Cella PDF Server on a Mac: step by step

Cella PDF Server 1.1.2 · Sorted Solution

Cella PDF Server keeps a project's drawings and everyone's markups in step across the office: people working on the same sheet see each other's markups arrive live, on Mac, Windows, Linux and iPad. You run it on a Mac of your own, such as a Mac mini in the office. This guide assumes you are comfortable installing apps on a Mac and have never used Docker. It takes about half an hour.

What Docker is, in one paragraph. Docker Desktop is a free app that runs other programs in sealed boxes called *containers*. Cella PDF Server comes as a container, so you never install the server itself: you install Docker Desktop once, and a setup script in this folder tells Docker to download the server and run it. You won't need to learn Docker's commands.

What you need

- **A Mac that stays on**, with macOS 13 or newer, 8 GB of memory or more, and free disk space for about three times the size of your current drawing sets. Apple silicon or Intel.
- **An administrator account** on that Mac.
- **This folder**, unzipped somewhere permanent such as a folder named `cellapdf-server` in your home folder. Don't leave it in Downloads: the folder holds the server's settings from now on.

Two things to know before you start:

- The server runs while someone is **logged in** to that Mac (the screen can be locked). After a restart, log in again and it starts by itself. If the Mac should come back unattended after a power cut, turn on automatic login for it (**System Settings ▸ Users & Groups**).
- Docker Desktop is free for firms with fewer than 250 people and under $10 million a year in revenue. Larger firms need a paid Docker subscription.

Step 1. Install Docker Desktop

1. Download **Docker Desktop for Mac** from https://www.docker.com/products/docker-desktop/ (choose Apple silicon or Intel to match the Mac), open the download and drag **Docker** to **Applications**.
2. Open **Docker** from Applications. Accept its terms and enter your password when it asks to finish installing. You can skip signing in and skip the survey.
3. Wait until the bottom-left corner of the Docker Desktop window says **Engine running**.
4. In Docker Desktop, open **Settings** (the gear) ▸ **General** and tick **Start Docker Desktop when you sign in to your computer**. Choose **Apply & restart**.

Step 2. Keep the Mac awake

System Settings ▸ **Energy** (called **Energy Saver** on some Macs; on a laptop, **Battery** ▸ **Options**): turn on **Prevent automatic sleeping when the display is off**, and turn on **Start up automatically after a power failure** if it is offered. A sleeping Mac is a server nobody can reach.

Step 3. Run the setup

1. Open **Terminal** (Applications ▸ Utilities).
2. Type `bash` and a space, then drag the file **setup.sh** from the unzipped folder into the Terminal window, and press **Return**. (Double-clicking **Setup.command** does the same, if macOS lets it open.)
3. It asks two questions:
   - **Your firm's name.** People see it when they join.
   - **Where people connect from.** Choose **1** (only in the office) unless people must sync from home or site. You can change to the other later ("From anywhere", below).
4. It downloads the server and starts it. With an office-only setup it asks for your Mac password once, to make this Mac trust the server's certificate. Then it shows:
   - the **address** people join, such as `https://office-mac.local`;
   - the **admin token**, a long password starting `rsa_`. It is shown once. Copy it into your firm's password manager now. (It is also saved in a text file in the folder, named "ADMIN TOKEN…": delete that file once the token is in the password manager.)
5. Your browser opens the server's **admin page**. Sign in with the admin token.

If macOS asks whether Docker may accept incoming network connections, choose **Allow**.

If the setup stops, it says why in red and nothing is lost: fix what it names and run it again. Running it again later is always safe; it never erases a server.

Step 4. Let each device trust the server (office-only setup)

Skip this step if you chose "from anywhere".

An office-only server makes its own security certificate, and every computer and iPad has to be told once to trust it. The setup did this for the server Mac and left the certificate in the folder as **cellapdf-server-root.crt**.

- **Each other Mac:** copy `cellapdf-server-root.crt` to it (AirDrop works) and double-click it. Keychain Access opens: add it to the **System** keychain, then double-click the certificate there ("Caddy Local Authority"), open **Trust** and set **When using this certificate** to **Always Trust**.
- **Each Windows computer:** copy `cellapdf-server-root.crt` and `Trust-Certificate.cmd` to it (a USB stick or a shared folder), keep the two files together, double-click **Trust-Certificate.cmd** and answer **Yes**.

- **Each iPad:** send `cellapdf-server-root.crt` to it (AirDrop or email) and open it. Then **Settings ▸ General ▸ VPN & Device Management**, tap the profile and **Install**. Then **Settings ▸ General ▸ About ▸ Certificate Trust Settings** and switch it on.

To check a device: open the server's address in its browser with `/health` on the end (for example `https://office-mac.local/health`). You should see `{"ok":true}` with no security warning. If the name doesn't open on a Windows computer, use the Mac's address in numbers instead (**System Settings ▸ Network** on the server Mac shows it), for example `https://192.168.1.20/health`.

Step 5. Invite people

1. On the admin page, **Projects ▸ Create**: name it like the job (`2417 Riverside Clinic`).
2. **Invites ▸ Create invite** for that project, one for each computer or iPad, with a note (`Sam's laptop`). Copy the code (it looks like `J6GV-0WDS-ZJ3B`): it is shown once, works once and lasts 14 days.
3. Give each person the server's address and their code. In Cella PDF they choose **Sync ▸ Join Server…** (on an iPad, the cloud button at the right of the toolbar ▸ **Join Server…**), enter the address, the code, their name and email, then open a drawing and choose **Sync ▸ Connect Document to Project…**.

Each person needs a licensed Cella PDF. When someone leaves or a laptop is lost, use **Members ▸ Remove** on the admin page.

Step 6. Backups

The server backs itself up every night and keeps 14 days, but those backups sit inside Docker on the same Mac. Copy them somewhere your own backup covers. In Terminal, type `bash` and a space, drag **backup-copy.sh** from the folder into the window, then type the folder to copy to and `--every-day`, so the line reads like this, and press Return:

```
bash /Users/you/cellapdf-server/backup-copy.sh "/Users/you/Cella Server Backups" --
every-day
```

That copies the backups now and again every morning at 6:00. Use a folder inside your home folder (not Desktop, Documents or an external drive), because macOS blocks scheduled copies to those. Let Time Machine or your backup app carry it on from there. To bring a backup back after a disaster, contact us (Help, below): it is three commands and we will walk you through them.

From anywhere (home and site)

For people to sync from outside the office, the server needs a name on the internet:

1. Ask whoever looks after your website's domain for a name such as `sync.yourfirm.com` pointing at your office's public internet address (an "A record").
2. On the office router, forward **ports 80 and 443** to the server Mac. Give that Mac a fixed address on the router first ("DHCP reservation").

3. Run the setup in a fresh copy of the kit folder if this is a new server, and choose **2**. To change an existing office-only server instead, open `.env` in the folder with TextEdit (press ⇧⌘. in Finder to show it), set `ATRIUM_DOMAIN=sync.yourfirm.com`, put a `#` in front of the `ATRIUM_CADDY_TLS` line, save, and run the setup again.

With a name on the internet the server gets a recognised certificate by itself, so no device needs step 4. People then join `https://sync.yourfirm.com` from anywhere.

Updating the server

When we announce a new version: download the new kit, copy every file from it into your folder, replacing the old ones, except `.env` (your settings). Then run the setup again. Your projects and markups stay as they are. Let Docker Desktop update itself when it offers to.

If something goes wrong

- **Nobody can connect after a restart.** Log in to the server Mac and wait a minute. Check Docker Desktop says **Engine running**.
- **"This site can't be reached" from another computer.** Is the server Mac awake and on the same network? Try its address in numbers, for example `https://192.168.1.20/health`.
- **A security warning in the browser** (office-only setup): that device hasn't done step 4.
- **The setup says port 80 or 443 is in use.** Another program on the Mac is a web server. Stop or remove it, then run the setup again.
- **You lost the admin token.** In Terminal: `cd` and a space, drag the kit folder in, Return; then `docker compose exec atrium atrium admin rotate-token` prints a new one.
- **Is it running?** In Docker Desktop ▸ **Containers** you should see **atrium** with two green entries (the server and "caddy", its web front door).

Help

Sorted Solution: https://www.sortedsolution.com/contact/. It helps us if you open Terminal in the kit folder and send what these print:

```
docker compose ps
docker compose logs --tail 200 atrium caddy
```

(The files, settings and commands say `atrium`: that is the server's working name.) `QUICKSTART.md` and `SYNC.md` in this folder are the fuller guides for IT staff.