macOS and Windows

Almost nothing. Three things are worth knowing.

› Starting it

Start AV Central.command on macOS, Start AV Central.cmd on Windows. Both run the same launcher and boot the same apps.

› OCR for scanned contractor PDFs

This is the one optional feature that needs software from outside AV Central.

- macOS:

```
brew install poppler tesseract
```

- Windows — install the Tesseract build from the UB Mannheim project and the poppler Windows binaries, then add both of their bin folders to your PATH and open a fresh terminal so the change takes effect.

If either is missing, contractor PDF import still works for PDFs that carry a text layer, and tells you plainly when it cannot read one. Nothing else in AV Central depends on these.

› The launcher's Updates drop-folder

The AV Central Launcher watches an Updates folder and applies any release zip dropped into it. That one path uses the unzip command, which macOS includes and Windows does not. On Windows, use the in-app updater in Settings instead — it needs nothing external. Everything else the launcher does, including starting both apps, restarting them after a crash, and prefixed logs, works the same on both platforms.

15 Backups

There are two kinds, and they are for different problems.

› The whole install — copy the folder

Everything that matters is the server/data folder inside your install:

```
AV Central\AV Drawings\Beta\av-drawings\server\data
```

Copy that folder to back up. It holds your venues, device and fixture libraries, accounts, uploaded PDFs and images, snapshots, and the audit log. It is a plain folder copy on either platform. This is the one that gets you back after a disk failure.

› One venue — Download full backup

Inside a venue, Version history has a Download full backup button. It produces a single zip holding that venue, every file it references, both libraries, the rendered drawing package and the venue's audit trail — enough to stand it up on another install, hand to a contractor, or archive at the end of a build.

Three things to know about it:

- It is a copy taken at that moment. It does not update itself.
- The libraries inside it are the whole install's libraries as they stood at export. Restoring them onto a populated install would overwrite that install's own, so restore them deliberately rather than automatically.
- Anyone who can open the venue can take one, including read-only accounts. It contains no accounts and no passwords.

16 If something goes wrong

- The page will not load — check the window running the launcher for an error, and confirm nothing else is using port 4600.
- Windows says node is not recognised — Node is not on your PATH. Reinstall Node with the default options, then open a new Command Prompt. PATH changes do not reach windows that were already open.
- Contractor PDF import finds nothing — the PDF is probably a scan with no text layer. Install poppler and tesseract for OCR, or export the page as a PNG and use it as an underlay.
- A DWG file is rejected — that is deliberate. Export it as DXF (ASCII) and import that.
- A notification never arrived — open Settings → Notifications and press Send test. It prints exactly what the destination answered. If the test works but real events do not arrive, the event is not ticked on that destination.
- A production role will not save — the dashboard's positions are defined on the dashboard, and AV Central reads the live list. If it cannot reach the dashboard it falls back to the five built-in positions and says so above the account list.
- Someone cannot edit — check their access for that specific module in Settings. Access is per module now, so someone can be Editing on AV Drawings and Viewer on everything else.
- A module is missing from someone's Hub — it is set to Hidden for them. Set it to Viewer or higher in Settings → Accounts & access.
- Another machine cannot reach it — AV Central listens on the computer running it. Browse to that machine's IP address on port 4600, and make sure the firewall allows Node on your private network.