TonyVision

Simple User Guide | v2.2 | Updated 16 October 2026

TonyVision is a self-hosted, browser-based CCTV system for up to eight cameras. The bundle includes the authenticated main CCTV application, a separate LAN-only CCTV_Viewer and a LAN-only System Stats dashboard. Features include live viewing, recording, playback, MP4 downloads, retention controls and per-user camera permissions.

1. Applications and addresses

Replace SERVER-IP with the IP address of the Linux machine when connecting from another device on your local network.

Application	On the server	From another LAN device
CCTV main app	http://localhost:30000	http://SERVER-IP:30000
CCTV_Viewer	http://localhost:30002	http://SERVER-IP:30002
System_Stats	http://localhost:23456	http://SERVER-IP:23456

Security: Only the authenticated main app is intended for remote access, preferably through a properly secured HTTPS reverse proxy. Do not expose the login-free CCTV_Viewer (30002), System_Stats (23456), or go2rtc API (1984) to the Internet.

2. Sign in

Open the main CCTV app in a modern browser. On a fresh installation, the default administrator credentials are admin / admin; you must change the password at first login. Select Logout to end your session.

3. Live camera views

Select Live, then choose 1×1, 2×2, 3×2, 4×2, 6 view or 8 view. The desktop 8-view layout places one large camera at the upper left, three smaller cameras down its right side and four along the bottom. Mobile layouts adapt to smaller screens. Select a camera to enlarge it and select it again to return. Use Refresh to reload the camera view.

4. Authenticated Viewer — new in v2.2

Select Authenticated Viewer in the main navigation for a clean, live-only camera display based on CCTV_Viewer. It uses the existing login session and displays only enabled cameras assigned to your account. Administrators can see all enabled cameras. Use the layout selector in the top-right corner to change the arrangement, and select Exit at the top left to return to the main Live page.

Unlike the separate LAN-only CCTV_Viewer, Authenticated Viewer is part of the main authenticated application. Camera permissions apply to its camera list and stream requests.

5. LAN-only CCTV_Viewer

Open port 30002 for a login-free, live-only camera display on trusted LAN devices. It offers the same layout choices and displays friendly camera names. This separate viewer does not apply individual user camera permissions; keep it LAN-only.

6. Disk usage indicator — new in v2.2

The main app header displays Used Disk Space: XX.X%, refreshed approximately every 30 seconds. This is the percentage used on the filesystem holding TonyVision data and recordings, not just the size of recordings.

Disk space used	Indicator
Below 85%	Green
85% to below 95%	Amber
95% to below 98%	Red
98% or more	Flashing red

If usage is high, check available storage and recording retention settings. The flashing indicator is a warning, not an automatic disk-cleanup action.

7. Playback and downloads

Select Playback, choose an available camera and date, then select a recording. Play or download the MP4 segment. A segment currently being recorded may not appear until it closes. Administrators can choose clip lengths of 1, 2, 5, 10, 15 or 30 minutes (default 15); changes affect new segments only.

8. Administrator controls

Only administrators can manage cameras, recording options, users, retention and clip duration.

Setting	Purpose
Cameras	Add, edit, enable, disable or delete up to eight cameras.
RTSP URL	Configure the direct camera video stream address.
Record	Enable or disable recording for each camera.
Compatibility Mode	Convert problematic streams to H.264 when needed.
Users	Create, edit, enable or disable accounts and set roles.
Camera permissions	Choose which cameras each standard user can access.
Retention	Automatically delete recordings older than the configured period.
Clip length	Set the global MP4 segment duration.

9. Camera setup

In Admin, enter a descriptive camera name and a direct RTSP URL, such as rtsp://user:password@camera-address/stream. An HTTP/HTTPS camera administration page is not a video stream. Consult the manufacturer for the correct RTSP path and credentials. Enabled + Record means live and recorded; enabled without Record means live only; disabled means unavailable.

10. Users and camera permissions

Administrators can access all configured cameras. Standard users can view and play back only cameras assigned to them in the authenticated main app, including Authenticated Viewer. Standard users cannot manage cameras, users or recording settings. The separate LAN-only CCTV_Viewer is intentionally independent of these restrictions.

11. Recording and Compatibility Mode

TonyVision normally uses FFmpeg stream copy to reduce CPU usage. If a stream works in VLC but has trouble in the browser, Compatibility Mode can re-encode it to H.264 for live viewing and recording. This consumes more CPU, so enable it only when needed.

12. Recording retention

TonyVision periodically deletes MP4 files older than the configured retention period, normally checking approximately hourly. Recordings are stored by default in ~/Apps/CCTV/data/recordings. Retention settings help control storage use, but you should still monitor free disk capacity.

13. Installation and startup

Install on a Linux host with Docker Engine and Docker Compose v2 already installed and usable by your normal user account. The installer does not install Docker. Linux Mint is recommended; Ubuntu has been tested, and earlier testing also included Fedora.

Download CCTV-install.sh, then run as your normal user (not sudo):

```
chmod +x CCTV-install.sh
./CCTV-install.sh
```

The installer deploys CCTV, CCTV_Viewer and System_Stats and starts their Docker services. They are designed to restart automatically after a host reboot.

14. Managing services

Check the services using Docker Compose in each application directory:

```
cd ~/Apps/CCTV && docker compose ps
cd ~/Apps/CCTV_Viewer && docker compose ps
cd ~/Apps/System_Stats && docker compose ps
```

Use docker compose down to stop an application and docker compose up -d to start it. Do not delete the CCTV data directory unless you intend to remove recordings and settings.

15. System Stats

The LAN-only System Stats dashboard on port 23456 displays host uptime, CPU and per-core usage, memory, storage, network activity, kernel information and Docker container status. It monitors the host as a whole.

16. Community Support — new in v2.1

Select Community Support in the main application navigation to open the TonyVision community forum in a new browser tab: https://community.tonyvision.co.uk/. You can use the forum for questions, help and discussion.

17. Mobile navigation — updated in v2.2

On narrow screens, the navigation buttons wrap onto additional rows so they do not overlap the Live view layout selector or Refresh control. The same features are available on desktop and mobile.

18. Quick troubleshooting

No live image: Check camera enabled state, RTSP URL and network connectivity. Test the stream in VLC; use Compatibility Mode only if necessary.

No recording: Confirm Record is enabled, select the correct camera and date, and wait for the current segment to finish.

Authenticated Viewer empty: Confirm your account has permission to see enabled cameras and that the main app and streaming service are running.

LAN viewer empty: Confirm CCTV, go2rtc and CCTV_Viewer are running and that the viewer can access the CCTV data directory.

After reboot: Run docker ps and test each application address.

Browser issues: Update the Linux host and browser, reboot if necessary, or try another modern browser. On Linux Mint or Ubuntu: sudo apt update && sudo apt full-upgrade.

19. Security checklist

- Change the default administrator password at first login.
- Keep CCTV_Viewer (30002) and System_Stats (23456) on trusted LAN devices only.
- Never expose the go2rtc API (1984) directly to the Internet.
- Use HTTPS and a secured reverse proxy for remote access to the main app.
- Give standard users access only to the cameras they need.
- Keep Linux, Docker and containers updated; back up CCTV data before major changes.

TonyVision — Live. Record. Playback.