TUVORLINK

SETUP GUIDE

Sell Wi-Fi with Mobile Money

Connect your router, set your packages and prices, and get paid. Everything a Wi-Fi business needs to go live on Tuvorlink.

MikroTik · Grandstream GWN · Ruijie / Reyee · TP-Link Omada · Ubiquiti UniFi · MTN MoMo · Telecel Cash · AT Money

Edition
October 2026

Online
tuvorlink.com/docs

Help
support@tuvorlink.com

Contents

GETTING STARTED

01 **Introduction** — How Tuvorlink works, who it's for and what it costs

02 **Quick start** — From sign-up to your first sale in five steps

ROUTERS

03 **MikroTik** — Connect a MikroTik with one command, and fix common problems

04 **Grandstream GWN** — Sell codes made in GWN.Cloud, or let paid devices on automatically

05 **Ruijie / Reyee** — Sell Ruijie and Reyee vouchers through your shop page

06 **TP-Link Omada** — Sell Omada vouchers through your shop page

07 **Ubiquiti UniFi** — Sell UniFi vouchers through your shop page

08 **Other access points** — Any access point that makes vouchers

SELLING

09 **Packages** — Time, data, devices, speed, discounts and fair usage

10 **Mobile Money payments** — How customers pay with Mobile Money, and when it goes wrong

11 **What customers see** — What your customers see when they buy and come back

12 **Your dashboard** — Sales, active users, vouchers, promotions, policies and more

13 **PPPoE and customer accounts** — Bill home and office connections, and customer accounts

14 **Your brand** — Your logo, colour, own domain and text receipts

MONEY

15 **Fees and payouts** — What it costs and how you get paid

PARTNERS

16 **Installer partners** — Installers earn a share of their clients' sales

HELP

17 **FAQ** — Answers to common questions

Introduction

Tuvorlink runs the business side of a Wi-Fi hotspot: customers pay with Mobile Money on your Wi-Fi's login page and go online, and you follow every sale and get paid out.

How it works

1. **You connect your router or access points.** MikroTik takes one command; Grandstream, Ruijie, Omada, UniFi and other brands sell codes you make on your controller (see *Routers*).
2. **A customer joins your Wi-Fi.** The login page opens on its own and shows your packages: by the hour, the day, the week, or by data.
3. **They pay with Mobile Money.** MTN MoMo, Telecel Cash or AT Money: a prompt appears on their phone and they approve it with their PIN.
4. **They go online.** On MikroTik the device logs in by itself, with no code (or, if you prefer, it gets a code to type). On other brands the customer sees their code on screen, can have it sent by SMS, and types it on the Wi-Fi login page. A device that leaves and comes back while it has time left gets back on without paying again.

Customers without Mobile Money can buy **printed vouchers** from you for cash (MikroTik), and anyone can buy Wi-Fi **for someone else** and have the code texted to them.

Who it's for

- **Wi-Fi businesses (operators):** hostels, cafés, campuses, estates, shops. You set your packages and prices; customers pay; you see every sale and receive your share.
- **Installers and network engineers:** set up hotspots for your clients and earn a share of our fee on everything they sell. See Installer partners.
- **Customers:** pay in seconds, no account, no code.

What it costs

No monthly fee and no setup fee. We keep **4%** of each sale; you keep **96%**. See Fees and payouts.

Where to start

- New here? Follow the Quick start.
- Connecting a router? Pick your brand under *Routers*.

Quick start

From sign-up to your first sale in five steps.

1. Create your account

Go to https://tuvorlink.com/register and fill in your business name, your name, phone, email, region and town. You land on your dashboard with a **Get started** checklist.

If an installer brought you, use their link (it looks like `https://tuvorlink.com/r/CODE`) or ask them to register your business for you, so they're credited.

2. Check your packages and prices

You start with three packages (1 Hour, 1 Day, 1 Week) at example prices. Open **Packages** and set your own. See Packages for time, data and speed limits.

3. Connect your router

Open **Hotspots › Add hotspot**, name the location and choose the device:

DEVICE	HOW IT CONNECTS	GUIDE
MikroTik	One command pasted into the router	MikroTik
Grandstream GWN	Codes you make in GWN.Cloud (or automatic login with your GWN.Cloud API keys)	Grandstream
Ruijie / Reyee, TP-Link Omada, UniFi, others	Codes you make on your controller and add to Tuvorlink	Ruijie, Omada, UniFi, Others

Your dashboard shows each router's status (**Online**, **Offline**, **Not connected**), and each hotspot's setup page ticks off its steps as you go.

4. Add your payout details

Open **Settings › Business and payouts** and enter the Mobile Money number and network (or bank account) your share is sent to, with the account name.

5. Make a test sale

Join your Wi-Fi with a phone, buy the cheapest package with your own Mobile Money and check the phone goes online (by itself on MikroTik, or with the code you're shown on other brands). The sale appears under **Sales**, and your share under **Payouts › Due to you**.

That's it: the checklist disappears once all four steps are done.

Then make it yours

- **Settings › Customer login page**: your logo, colour, welcome message and support phone. See Your brand.
- **Promotions** and **Discounts**: weekend deals and codes for staff or regulars. See Your dashboard and Packages.
- **Your shop page** (`https://tuvorlink.com/s/…` , shown under **Hotspots**): print it as a QR code at the venue, or share it on WhatsApp.

03 · ROUTERS

MikroTik

MikroTik routers connect with **one command**. Afterwards the router fetches each paid purchase from Tuvorlink within seconds, logs customers in without a code, applies the package's time, data and speed limits (and fair usage), and removes users when their time is up.

What you need

- A MikroTik router with **RouterOS v6.43 or newer** (v7 recommended).
- The internet (Starlink or your ISP's router) plugged into **ether1**.
- WinBox (from mikrotik.com/download) or any terminal to the router.

Connect it

In your dashboard: **Hotspots › Add hotspot**, device **MikroTik**, then **Router setup**. It takes two steps.

Step 1: Router & ports. Choose how the router is set up:

- **Existing router** (connect only): its settings are kept. If it has no hotspot, one is added on its LAN bridge.
- **New or reset router** (full setup): for a new router, one reset to its default configuration, or one that was in bridge mode behind another router. Tuvorlink builds the whole network. Choose:
  - **Hotspot ports**: where customers plug in or connect access points (ether1 is always the internet).
  - **Your own network (LAN) ports**: for your laptop, CCTV or till, outside the hotspot.
  - Whether the router's own **Wi-Fi** is part of the hotspot, and its **Wi-Fi name** (your business name unless you change it). The Wi-Fi becomes an open network with that name: customers join without a password and get the login page.
  - The **time zone**, and how many **customers at the busiest time** (this sizes the customers' network).

Leave **Stop customers sharing their connection** ticked unless you want phones to be able to share your Wi-Fi onward. Then click **Continue to command**.

Step 2: Command. Click **Copy command**, open **New Terminal** in WinBox, paste and press **Enter**. It looks like this (first it gets the router internet on ether1 if it has none; if that step fails, the download still runs):

```
:do { :if (…no internet…) do={ /ip dhcp-client add interface=ether1 … } } on-error={}; /tool fetch ur
l="https://tuvorlink.com/i/…" dst-path=tuvorlink-setup.rsc; :delay 2s; /import file-name=tuvorlink-se
tup.rsc; /file remove tuvorlink-setup.rsc
```

It finishes in 10 to 30 seconds with `Tuvorlink: connected`. The **Router status check** under the command checks every 5 seconds (or press **Check now**) and changes to **Connected** by itself, then the page shows the router's hotspot: *Hotspot running on bridge · 3 devices logged in*.

The command works **once** and for **one hour**. If it expires, click *New command*. **Change the setup** goes back to step 1.

After paying: automatic login or a code

By default the phone that paid is logged in by itself: the customer never sees a code. If you'd rather customers keep a code (to log in again on another device, or because you also sell printed vouchers), open **Hotspots › Change** and under **After paying** choose:

- **Log the device in by itself: no code to type** (the default), or
- **Show the code, and send it by SMS**: after paying, the customer sees their code with a **Log in with this code** button, can have it texted to them, and the Wi-Fi page shows **Have a code? Log in** at the top.

Either way the router applies the package's time, data, speed and devices.

"Not allowed by device-mode"?

New MikroTiks on RouterOS 7 lock downloads and scripts until someone with the router in hand unlocks them. If the command answers `not allowed by device-mode`:

1. Paste `/system/device-mode/update mode=advanced` in the terminal.
2. Within 5 minutes, unplug the router's power for 10 seconds (or briefly press its reset button), then plug it back in.
3. Run the install command again (get a new one if it expired).

What it does on the router

Every install, both kinds:

- Gets internet on **ether1** first if the router has none (a DHCP client), and sets the router's **clock** (time zone and NTP): secure downloads fail on a router whose date is wrong.
- Names the router after your business (WinBox's title bar shows it), and labels everything it adds **Tuvorlink**: the `tuvorlink-sync` and `tuvorlink-report` scripts, the `tuvorlink` pages folder, the walled-garden entry, the hotspot users of paid purchases.
- Two scheduled scripts: one fetches new purchases every 10 seconds (and tells your dashboard whether the hotspot is running), one reports every minute: each purchase's time and data (including the session still going on), the router's health and who is online.
- Speed profiles for your packages, named `tuvorlink-<number>` (and `tuvorlink-<number>-fup` for the fair-usage speed).
- Walled-garden entries so customers can reach Tuvorlink and pay before they're online.
- Makes the hotspot work on its bridge: **hardware offloading off** on the bridge's ports (otherwise the switch chip passes customers' traffic without the hotspot seeing it), bridged traffic through the firewall, and the bridge in the **LAN** list so the default firewall lets its DHCP and DNS through.

- Keeps customers logged in while their phone sleeps (no idle timeout) and clears devices stuck half-way through logging in.
- With **Stop customers sharing** ticked: a firewall rule so a customer's phone can't pass your Wi-Fi on.

Full setup (new or reset router) also builds the network on the ports chosen in step 1, in the background so your own connection dropping doesn't stop it:

PORT	USE	ADDRESSES
ether1	Internet (Starlink or ISP router)	from your internet
the hotspot ports (ether2–ether4 unless you chose others), and the Wi-Fi if chosen (open, with the Wi-Fi name you chose)	Customers, behind the hotspot	10.20.0.x
the LAN ports (ether5 unless you chose others)	Your own devices (outside the hotspot)	10.30.0.x

Ports your router doesn't have are skipped, and ports in neither list are left as they are. Plug your laptop into a LAN port to manage the router; with none, manage it with WinBox by its MAC address.

Your original hotspot pages folder is kept: to go back, set the hotspot profile's HTML directory to it again. Users you create yourself are never touched. The router only ever *reads data* from Tuvorlink after installation; it never runs scripts from it.

More Wi-Fi: access points

To cover a bigger area, add access points (Ruijie / Reyee, TP-Link, Ubiquiti, Tenda and others) behind your MikroTik. Customers on them get the same login page and packages, and phones move between them without paying again.

1. **Cable the access point to a hotspot port** (ether2–ether4 unless you chose others). With a PoE adapter: the adapter's **LAN** socket goes to the MikroTik, its **PoE** socket to the access point. The port's light comes on when the cable works.
2. **Set it up as a plain access point:** its internet (WAN) by **DHCP**, and **no** DHCP server, router mode or login page (captive portal, Wi-Fi auth) of its own. The MikroTik hands out the addresses and shows the login page.
3. **Give its Wi-Fi the same name as the MikroTik's** (the Wi-Fi name from step 1: your business name unless you changed it), **open** (no password), on both bands. With one name everywhere, phones join whichever is nearest.
4. **Let the access point itself through:** on your dashboard, **IP binding › Add**, with its MAC address (on its label), limits **Custom**, no speed and no days. It can then reach its own cloud (Ruijie Cloud, Omada and so on) for updates and management. Customers on it still log in and pay.

Two mistakes cost you money:

- **An access point on ether1 or a LAN port (ether5).** On a LAN port everyone on it gets internet **without paying**.

- **An access point linked to the MikroTik over Wi-Fi** (repeater, wireless bridge, or mesh with the MikroTik). All phones behind it then look like one device to the MikroTik, so one payment unlocks all of them. Always use a cable.

Example: a Ruijie / Reyee access point

1. Reset it (hold the reset button for about 10 seconds), join its Wi-Fi **@Ruijie-s...** and open `https://192.168.120.1`. Accept the browser's certificate warning and set the admin password it asks for.
2. In the setup wizard: **Internet: DHCP**, **SSID**: your Wi-Fi name, **Security: Open**, **Country/Region: Ghana**, time zone **Africa/Accra**. Changing the country can reset the SSID: check it before **Next**. If it warns *WAN port is not connected*, close the warning; don't choose **Wireless Repeater**.
3. Name the project and click **Create Network & Connect**. Skip binding it to Ruijie Cloud unless you use it.
4. Cable it to a hotspot port and add it under **IP binding**. To change its Wi-Fi name later, open its address (WinBox: *IP › DHCP Server › Leases*, host name `RAP…` or `EAP…`) and go to *Workspace › Wi-Fi › Edit*.

On your dashboard

MikroTik routers also give you **Active users** (who is online, with Disconnect), **Network status** (online, outages, CPU and memory), **Vouchers** to print and sell for cash, **IP binding**, **Pause internet** and **Policies** (block sites): see Your dashboard. Routers installed with an older script show "needs the new install command" on those pages until you run it again.

Troubleshooting

PROBLEM	WHAT TO DO
`not allowed by device-mode`	See *"Not allowed by device-mode"?* above.
`STOPPED. Couldn't download the login page`	The router has no internet or DNS: plug the internet into ether1, test with `/ping tuvorlink.com`, then run a new command.
Setup page stays on "Waiting for the router"	The command didn't run: paste it again (each command works once; get a new one if it already ran).
Dashboard says **no hotspot running**	Get a new command and run it: it creates the hotspot, or prints why it can't. If it says the router has no DHCP server of its own, choose **New or reset router** and run again.
Customers join the Wi-Fi but get no address	The bridge isn't in the LAN list or the hotspot sits on a single port: running the command again fixes both.
Customers get an address but no login page	Check *IP › Hotspot › Servers*: the hotspot must be on the bridge (not on ether2 or wlan1 alone), and *Server Profiles* › HTML directory should be `tuvorlink` (or `flash/tuvorlink`).
Router shows **Offline** on the dashboard	It hasn't checked in for a few minutes: check its internet. See its log with `/log print where message~"Tuvorlink"`.

PROBLEM	WHAT TO DO
"Router script out of date", or "needs the new install command"	Get a new command and run it: routers keep their old setup until you do.
A disconnected device is back online	It still had time on its purchase and logged in again. Devices only stay off once their purchase ends.
A customer's TV can't get online	TVs can't open the Wi-Fi page: the customer adds it by its MAC address on their payment page (**Using it on a TV?**, packages for more than one device, router script from version 9). See What customers see.
A TV added by a customer stays offline	Its MAC address must be the one it uses on your Wi-Fi (turn off its "private"/"random" MAC), and the purchase must have a device free: the TV gets in once one is.
Phones on an access point get internet without paying	The access point is on a LAN port (ether5): move its cable to a hotspot port.
Phones on an access point get no address	Its cable to the MikroTik isn't working (the port's light is off: check the PoE adapter's LAN and PoE sockets), or it's in router mode: set it to access point with DHCP.
An access point shows offline in its own cloud	Add its MAC address under **IP binding**.

Can't run commands?

Under **Router setup › Or paste the full setup script** you get the whole script to paste instead, for routers that can't download files.

Grandstream GWN

Grandstream GWN works with Tuvorlink in two ways:

- **Codes (the simplest, and the default):** you make vouchers in GWN.Cloud and add them to Tuvorlink. Each customer who pays is shown one of your codes, and types it on the Grandstream login page.
- **Automatic (beta):** the access point sends customers to your Tuvorlink page; once they pay, Tuvorlink tells your GWN.Cloud to let their device on. No codes, but more to set up.

You can switch a hotspot between the two any time under **Hotspots › Change**.

Codes

1. **Hotspots › Add hotspot**, device **Grandstream GWN**, connection **Codes** (or **Change** an existing hotspot to Codes). You land on its setup page, which shows exactly how to set each package's vouchers.
2. In GWN.Cloud: *Captive Portal › Vouchers › Add*, one batch per package: **Quantity**, **Max Devices**, **Duration** (up to 7 days, counted from the first login) and, if the package has one, the **byte limit**. Grandstream enforces these, so a 1-device voucher only works on one phone.
3. *Captive Portal › Splash Page*: a page with only **Voucher** as the login method; *Captive Portal › Policy*: a policy using that splash page, chosen on the Wi-Fi customers pay on.
4. In the policy's **Pre-Authentication Rules**, allow `tuvorlink.com`, and add a **Buy Wi-Fi** link to your shop page on the splash page.
5. Export or copy the vouchers and add them under **Codes**, choosing the package. We email you when a package is running low.
6. *Optional:* paste your Wi-Fi login page's address on the setup page (**Your login page address**), so customers get a button straight back to it after paying.

Customers buy on your shop page, see their code (with a Copy button and how many devices it works on), can have it sent by SMS (or to someone else's number), and can find it again under **Already paid? Lost your code?** with the number they paid with or the number it was sent to.

Automatic login (beta)

> **Beta.** Automatic login on Grandstream is new: tell us if a menu on your controller looks different.

What you need

- GWN access points managed in **GWN.Cloud** (www.gwn.cloud or eu.gwn.cloud), or a **GWN Manager** reachable from the internet.
- Your controller login, to turn on API access and create a portal policy.

1. Add the hotspot

In your dashboard: **Hotspots › Add hotspot**, device **Grandstream GWN** (connection: *Automatic: GWN.Cloud lets each paid device on*), then **Grandstream setup**.

2. Give Tuvorlink your API keys

1. In GWN.Cloud, open the **API Developer** page and turn on developer mode. It shows an **App ID** and a **Secret Key**.
2. On the Grandstream setup page, choose where your access points are managed, paste both, and click **Save and test**. You should see **Connected to GWN.Cloud**.

The Secret Key is stored encrypted and never shown again.

3. Point the Wi-Fi's captive portal at Tuvorlink

In GWN.Cloud (*Captive Portal › Policy List*, or *Profiles › Portal Policy*), **add a policy**:

FIELD	VALUE
Splash Page	External
Platform	Universal Platform
External Splash Server Address	your hotspot's address, shown on the setup page (`https://tuvorlink.com/g/…`)
RADIUS Authentication	required by the form: see below
Enable HTTPS Redirection	on
Enable Secure Portal	on
Pre Authentication Rule(s)	two rules, service *Web*: Hostname `tuvorlink.com` and the IP address shown on the setup page

RADIUS: GWN.Cloud won't save an external policy without a RADIUS profile. Create one first under *Settings › Profiles › RADIUS*, with the server address shown on the setup page, ports 1812 and 1813, and any secret. Tuvorlink lets devices on through the GWN.Cloud API, not through RADIUS.

Then edit your guest Wi-Fi (*SSIDs* or *Settings › Wi-Fi*): **Security** Open, **Enable Captive Portal** on, **Captive Portal Policy** the one you made. Under **Device Membership**, make sure your access points are members.

4. Test

Wait a minute for GWN.Cloud to update the access points, join the Wi-Fi with a phone and open `http://neverssl.com`. Your Tuvorlink page should open. The **Check** box on the setup page turns green when it does. Buy the cheapest package: the phone should go online by itself.

Good to know

- **Packages end by time.** GWN.Cloud can't apply data limits this way, so a data package ends when its validity ends.
- **Time starts at first connection**, and a returning device gets its remaining time back, even on another access point of the same hotspot.
- If GWN.Cloud can't be reached at the moment of payment, Tuvorlink keeps trying every minute.

Troubleshooting

PROBLEM	WHAT TO DO
Phone has internet without paying	The policy isn't on that Wi-Fi: check *Enable Captive Portal*, the policy, and **Device Membership**.
No internet and no page	Check the External Splash Server Address, the two Pre Authentication Rules and HTTPS Redirection. Test with an `http://` site: https sites can't be redirected.
"GWN.Cloud didn't accept the keys"	Copy the App ID and Secret Key again from the API Developer page, and check the region (www or eu).

Ruijie / Reyee

Ruijie and Reyee work with Tuvorlink through **codes**: you create Wi-Fi vouchers on your Ruijie, add them to Tuvorlink, and each customer who pays is shown one of your codes to type on the Wi-Fi login page. There's no automatic login to set up, which on Ruijie is the hard part.

Using a Ruijie access point to extend a **MikroTik** hotspot? Then you don't need codes: see MikroTik (*More Wi-Fi: access points*).

Your dashboard walks you through it: **Hotspots › Add hotspot**, device **Ruijie / Reyee**. You land on the hotspot's **Ruijie setup** page, which ticks off each step.

1. **Make the same packages on Ruijie.** In Ruijie Cloud: *Configuration › Authentication › Voucher › Manage Package › Add Package*. One Ruijie package for each Tuvorlink package, with the same time (and data) and *Max Concurrent Devices* set to the package's devices.
2. **Turn on code login.** *Configuration › Authentication › Captive Portal*: choose the guest Wi-Fi and set the login to **Voucher**.
3. **Let customers buy before they log in.** Add `tuvorlink.com` to the captive portal's **Allowlist** (walled garden), and add a **Buy Wi-Fi** button on the login page linking to your shop page (shown on the setup page).
4. **Create codes and add them.** Generate a batch of vouchers for each package, export or copy them, and add them under **Codes**, choosing the package. We email you when a package is running low.
5. **Your login page address** *(optional)*. Paste the Wi-Fi login page's address on the setup page: after paying, customers see their code and a **Go to the Wi-Fi login page** button. Without it, they rejoin the Wi-Fi to reach the login page.
6. **Test.** Join the Wi-Fi, tap **Buy Wi-Fi**, buy the cheapest package and type the code on the login page.

Customers can have their code sent by SMS too, and find it again under **Already paid? Lost your code?** with the number they paid with.

Menu names vary a little between Ruijie Cloud versions; on a Reyee router's own web page, look under *Authentication*.

When a package runs out of codes, customers can't buy it until you add more: keep an eye on the setup page, or the low-codes email.

TP-Link Omada

Today: code pool

Omada access points work with Tuvorlink through a **code pool**:

1. In your Omada Controller, create vouchers (*Hotspot Manager › Vouchers*) for each package, with the same duration.
2. Export them, then in your dashboard: **Hotspots › Add hotspot**, device **TP-Link Omada**, connection **Code pool** › **Codes** › upload.
3. In the controller's portal settings, allow `tuvorlink.com` before authentication and link your shop page (`https://tuvorlink.com/s/…`, shown on the Hotspots page) from the login page.

Coming: direct connection

Omada controllers can hand the login page to an external portal and let it authorise devices through the controller's API. We're adding this: you'll give Tuvorlink a hotspot operator account on your controller (on-premise reachable from the internet, or Omada Cloud), and customers will go online by themselves after paying, without a code.

Ubiquiti UniFi

Today: code pool

UniFi works with Tuvorlink through a **code pool**:

1. In the UniFi Network application, create hotspot vouchers (*Hotspot Manager › Vouchers*) for each package, with the same duration.
2. In your dashboard: **Hotspots › Add hotspot**, device **Ubiquiti UniFi**, connection **Code pool** › **Codes** › paste or upload them.
3. In the guest hotspot settings, allow `tuvorlink.com` before authorisation (pre-authorization access) and link your shop page (`https://tuvorlink.com/s/…`) from the portal.

Coming: direct connection

The UniFi Network application can send guests to an external portal and authorise them through its API, with time, data and speed limits. We're adding this, so customers go online by themselves after paying. You'll need a UniFi console reachable by Tuvorlink and an API key (*Network › Control Plane › Integrations*).

Other access points

Any access point or controller that can **print or export vouchers** works with Tuvorlink through a **code pool**:

1. Create vouchers on your device for each package (same duration as the Tuvorlink package).
2. In your dashboard: **Hotspots › Add hotspot**, device **Other access point**, connection **Code pool**. Open **Codes**, choose the package, and upload a CSV or paste the codes (one per line).
3. Give customers your shop page (`https://tuvorlink.com/s/…` , shown on the Hotspots page): link it from your login page, or print it as a QR code at the venue. If customers must reach it before they're online, allow `tuvorlink.com` in your device's walled garden.

Each sale hands out one code, which the customer enters on your device's login page. The **Codes** page shows how many are left for each package.

Want no codes?

Customers go online by themselves on MikroTik today, and on Grandstream through GWN.Cloud (beta). Direct connections for Ruijie, Omada and UniFi are coming, and many other brands can be connected through RADIUS: tell us which equipment you use.

Packages

A package is what customers buy: a name, a price, and its limits. Open **Packages** in your dashboard to add, edit or pause them.

Limits

LIMIT	MEANING	EXAMPLE
Time	Online time the customer can use	1 hour, 3 hours
Data	Data they can use (MB or GB)	1 GB
Validity	Days the package lasts from its first use, whatever is left	1 day, 7 days
Devices	Phones or laptops that can use one purchase at the same time	1 device, 3 devices
Speed	Download / upload limit	5M down, 2M up

Combine them: *1 GB valid 7 days* ends when the gigabyte is used **or** after seven days, whichever comes first. *1 Day* (validity 1 day, no time limit) gives unlimited use for 24 hours from the first connection.

Devices

Set **Devices per purchase** to sell family or room packages: with 3 devices, one payment covers three phones or laptops at once. Customers see it on the package ("1 day · 3 devices").

- The phone that paid goes online straight away. Each other device opens the Wi-Fi login page and taps **Already paid?** with the Mobile Money number used to pay; from then on it reconnects by itself.
- **MikroTik** refuses a device beyond the limit while the others are online. Routers connected before this setting existed need the install command run once more (**Hotspots** shows *Router script out of date* when that's the case).
- **Grandstream**: when a new device joins a purchase that's already on its limit, the device used least recently is taken off.
- **Code pools**: set the same number of devices when you create the vouchers on your controller.

Per router brand

- **MikroTik** applies time, data, validity, devices and speed.
- **Grandstream** applies time, validity and devices (packages end by time; data limits can't be applied there yet).
- **Code pools** (Ruijie, Omada, UniFi, others): the limits are the ones you set when creating the vouchers on your device, so keep them the same as the package.

Prices

Prices are in Ghana cedis. You keep 96% of each sale; see Fees and payouts.

Showing and hiding

Each package has **Hide** and **Show** buttons (and **Visible to customers** when you edit it). A hidden package disappears from your Wi-Fi page straight away, without deleting its sales history; customers who already bought it keep their time. Use it for packages you only sell at certain times, or to retire one.

Discount codes

Open **Discounts** to make codes customers enter before paying, such as *WELCOME20* for 20% off, or GHS 1.00 off one package.

- **Percentage or amount off**, for every package or one.
- **Uses allowed** and **Valid until** are optional. A code counts as used once its customer has paid.
- **100% off** gives free access straight away, with no payment (for staff, guests or giveaways).
- Customers tap **Have a discount code?** on the payment page and see the new price before paying.

You give the discount: Tuvorlink's 4% is worked out on what the customer actually pays. Each sale shows the code it used under **Sales**. Turn a code off at any time; codes that were used can't be deleted, so your sales history stays complete.

Fair usage

A package can slow a purchase down after an amount of data instead of cutting it off, for example **1 Week Unlimited: 1 Mbps after 20 GB**. Set it under **Packages › Edit › Fair usage**: the amount, and the slower speed (upload/download, like `1M/1M`).

- MikroTik routers apply it by themselves: once a purchase passes the amount, the router moves it to the slower speed until the package ends (the customer is logged out once and back in). Routers set up before fair usage existed need the install command run again (**Hotspots › Router setup**).
- Customers see it in the **fair usage policy** they accept when they pay (linked below the packages); the packages themselves show only their name and time, to keep the page simple. Add your own Wi-Fi rules to that policy under **Settings › Customer login page**.
- Grandstream and voucher-code hotspots can't slow a purchase down after an amount of data, so fair usage isn't shown there.

Mobile Money payments

Customers pay on your Wi-Fi's login page with **MTN MoMo, Telecel Cash or AT Money**. Payments are processed by our payment partner, Moolre, and arrive in Tuvorlink's account; your share is paid out to you (see Fees and payouts).

What the customer does

1. Taps a package.
2. Types their Mobile Money number. The network is picked from the number; they can change it.
3. Chooses whether to get a text: **Send me a receipt by SMS**, or on code hotspots **Also send my code by SMS**. Buying for someone else? **Send it to someone else's number** texts the code to that number instead. A **discount code**, if they have one, goes in here too.
4. Approves the prompt on their phone with their Mobile Money PIN.
5. Their device goes online by itself (MikroTik), or they see their code on screen with a **Copy** button (code hotspots, and MikroTik set to codes) and type it on the Wi-Fi login page.

Some numbers first get an **SMS code** from the payment service, especially the first time they pay. The page asks for it; most phones offer to fill it in from the SMS. It's a security check by the payment service and can't be skipped. If it doesn't come within about 30 seconds, the page offers **Send a new code** (a new code replaces the one before).

When something goes wrong

SITUATION	WHAT HAPPENS
Customer declines, or low balance	The page says why; they can try again or use another number. No money is taken.
No prompt arrives	After 90 seconds the page offers *Try again*. On MTN, pending approvals are also under `*170#` › My Wallet › My Approvals.
Customer closes the page after approving	The payment is still completed and recorded: Tuvorlink checks pending payments every minute. They can connect later with **Already paid?** on the login page.
Two approved prompts for one purchase	The customer gets access once; the second payment is recorded so it can be refunded.
A code hotspot ran out of codes	The customer has paid but waits for a code: add codes and they get theirs automatically. If you gave the money back instead, use **Mark refunded** under **Sales**.

Every sale under **Sales** shows the payer's number and network, the payment's **Transaction ID** and the code it got, so you can match it with what the customer shows you.

Your customers' details

Tuvorlink keeps the number a customer paid with, to let them reconnect with **Already paid?** and so you can help them. Numbers are masked on customer pages (`024 ••• 4567`).

What customers see

Buying

When a customer joins your Wi-Fi, their phone shows a login page with your business name, your colour and **your packages first**. They tap a package, pay with Mobile Money, and on MikroTik hotspots their device goes online by itself: **no code to see or type** (unless you chose codes, see MikroTik).

On a computer the page shows the packages and the payment side by side; on a phone, one below the other.

Set your colour, welcome message and support phone under **Settings › Customer login page**. Your support number appears on the customer pages.

Buying for someone else

A customer can pay for a friend or family member: under the SMS choice they tick **Send it to someone else's number** and type that number. The code is texted to it, with who bought it, for example *"Lab Hostel Wi-Fi: 024 ••• 4567 bought you 1 Day. Your Wi-Fi code: …"* The friend types the code on the Wi-Fi login page, or finds it under **Already paid? Lost your code?** with their own number.

Coming back

While a purchase has time left, the device that bought it reconnects by itself: the login page recognises it and logs it straight back in.

If it isn't recognised (another browser, or a phone that changed its Wi-Fi address), the customer taps **Already paid?** and enters the Mobile Money number they paid with.

TVs and games consoles

A TV or games console usually can't open the Wi-Fi page, so it can't buy or log in by itself. On MikroTik hotspots, a customer whose package is for **more than one device** adds it from their phone instead:

1. After paying, on the payment page (the one showing their purchase), under **Using it on a TV?**, they type the TV's **MAC address** and a name. The TV shows it under *Settings › Network › Network status* or *About*; if it has a "private" or "random" MAC option, they turn it off first.
2. Whenever the TV is on your Wi-Fi, the router logs it in under their purchase, within a few seconds. It's one of the package's devices, with the package's speed, data and fair usage, and it goes offline when the purchase ends.
3. **Remove** on the same page takes it off again at once.

If the TV has a web browser, there's another way: open `http://neverssl.com`, and on the Wi-Fi page tap **Already paid?** and enter the Mobile Money number.

Your router needs the install command from version 9 for this (**Hotspots › Router setup**): until then customers don't see the option. You can always let a device through yourself with **IP binding** (see Your dashboard).

Phones with "private" Wi-Fi addresses

Modern phones may use a different address on each network, and some change it now and then. If a customer is asked to pay again although they have time left, they can use **Already paid?**, or turn off *Private address* / *Randomised MAC* for your Wi-Fi in their phone's Wi-Fi settings.

Code-pool hotspots

On Grandstream, Ruijie, Omada, UniFi and other code hotspots, customers buy on your shop page and receive a code to enter on your device's login page: on screen with a **Copy** button, and by SMS if they asked for it. The page tells them to keep it, since they need it to log in again, and offers **Go to the Wi-Fi login page** when you've saved that page's address on the hotspot's setup page. Lost it? **Already paid? Lost your code?** shows it again for the number they paid with.

Your dashboard

Besides packages, sales and payouts, your dashboard shows who is on your Wi-Fi and how your routers are doing, and makes vouchers to sell for cash. The menu groups it: **Hotspot**, **Network** and **Money**.

Overview

Your earnings today, over 7 days and over 30 days with a chart, each hotspot's status, and the **Get started** checklist until its steps are done.

Sales

Every paid purchase, newest first: when it was paid, the customer's number and Mobile Money network, the payment's **Transaction ID**, the hotspot, the package, the amount, your share, the code it got, and whether it has been paid out to you. Use it to answer a customer who says they paid: ask for their number or the transaction ID.

- **Waiting** (code hotspots): the customer paid but the package had no codes left. Add codes and they get theirs automatically.
- **Mark refunded**: if you gave such a customer their money back yourself, mark the order refunded so it stops waiting. The sale stays paid to you, since the refund came from you.

Payouts received at the bottom lists what has been sent to you, with references.

Active users

Every device online on your MikroTik hotspots: its code, MAC and IP address, which router, the package and time left, how long it has been online and the data it used. Search by code, MAC or IP, or pick one router.

Disconnect logs a device off within 10 seconds. It can log back in while its purchase still has time; it only stays off once the purchase ends.

Routers report every minute. Routers installed before script version 6 show "needs the new install command": run their install command again (Hotspots › Router setup).

Customers

Everyone who has paid on your Wi-Fi, by the Mobile Money number they paid with: how many purchases, how much they spent, their latest package and where, and since when they're a customer.

- **Online**: customers whose purchase is logged in on one of your routers right now (a green dot).
- **Top spenders**: who spends the most.
- **Came back**: how many bought more than once.

Vouchers

Codes to print and sell for cash at your MikroTik hotspots, for customers without Mobile Money or to sell through a shop.

1. **Vouchers › Generate vouchers**.
2. Pick the router and the package: time, data, speed and devices come from the package.
3. Choose how many (up to 500), the length, an optional prefix (such as `WIFI`), letters and/or numbers, and upper or lower case. Codes leave out 0/O and 1/I/L, which get misread off paper. Numbers-only codes have at least 8 digits, so nobody can guess one.
4. **Print** gives a sheet of cards to cut out (or save as a PDF). **CSV** downloads the list for your own printing.

The vouchers are on the router within seconds. A customer joins the Wi-Fi, opens any website, taps **Have a voucher code?** and enters the code. The package's validity starts at first use.

Each voucher shows as **Active** (not used yet), **In use**, **Used** (time, data or validity used up) or **Disabled**. **Disable** stops one at once, also for someone using it. **Disable unused** stops a whole batch's unused vouchers, for a lost or stolen sheet.

Voucher sales are cash in your hand, so Tuvorlink's usual **4% commission** is taken from your next payout instead, and only for vouchers a customer has **used** (unsold or lost vouchers cost nothing). Each payout shows what was taken off. If no payout covers it in a month (for example you have no Mobile Money sales), it's invoiced on the 1st of the next month and shows under **Invoices**.

Promotions

Offers that show on your Wi-Fi page by themselves for a while; nobody types a code (for codes, see **Discounts**).

- **Percentage off** (up to 90%) or **amount off**: customers see the badge, the old price crossed out and the new one, and pay the new price. Tuvorlink's fee is on what they pay. A price never goes below GHS 0.50.
- **Bonus data**: extra data on top of a package's data, for packages with a data limit on MikroTik routers (codes made on other devices keep their own limits).
- Choose the packages (or every package), the start and end, and if you like only some days of the week: tick Saturday and Sunday for a weekend deal.

When several promotions apply, the customer gets the biggest price cut and the biggest data bonus. **Pause**, **End now** or edit a promotion any time; one nobody bought with yet can be deleted.

Fair usage

Purchases close to (80% or more) or past their package's fair usage amount, on your MikroTik routers, with the data used and the customer's number.

- **Slow down now**: applies the package's slower speed straight away.
- **Reset**: gives a slowed purchase its full speed back, and its fair usage amount starts over from the data used so far.

The router applies either within 10 seconds; the device reconnects once at the new speed. Set fair usage on a package under Packages: see Packages.

IP binding

Devices your MikroTik lets through without the login page, by MAC address: a printer, a POS, a staff phone, an access point extending your Wi-Fi (see MikroTik), or a regular customer who paid you in cash.

- **From a package**: the device gets the package's speed, and its time or validity as the end date (no payment is taken).
- **Custom**: a speed such as `2M/5M` (upload/download; empty for full speed) and a number of days (empty for no end).
- Add several devices at once with one MAC address per line. The MAC address is in the device's Wi-Fi or network settings.
- **Pause** cuts a device off at once; **Resume** lets it through again until its end date.

Pause internet

Cut the internet on a router from anywhere and bring it back; the router and its Wi-Fi stay on.

- **Pause the hotspot**: customers lose internet; your own devices on other ports keep it.
- **Pause the whole router**: every device behind it loses internet.

Customers are logged off when you pause, and purchases with a time limit keep counting while paused, so pause for short spells.

Policies

Simple rules for your MikroTik routers, on every router or the ones you choose, all the time, in the evenings (6 to 11 pm) or on weekdays (8 am to 6 pm):

- **Block sites**: up to 100 site names, such as `sportybet.com` (subdomains are blocked too). Ready-made lists for social media, video streaming, betting and adult sites help you start.
- **Router DNS for everyone**: every device has to look sites up through the router, so customers can't dodge blocks with their own DNS settings or Android's "private DNS". Blocking sites switches this on by itself.

Blocking works by site name: apps that use their own connections may still get through.

IP binding, Pause internet and Policies need the router script from version 7. Routers apply changes within 10 seconds.

Network status

Your MikroTik routers right now:

- **Online / offline**: a router counts as down after 3 minutes without contact.

- **Last outage** and **uptime over 24 hours**, and the outages of the last 7 days.
- **Health**: CPU, memory, model, RouterOS version and how long since the router restarted.
- **Needs attention**: offline routers, no hotspot running, an older router script, a router whose CPU or memory is nearly full.

PPPoE and customer accounts

Besides the hotspot, a MikroTik connected to Tuvorlink can bill **home and office connections** (PPPoE), and your customers can have an **account** in your customer portal.

PPPoE: home and office internet

Subscribers' routers or ONUs dial in to your MikroTik with a login and password. Tuvorlink keeps the logins on the router, cuts a subscriber off when their plan ends, and lets them renew with Mobile Money.

1. Turn PPPoE on on the router

Hotspots › Router setup, step 1:

- **New or reset router**: tick the **PPPoE ports** (where subscribers' cables or the OLT plug in). They get their own bridge, and subscribers get 10.40.x.x addresses.
- **Existing router**: type the interface for the PPPoE server (for example `ether5` or `bridge2`).

Then run the command (router script version 8 or newer). The terminal says `Tuvorlink: PPPoE server on …`.

2. PPPoE packages

PPPoE › Packages: a speed (download and upload, in Mbps), a length in days, a data cap or unlimited data, and optionally **fair usage** (after an amount of data, the connection continues at a lower speed until the plan renews). A package with a data cap stops when the data is used up. Untick *Subscribers can choose it in the portal* for plans you only sell yourself.

PPPoE packages are separate from your hotspot packages: they never show on your Wi-Fi page.

3. PPPoE customers

PPPoE › Customers › Add PPPoE customer: their name and phone number (their customer portal login, with a portal password), the router, their PPPoE login and password (set these on their router or ONU), the package, and optionally a fixed IP address. Tick *Start the plan now* if they paid you in cash.

The list shows who is **online** (and their address), each plan's end, the data used this period, and why a connection is **cut off** (expired, data used up, suspended, no plan). Routers apply every change within 10 seconds.

- **Renew**: you received cash: one more plan length, added on while the plan is still running.
- **Suspend / Resume**: cut a subscriber off and bring them back.
- **Login**: shows their PPPoE login and password.
- **Remove**: removes the login from the router. To move a subscriber to another router, remove them and add them there.

4. Settings

PPPoE › Settings:

- **Grace period**: days a subscriber stays connected after their plan ends, to renew without losing the connection.
- **Customers can change their PPPoE password** in the portal.
- **Customers can create their own account** (app accounts, below).

The customer portal

Your customers log in at `https://tuvorlink.com/c/<your business>` with their phone number and password (the address is shown under PPPoE settings and App accounts). It's on the Wi-Fi's address, so it opens from the Wi-Fi page before they're online.

- **PPPoE subscribers** see their plan, whether they're connected, the data used and the plan's end, and **renew** (or change plan) with Mobile Money. Renewing early adds on to the plan.
- **App accounts** see their plan and devices, add the phone they're on, and buy plans.

App accounts

An app account belongs to one router. While it has a plan, its devices (up to 5, by MAC address) go online **without logging in**: no code to type, even after the phone sleeps or rejoins.

- **App accounts › Add app account**: name, phone, portal password, router, a device's MAC address, and optionally a plan (cash received). **Activate plan** adds a plan later, for cash; **End plan** sends the devices back to the login page.
- Customers buy plans in the portal from your **hotspot packages**, paid with Mobile Money. The plan's speed applies; its time limit becomes the plan's end (data limits don't apply to devices let through this way).
- With **Customers can create their own account** on, your Wi-Fi page shows **Your account**: customers sign up there, and the phone they're on is added to the account.

Phones may use a "private" MAC address per Wi-Fi network: add the one the phone uses for your Wi-Fi (it's what the Wi-Fi page sees).

App accounts need router script version 7 or newer; PPPoE needs version 8.

Your brand

Customers see your business, not ours, on the Wi-Fi login page, the buy page and the payment page.

Logo, colour and welcome message

Open **Settings › Customer login page**:

- **Brand colour** lights up your customer pages.
- **Welcome message** appears under your business name.
- **Support phone** is shown to customers who need help.
- **Logo**: upload a PNG, JPG or WebP up to 512 KB. It appears above your business name. A wide logo on a transparent background looks best.

White-label (Private ISP plan)

For ISPs that want their own brand end to end:

- **Tuvorlink hidden**: no "Wi-Fi payments by Tuvorlink" on your customer pages.
- **Your own domain**, such as `wifi.yourisp.com`, with SSL. Your login, buy and payment pages run on it, and its home page lists your Wi-Fi locations (or opens your shop if you have one).
- Routers, payments and payouts keep running on Tuvorlink in the background.

Talk to us to set it up. We'll ask you to add one DNS record:

TYPE	NAME	POINTS TO
A	`wifi` (for wifi.yourisp.com)	the address we give you

Once the domain is live, new router install commands and the Grandstream portal address use it. Routers set up before need the install command run once more (**Hotspots › Router setup**).

Text receipts

Customers choose on the payment page whether to get a text. It's in your business name, with the amount, the package, your support number and, on code hotspots, their code (or it goes to the number of the person they bought for). Turn texts off under **Settings › Customer login page** if you prefer.

Texts come from **Tuvorlink** by default. Private ISP clients can have their own sender name (up to 11 characters, such as *KofiNet*) once it is approved: talk to us.

Fees and payouts

What it costs

No monthly fee, no setup fee. Tuvorlink keeps **4% of each sale**; you keep **96%**. Payment fees are included.

Printed vouchers you sell for cash carry the same 4%, once a customer uses them: it's taken off your next payout (or invoiced monthly when no payout covers it). See Your dashboard.

Example: you sell GHS 1,000 of Wi-Fi in a month and receive your 96% share of it. Your rate is shown under **Settings**; larger networks can agree a different rate with us.

Getting paid

1. Add your payout details under **Settings › Business and payouts**: Mobile Money number and network, or bank account, with the account name.
2. Your share of each sale adds up under **Payouts › Due to you**.
3. Ask for it: tap **Request payout**, or choose a **payout schedule** so it's asked for automatically.
4. We send it to you and record the payout with its transaction reference. You see every payout, the amount and the reference under **Payouts**.

Payout schedule

Under **Payouts › Payout schedule**, choose how often your payout is asked for:

SCHEDULE	ASKED FOR
When I ask	Only when you tap Request payout
Daily	Every morning
Weekly (the default)	Every Monday morning
Monthly	On the 1st of each month

You can tap **Request payout** at any time, whatever your schedule. A payout is asked for once at least GHS 10.00 is due, and there's one request at a time: everything due when we send it is paid, including sales made after you asked.

Your dashboard's overview shows your earnings today, over 7 days and over 30 days, with a 30-day chart.

Refunds and disputes

If a customer was charged twice or paid the wrong amount, the sale is flagged and doesn't count towards your earnings until it's sorted out. Contact us with the reference shown to the customer.

If you give a customer their money back yourself (for example a code hotspot ran out of codes), open **Sales** and use **Mark refunded** on their order. See the Refund policy for what customers are told.

Installer partners

Wi-Fi installers and network engineers can bring their clients to Tuvorlink and earn **20% of our fee** on every sale those clients make, for as long as they sell.

Join

1. Apply at https://tuvorlink.com/partners/apply: where you work, what you install, your experience.
2. We call you to confirm your experience, then approve your account.
3. Approved partners appear in the public installer directory, so Wi-Fi businesses can find you (you can turn this off in your profile).

Bring clients

- **Your referral link:** `https://tuvorlink.com/r/YOURCODE`, shown on your partner dashboard. Businesses that sign up through it within 30 days are your clients.
- **Add a client:** register the business yourself from your dashboard. You get their login details to hand over.
- **Set up their routers:** you can open your clients' Hotspots and Router setup pages to connect their equipment. You never see their sales, payouts or settings.

Earnings

Your share is worked out on each paid sale of your clients and shown on your dashboard (30 days, total, due to you). We pay you by Mobile Money and record each payout with its reference: see **Payouts** in your partner dashboard, and add your payout details under **Profile**.

FAQ

Do I pay a monthly fee?

No. There's no monthly or setup fee: Tuvorlink keeps 4% of each sale and you keep 96%.

Which routers work?

MikroTik (customers go online by themselves, or with a code if you prefer), and any access point that makes vouchers through codes: Grandstream GWN, Ruijie / Reyee, TP-Link Omada, UniFi and others. Grandstream can also log paid devices in automatically through GWN.Cloud (beta). See the guides under *Routers*.

Do my customers need an account or an app?

No. They join your Wi-Fi, pay with Mobile Money on the login page, and go online.

Can customers pay with cash?

Yes. On MikroTik, print **Vouchers** from your dashboard and sell them for cash. On code hotspots you can keep selling your own printed vouchers alongside: Tuvorlink only hands out the codes you add to it.

Can a customer buy Wi-Fi for someone else?

Yes. On the payment page they tick **Send it to someone else's number**: the code is texted to that number.

How do I get my money?

Your share adds up under **Payouts › Due to you**. Tap **Request payout** whenever you like, or choose a daily, weekly or monthly schedule, and it is sent to the Mobile Money number or bank account in your settings. See Fees and payouts.

What happens if the internet or power goes off at the venue?

Customers can't get online while the router is down, as with any Wi-Fi. MikroTik routers catch up with purchases as soon as they're back online.

My router shows Offline on the dashboard

It hasn't checked in for a few minutes. Check it has internet. For MikroTik, see the MikroTik guide (Troubleshooting).

A customer paid but isn't online

Ask them to open any website: the login page should log them straight in. If not, they can use **Already paid?** with the number they paid with. On code hotspots, they enter the code shown after paying, or find it again under **Already paid? Lost your code?**.

Find the sale under **Sales**: its number and transaction ID match the customer's Mobile Money message. If it shows **Waiting**, that package ran out of codes: add codes and they get theirs automatically.

Can I use my own brand?

Yes. Your business name, logo, colour, welcome message and support phone appear on your customers' pages (**Settings › Customer login page**). Larger ISPs can also hide Tuvorlink and use their own domain: see Your brand.

I install Wi-Fi for clients. Can I earn from it?

Yes: see Installer partners.

TUVORLINK

Need a hand?

We help you connect your equipment and make your first sale. Write to us, or ask for a call from your dashboard.

Email	**support@tuvorlink.com**
Documentation	**tuvorlink.com/docs**
Contact	**tuvorlink.com/contact**
Sign up	**tuvorlink.com/register**