

05 — Floating License Server: Administrator Guide

TraxProbe & Traxcope User Manual · Version 2.0.0 · Updated 2026-10-07

This chapter is for the **IT administrator** who installs and runs the license server for a Traxcope **floating license** on the company network. The engineers who use Traxcope do not need to read it: they only enter the server address in Traxcope (Chapter 04 §8).

The server is Cryptlex **LexFloatServer**. Embedya ships it in the **Traxcope License Server kit**, together with a helper script that does every step in this chapter. You edit one settings file and run one command per step.

1. Before you start

What you need

Item	Where it comes from
Server license key	Embedya, with your order. Only this server uses it; engineers never see it.
Traxcope License Server kit for your operating system	Embedya's website or your order e-mail
A machine that stays on	Any small server or VM on the network the engineers use (see below)
Administrator rights on that machine	sudo on Linux, an administrator prompt on Windows

Supported systems

Kit	Runs on
traxcope-license-server-<ver>-windows-x64.zip	Windows 10 / 11, Windows Server 2016 or later, 64-bit
traxcope-license-server-<ver>-linux-x64.tar.gz	64-bit Linux with systemd, Upstart or SysV init (Ubuntu, Debian, RHEL, Rocky, SUSE, ...)
traxcope-license-server-<ver>-linux-arm64.tar.gz	The same on ARM64

The server is light: it needs well under 100 MB of memory and almost no CPU. Engineers' PCs connect to it over **HTTP on one TCP port** (8090 unless you change it).

Online or air-gapped?

The only difference is how the server is **activated**. Running it, connecting engineers and everything else is the same.

Your site	Activation	Read
The server can reach the internet over HTTPS (even if the engineers' PCs cannot)	Online, one command	§3.1
Nothing on the site reaches the internet	A request file goes to Embedya, a response file comes back, once a year	§3.2

Your license is made for one of the two; if you are not sure which you bought, the order confirmation says *Floating Team* (online) or *Offline Floating* (air-gapped).

Virtual machines

Running the server in a VM is fine and common. **One license runs one server**. Do not start a copy or clone of an activated server VM next to the original: a clone cannot serve seats, and running a copy that does is a breach of the

license terms. To move the server to another machine or VM, deactivate it first (§7). Restoring a snapshot of the same VM is fine.

2. Install the kit

Linux

```
sudo mkdir -p /opt/traxcope-license-server
sudo tar -xzf traxcope-license-server-<ver>-linux-x64.tar.gz \
  -C /opt/traxcope-license-server --strip-components=1
cd /opt/traxcope-license-server
```

Windows

Extract the zip to a permanent folder, for example C:\Program Files\Traxcope License Server. The zip holds one folder, traxcope-license-server-<ver>-windows-x64: work in that folder, or move its contents up one level. Open an **administrator** command prompt or PowerShell there.

In both cmd and PowerShell the command is `.\traxcope-server`. It runs `traxcope-server.cmd`, so you do not need to change PowerShell's execution policy.

The service runs from this folder, so do not move it after you install the service.

Edit server.env

`server.env` is the only file you edit. The script writes `config.yml` from it whenever it activates, starts or restarts the server (§9), so changes made directly in `config.yml` are overwritten.

Setting	What it is	Default
LICENSE_KEY	The server license key from Embedya.	(empty: you must set it)
ADMIN_PASSWORD	Password for the server's web dashboard. Stored in <code>config.yml</code> only as a SHA-256 hash.	(empty: you must set it)
ADMIN_USER	Dashboard user name.	admin
PORT	TCP port for Traxcope and the dashboard.	8090
SERVICE_NAME	Name of the operating-system service.	traxcope-license-server
LEASE_SECONDS	How long an online seat lasts before Traxcope renews it. After a crash or power loss, the seat returns to the pool when this ends. Minimum 30.	60
BORROW_MAX_DAYS	The longest an engineer may borrow a seat to work off the network (Chapter 04 §9).	7
BORROW_MAX_SEATS	How many seats may be borrowed at the same time. 0 turns borrowing off. A borrowed seat is taken from the pool until it ends, so set this to the number of people who really work off-site.	1
API_KEY	Key for the read-only status API. Leave it empty: the script creates a random one on first run and saves it here.	(generated)

Lines are `NAME=value`, without quotes and without spaces around `=`. A value must not contain a single quote (`'`).

On Linux the script makes `server.env` and `config.yml` readable by root only, because they hold the license key.

3. Activate the server

Activation ties the license to this machine. It is done once, and again at each yearly renewal on an air-gapped site.

In the commands below, Linux uses `sudo ./traxcope-server.sh`, Windows uses `.\traxcope-server` from an administrator prompt (cmd or PowerShell) in the kit folder. Both take the same commands.

3.1 Site with internet

```
sudo ./traxcope-server.sh activate      # Linux
.\traxcope-server activate              # Windows
```

The server contacts Cryptlex over HTTPS once, and from then on every few minutes to pick up renewals and seat changes. If the internet goes away later, the server keeps serving seats.

3.2 Air-gapped site

This is **one file exchange per site per year**. Engineers never exchange files.

1. Write the request on the server itself (the request is bound to this machine):

```
sudo ./traxcope-server.sh offline-request  # Linux
.\traxcope-server offline-request          # Windows
```

It writes activation-request.dat in the kit folder. Writing it activates nothing.

2. Send it to Embedya. Carry the file to a machine with e-mail (USB stick, or through your security officer) and send it to **info@embedya.com**, or to your Embedya contact. You get back a response file, usually named offlineResponse_<key>.dat.

3. Apply the response on the same server:

```
sudo ./traxcope-server.sh offline-apply /path/to/offlineResponse_XXXX.dat
.\traxcope-server offline-apply D:\offlineResponse_XXXX.dat
```

The response works only on the machine that wrote the request. It is valid for 30 days after Embedya creates it; if it arrives later, write a new request.

The yearly license starts when Embedya creates the response, not when you apply it.

4. Run the server

Install it as a service

```
sudo ./traxcope-server.sh install-service  # Linux
.\traxcope-server install-service          # Windows
```

The service starts at once and at every boot. Then open the port:

```
sudo ./traxcope-server.sh open-firewall    # Linux: ufw or firewall, whichever is active
.\traxcope-server open-firewall            # Windows: adds an inbound Windows Firewall rule
```

If a network firewall sits between the engineers and the server, allow TCP PORT from the engineers' subnet there too.

Check it

```
sudo ./traxcope-server.sh status
.\traxcope-server status
```

status shows whether the service runs, whether the port is listening, how many seats are in use (from the server's status API), and the last log lines. A healthy server log contains Total number of available floating licenses: N, where N is the number of seats you bought.

The web dashboard is at `http://<server>:<PORT>`. Sign in with ADMIN_USER and ADMIN_PASSWORD.

Connect the engineers

Give the engineers the address `http://<server-name-or-IP>:<PORT>`. In Traxcope each one opens **Menu → Manage License...**, enters it under **Team seat? Use a floating license server**, and clicks **Connect to Server**. Traxcope remembers the address and takes a seat on every start. The details are in Chapter 04 §8.

5. Everyday tasks

Task	What to do
Change a setting	Edit <code>server.env</code> , then restart
Stop / start the server	stop, start, restart
Try the server in a terminal (tests)	stop the service, then run (Ctrl+C ends it)
See who holds seats	The web dashboard, or status
Read the logs	The logs folder in the kit; status prints the last lines
Find the server's address after a network change	Linux <code>ip -4 addr</code> , Windows <code>ipconfig</code> ; give engineers the new address

A seat comes back to the pool when the engineer quits Traxcope or clicks **Release Seat**. If a PC crashes or loses power, the seat comes back after `LEASE_SECONDS`.

6. Renewal and more seats

	Online site	Air-gapped site
Yearly renewal	Nothing to do. The server picks up the new end date from Cryptlex.	Repeat §3.2: request, response, apply.
More seats	Nothing to do after Embedya changes the order; the server picks it up within minutes (or restart).	A new request and response, as in §3.2.

On an air-gapped site, Embedya cannot change anything on the server remotely: the end date and the number of seats are inside the response file.

7. Move or replace the server

One license runs one server. To move it:

1. **On the old server**, free the activation:

```
sudo ./traxcope-server.sh deactivate # online site
sudo ./traxcope-server.sh deactivate-offline # air-gapped: writes deactivation-proof.dat
```

On an air-gapped site, send `deactivation-proof.dat` to Embedya. The old server stops serving seats at once.

2. **On the new server**, install the kit (§2), copy `server.env` from the old one, and activate (§3).
3. Give the engineers the new address, or move the old DNS name to the new machine.

If the old server is gone (disk failure, VM deleted) and cannot be deactivated, contact Embedya: we free the activation from our side.

Remove the server

```
sudo ./traxcope-server.sh deactivate # first, so the license can be used again
sudo ./traxcope-server.sh remove-service
```

Then delete the kit folder.

8. Troubleshooting

What you see	Cause	What to do
server.env: set LICENSE_KEY ... / ... ADMIN_PASSWORD ...	The setting is empty	Fill it in server.env
Activation error 58	The license is already active on another server	Deactivate the old server (\$7), or ask Embedya
Activation error 63 , or the log says <i>License not activated and available floating licenses: 0</i>	This machine is not the one the license was activated on: a clone or copy, or the hardware changed a lot	Activate this machine (\$3); deactivate the old one first if it still runs
Activation error 80	The key is set up without VM activation. Server licenses allow VMs, so this is a set-up problem on our side	Report it to Embedya; activate again once the key is fixed
Activation error 40	The response file path is wrong or unreadable	Use the full path; check the file is there
Response file refused	It was made for another machine, or more than 30 days ago	Write a new request on this server
status: <i>nothing is listening</i>	The service is not running, or another program uses the port	start; check the log; change PORT if the port is taken
Engineers: <i>Could not reach the license server</i>	Wrong address, firewall, or the server's IP changed	Ping the server from an engineer PC; open-firewall; give the current address
Engineers: <i>All concurrent seats ... are in use</i>	Every seat is taken	Someone quits Traxcope or releases the seat; or order more seats
Engineers: borrowing is refused	BORROW_MAX_SEATS is 0, all borrow slots are used, or they asked for longer than BORROW_MAX_DAYS	Change server.env, then restart
A seat stays taken after a PC crashed	Online seats return after LEASE_SECONDS	Wait, or lower LEASE_SECONDS
Seats refused for a clock difference	The engineer PC's clock is more than 60 s off the server	Turn on automatic time sync on both

When you contact support, send the output of status and the newest file in logs. Do not send server.env: it holds your license key.

9. Command reference

Helper command	What it runs
activate	lexfloatserver -a --license-key ... --product-file ...
offline-request [FILE]	lexfloatserver -g --license-key ... --offline-request FILE
offline-apply FILE	lexfloatserver -a --license-key ... --offline-response FILE
install-service	lexfloatserver -i --service-name SERVICE_NAME, then starts it
remove-service	stops it, then lexfloatserver -u --service-name SERVICE_NAME
start / stop / restart	the service manager (systemctl / service, or Windows services)
run	lexfloatserver -s in the terminal
status	service state, port, GET /api/server/stats, lexfloatserver --status, last log lines
open-firewall	ufw / firewall-cmd, or New-NetFirewallRule
deactivate	lexfloatserver -d
deactivate-offline [FILE]	lexfloatserver -d --offline-request FILE
config	only writes config.yml from server.env

config, activate, offline-request, offline-apply, install-service, start, restart, run, deactivate and deactivate-offline write config.yml from server.env first. status, stop, remove-service and open-firewall do not.

If the service is running, activate, offline-request and offline-apply stop it for the step and start it again afterwards. deactivate and deactivate-offline stop it and leave it stopped: after a deactivation there is nothing to serve.

LexFloatServer is © Cryptlex LLP and is used under Cryptlex's terms; its own documentation is at <<https://docs.cryptlex.com>>.