Cella PDF Server on Ubuntu: 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. This guide puts it on a computer or virtual machine running Ubuntu. It assumes you can open a terminal and paste a command, and have never used Docker. It takes about twenty minutes.

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

What you need

- **Ubuntu 22.04 or 24.04** (Desktop or Server), on a machine that stays on: a small PC, or a virtual machine on a Windows server (Hyper-V) or a NAS. 2 CPUs and 2 GB of memory are plenty, with free disk space for about three times the size of your current drawing sets.
- **An account that can use** `sudo` (the one you made when installing Ubuntu can).
- **This folder**, unzipped somewhere permanent such as `~/cellapdf-server`.

Unlike on a Mac or a Windows PC, nobody needs to stay logged in: on Ubuntu the server starts with the machine.

Step 1. Put the kit on the machine

On Ubuntu Desktop, download the kit zip with the browser, right-click it ▸ **Extract**, and move the extracted folder to your home folder as `cellapdf-server`.

On Ubuntu Server (no desktop), in a terminal:

```
sudo apt-get install -y unzip
cd ~
wget https://www.sortedsolution.com/software/cellapdf/updates/cella-pdf-server-docker-1.1.2.zip
unzip cella-pdf-server-docker-1.1.2.zip
mv cella-pdf-server-docker-1.1.2 cellapdf-server
```

Step 2. Run the setup

In a terminal:

```
cd ~/cellapdf-server
bash setup.sh
```

1. If Docker isn't installed yet, the setup installs it. It asks for your password for that.
2. 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).
3. It downloads the server, starts it, opens Ubuntu's firewall for it if the firewall is on, and shows:
   - the **address** people join, such as `https://office-server`;
   - 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.)
4. In a browser on any computer in the office, open the address with `/admin` on the end and sign in with the admin token. (With an office-only setup, do step 3 on that computer first.)

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 3. 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 left the certificate in the folder as **cellapdf-server-root.crt**. Copy it off the server (a USB stick, a shared folder, or `scp you@office-server:cellapdf-server/cellapdf-server-root.crt .` from another computer).

- **Each Windows computer:** copy `cellapdf-server-root.crt` and `Trust-Certificate.cmd` (also in the kit folder) to it, keep the two files together, double-click **Trust-Certificate.cmd** and answer **Yes**.
- **Each Mac:** copy `cellapdf-server-root.crt` to it 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 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.
- **Each Ubuntu computer:** `sudo cp cellapdf-server-root.crt /usr/local/share/ca-certificates/` then `sudo update-ca-certificates`.

To check a device: open the server's address in its browser with `/health` on the end (for example `https://office-server/health`). You should see `{"ok":true}` with no security warning. If the name doesn't open, use the server's address in numbers instead (the setup listed it; `hostname -I` on the server shows it), for example `https://192.168.1.20/health`. Give the server a fixed address on the router ("DHCP reservation") so that number doesn't change.

Step 4. 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 5. Backups

The server backs itself up every night and keeps 14 days, but those backups sit inside Docker on the same machine. Copy them somewhere your own backup covers (a mounted NAS share, another drive):

```
cd ~/cellapdf-server
bash backup-copy.sh "/mnt/nas/Cella Server Backups" --every-day
```

That copies the backups now and again every morning at 6:00. 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.
3. Run `bash setup.sh` 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: `nano .env`, set `ATRIUM_DOMAIN=sync.yourfirm.com`, put a `#` in front of the `ATRIUM_CADDY_TLS` line, save (Ctrl+O, Return, Ctrl+X), and run `bash setup.sh` again.

With a name on the internet the server gets a recognised certificate by itself, so no device needs step 3. 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 `bash setup.sh` again. Your projects and markups stay as they are. Keep Ubuntu itself updated as usual (`sudo apt-get update && sudo apt-get upgrade`).

If something goes wrong

- **"This site can't be reached" from another computer.** Is the server on 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 3.
- **The setup says port 80 or 443 is in use.** Another web server is running on the machine (often Apache or nginx): `sudo systemctl disable --now apache2 nginx`, then run the setup again.
- **You lost the admin token.** `cd ~/cellapdf-server`, then `sudo docker compose exec atrium atrium admin rotate-token` prints a new one.
- **Is it running?** `sudo docker compose ps` in the kit folder should list **atrium** and **caddy**, both "healthy" or "running".

Help

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

```
sudo docker compose ps
sudo 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.