



DRACO

POST-QUANTUM VPN

User Guide

ML-KEM + Classic-McEliece

WireGuard + Rosenpass

Device mesh

URSA Mobile, Inc. · August 2026

Android · Windows · macOS · Linux · iOS · Apple TV · browser · the URSA portal

How to use this guide

Three audiences share one book, because the person who owns the account usually also uses the product. Every section is tagged so you can skip what is not yours:

Tag	Who	What they do
Personal user	You signed up yourself	Install a client, sign in, connect, use the mesh across your own devices; manage your own free or paid plan.
Team member	Your organization issued you a seat	The same day to day; your admin handles the billing.
Team admin	You own the account for an organization	Buy and assign seats, invite and remove members, manage the team.

Note

Screens differ slightly between platforms. Where it matters the platform is called out; otherwise the flow is the same everywhere.

1. Getting started

Personal

User

Team admin

1.1 Personal or organization account

Draco works the same day to day whether the account is yours or your employer's — the only difference is who signs up and who pays.

Account	How you get it	Billing
Personal	You sign up yourself in any Draco app or at draco.ursamobile.com . A free tier needs no card, and Try for free starts instantly with no account at all.	Yours. Upgrade to paid in-app (Apple) or from your account at any time; one plan covers all of your own devices.
Team member	Your organization's admin issues you a seat; you sign in with your work email.	Your organization's — you never enter payment.

Note

Either way it is one URSA account, and it carries every URSA product you own — Draco, Lyra and URSA OS — under the same email sign-in.

What each plan includes

Plan	Exit locations	Device mesh	How you get it
Free	The free exit locations	Not included	Sign up (no card), or Try for free with no account at all.
Personal (paid)	Every exit worldwide	Yes — up to your plan's device cap	Upgrade in-app (Apple) or from your account.
Team	Every exit worldwide	Yes — a shared organization mesh, one seat each	Your admin assigns you a seat.

Note

You are never left guessing what you have: the app always shows your current plan, and a paid-only exit is marked — pick a locked one and it offers to upgrade rather than silently failing.

1.2 Install

Platform	Where	Notes
Android	Google Play, or <code>draco.ursamobile.com/dl/</code>	On a URSA phone it is already installed and updates itself.
Windows	<code>/dl/draco-windows-setup.exe</code>	Installs a service plus the app.
Linux	<code>curl -fsSL https://draco.ursamobile.com/install.sh sudo sh</code>	Verifies the download before installing; use the .deb on Debian/Ubuntu.
macOS	<code>/dl/draco-macos.dmg</code>	Approve the system extension once, in System Settings.
iOS / Apple TV	App Store	One VPN at a time is an Apple limit, not ours.
Browser	Chrome / Edge / Firefox add-on	Tunnels that browser only, so it can differ from the system VPN.

Tip

Every download is listed with a SHA-256 on the site. On macOS or Linux `sha256sum -c SHA256SUMS` confirms you got what we published — worth doing once.

Careful

macOS only: the app must be in

/Applications

before the system extension will load. Running it from Downloads fails with no useful error.

1.3 Sign in

1. Open Draco. It asks for your URSA account — the same one you use for the portal, and for Lyra or URSA OS if you have them.
2. Enter your email and password. No account? **Create account** opens the portal; a free tier exists and you can upgrade later.
3. Draco fetches your entitlement and shows the exit list.

Note

Sign-in is by **email**, not a username. One account carries every URSA product you own.

2. Connecting

User

Note

Draco routes through **one exit at a time** — like every VPN, your traffic leaves from a single location. You can switch whenever you like: pick another country on **Countries**, or save favourites as **Profiles** for one-tap switching. It reconnects in about a second, and there is no limit on how often you switch.



Home — the map, and the connection card with the big Connect button

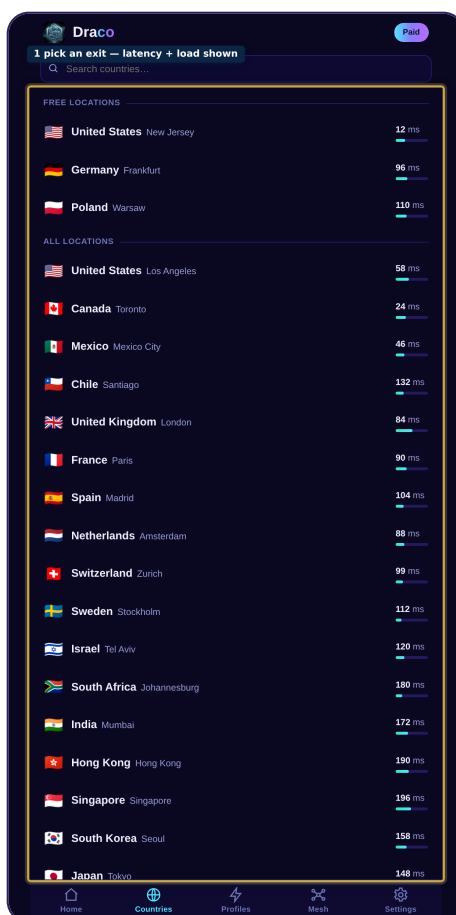
2.1 Quick connect

1. Open **Home**.
2. Press **Connect**. Draco picks the fastest exit for you.
3. The card turns to **Protected** and names the country you are exiting from.

Tip

Connect always chooses the lowest-latency exit. To pin a specific country, choose it on the Countries tab first — Draco remembers it for next time.

2.2 Choosing a country



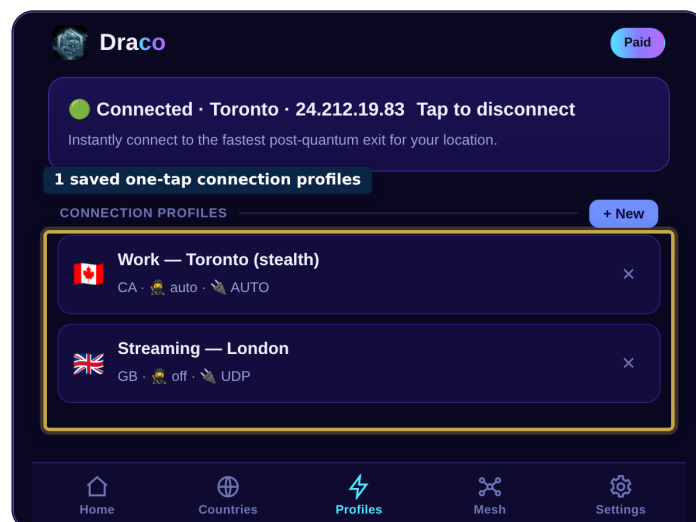
Countries — live latency and load per exit

1. Open **Countries**.
2. Search, or scroll. Each row shows live latency and load.
3. Tap a country to connect through it.

Tip

Lower latency matters more than distance. A nearer exit under load can be slower than a further idle one, which is why both numbers are shown.

2.3 Profiles



Profiles — saved country + stealth + transport combinations

A profile is a saved combination of country, stealth and transport, so a setup you use often is one tap instead of three settings.

1. Open **Profiles** → **+ New**.
2. Name it, pick the country.
3. Choose Stealth (Auto/On/Off) and Transport (Auto/UDP/TCP-443).
4. Save. Tap it any time to connect.

Tip

A *Travel* profile with Stealth

On

and Transport

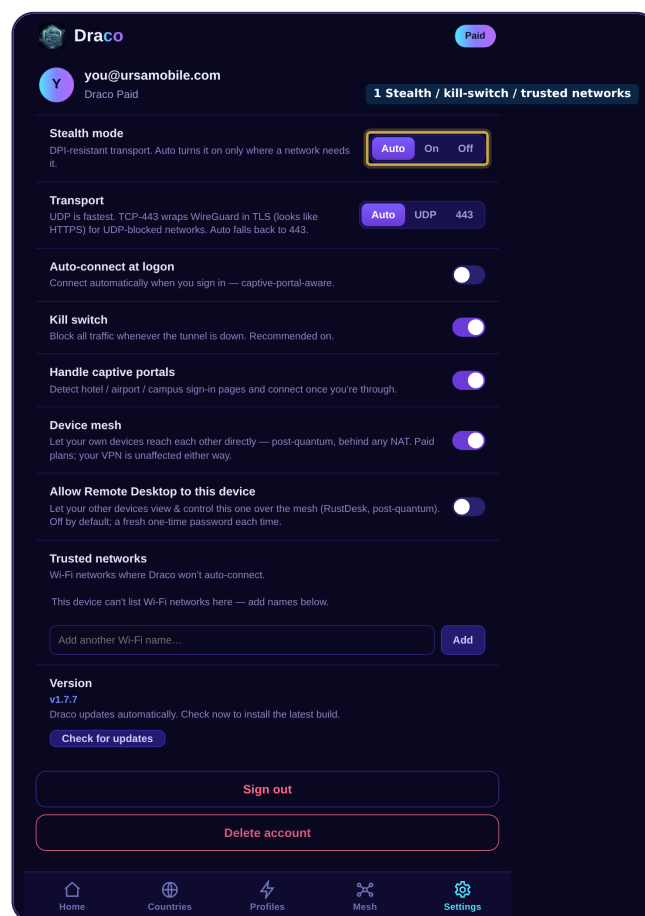
TCP-443

is the one to reach for on hotel, airport or conference Wi-Fi, where plain VPN traffic is often blocked.

3. Difficult networks

User

Some networks block VPNs. Draco handles the common cases by itself; these settings are for when you want to force the issue.



Settings — stealth, transport, kill switch and captive-portal handling

Setting	What it does	When to change it
Stealth	Disguises the tunnel so deep packet inspection cannot fingerprint it. Post-quantum protection is kept either way.	Leave on Auto . Force On where VPNs are actively blocked.
Transport	UDP is fastest. TCP-443 makes traffic look like ordinary HTTPS.	Leave on Auto . Force 443 if UDP is blocked outright.
Kill switch	Blocks traffic if the tunnel drops, so nothing leaks.	On, unless something genuinely needs to survive a drop.
Captive portal	Lets a hotel/airport sign-in page load before the tunnel takes over.	Leave on. Without it those pages cannot load.

Note

On **Auto**, Draco escalates by itself: plain UDP first, then TCP-443, then stealth, then both. You normally do not need to touch this.

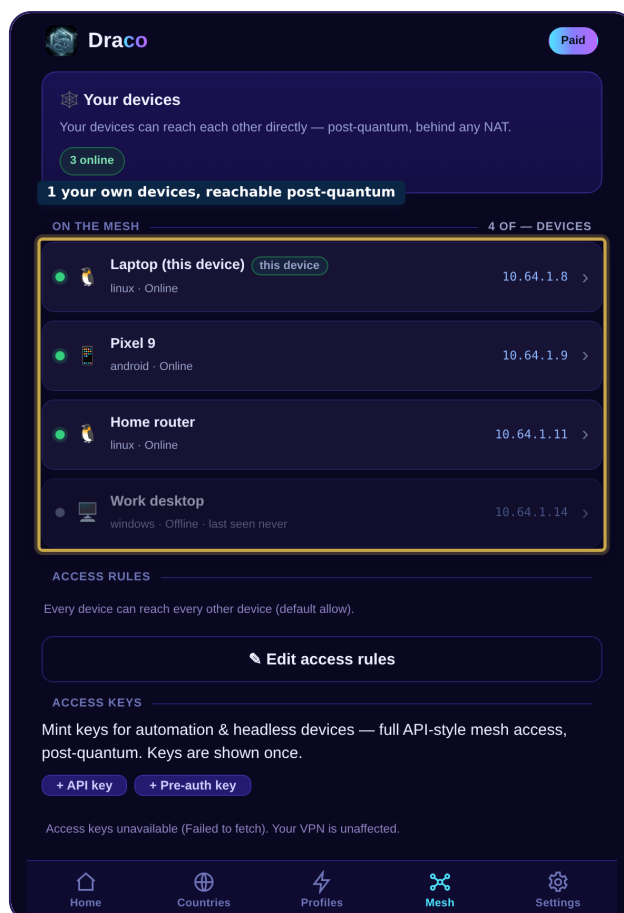
Tip

If a network lets you browse but Draco will not connect, set Transport to **TCP-443** before anything else. It fixes the large majority of blocked networks.

4. Device mesh

User

Team admin



Mesh — your own devices, reachable privately by name

The mesh links *your* devices to each other privately, alongside the VPN. Each device gets a stable mesh address and can reach the others directly, wherever they are.

1. Sign in to Draco on each device.
2. Open **Mesh** and enable it.
3. Devices appear in the roster with a green dot when online.
4. Reach a device by its mesh name or address, exactly as if on the same LAN.

Plan	Devices
Individual	5 enabled of 25 registered
Business	25 enabled of 50 registered
Enterprise / Government	100

Tip

Switching a device

off

freed its seat but keeps its registration and its address. Switch it back on later and it returns unchanged — no need to delete and re-add.

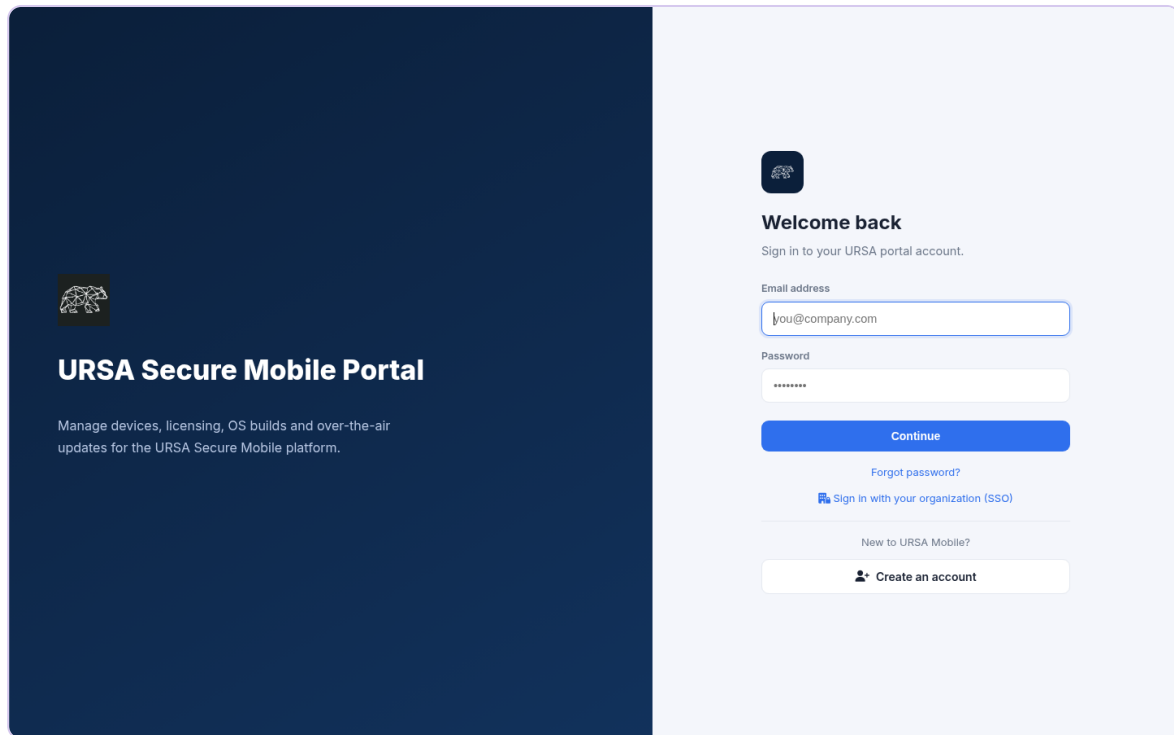
Note

Each device pair negotiates its own post-quantum key on first contact, so mesh traffic carries the same protection as the VPN.

5. Your account in the portal

User

The portal at app.ursamobile.com is where billing, plans and manual configuration live. Day to day you will not need it.



Portal sign-in. A one-time code is emailed after the password

1. Go to app.ursamobile.com and sign in with email and password.
2. A one-time code arrives by email — enter it. This is a second factor, not a password reset.
3. You land on the dashboard.

Careful

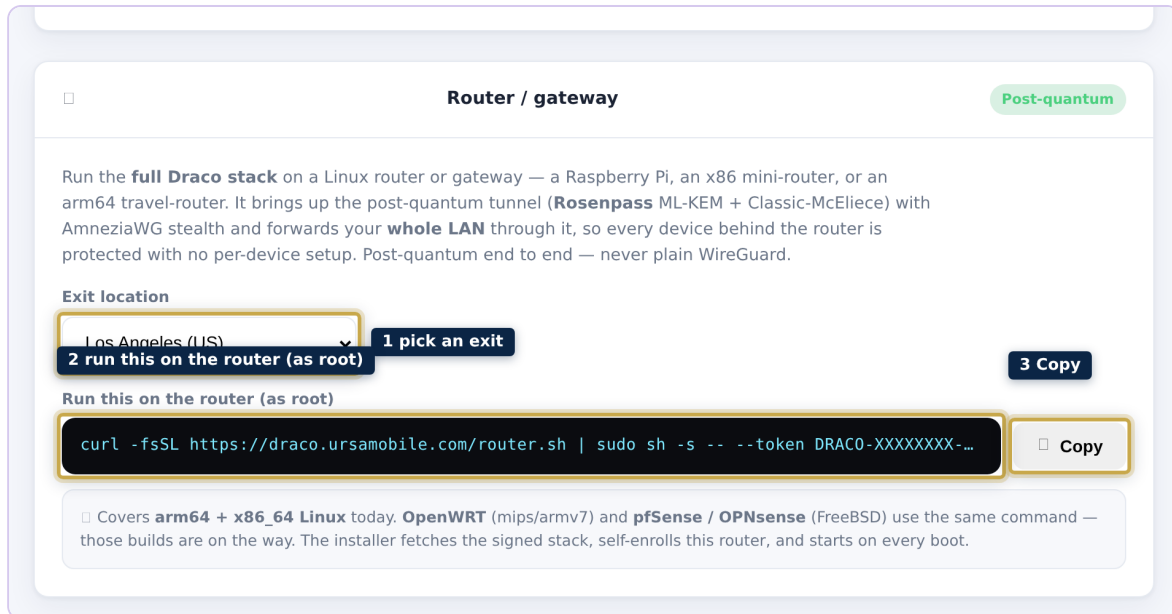
The code expires. If it is refused, ask for a new one rather than re-entering the old.

Note

Sign in with your organization (SSO). If your company has been set up for single sign-on, the sign-in page offers **Sign in with your organization** after you type a work email — you are sent to your company's Microsoft sign-in and land in the portal with no separate URSA password. One work login covers Draco, Lyra and URSA OS.

5.1 MyDraco

MyDraco shows your plan, your devices, and — for a router or gateway — a one-line install command that puts the **full post-quantum Draco stack** on it. Not plain WireGuard: the router runs Rosenpass (ML-KEM + Classic-McEliece) + AmneziaWG stealth and forwards its whole LAN through the tunnel, so every device behind it is protected with no per-device setup.



MyDraco &rrar; Router / gateway. Pick an exit, then run the install command on the router as root.

1. Open **MyDraco** and find **Router / gateway**.
2. Choose an exit location.
3. Copy the command and run it on the router as root: `curl -fsSL https://draco.ursamobile.com/router.sh | sudo sh -s -- --token <your token> --exit <city>`
4. It self-enrolls the router, starts on boot, and routes the LAN through the post-quantum tunnel.

Note

The one command auto-detects the router and installs the right build: **Linux** arm64 + x86_64 (Raspberry Pi, x86 mini-routers, arm64 travel-routers), **OpenWRT** arm64 / armv7 / x86_64, and **FreeBSD** — **pfSense / OPNsense** (amd64). On pfSense/OPNsense the tunnel comes up automatically; one last step — assign the `draco0` interface and add an outbound-NAT rule for your LAN — is done in the firewall web UI, and the installer prints exactly where.

Careful

The command contains your account token — treat it like a password. It only appears when you are signed in to your own account.

6. Running a team

Team admin

This section is for the person who owns the account at a customer.

6.1 Seats

1. Sign in and open your team.
2. Set the seat count you want.
3. Adding seats invoices immediately, per seat.
4. Reducing seats takes effect at the **next billing cycle** — no refund mid-term.

Action	Charge	When
Add seats	Per-seat, immediate	At once
Reduce seats	None	Next cycle
Cancel	None	Runs to period end

Tip

Volume pricing applies from 15 seats. If you are near that, buying to 15 can cost less than 14.

Careful

Seat limits are enforced by the server, not just the UI. At the cap, the next invite is declined until you add seats — nobody is charged for the blocked attempt.

6.2 Members

Your organization 3 of 250 seats used

Add employees to your Draco plan. Each member gets your organization's device cap and joins your private mesh. Someone without a URSA account yet is emailed an invite to set their password — or, on your company domain with SSO, they can just sign in with their work account.

Employee email

name@company.com **1 type a work email**

☐ Pick from your directory **2 or pick from your directory**

MEMBER **3 Remove frees**

dana.reyes@ursamobile.com	Remove
sam.okafor@ursamobile.com	Remove
priya.nair@ursamobile.com	Remove

MyDraco & rarr; Your organization. Add someone by email (they are emailed an invite if they have no account yet), pick from your directory, or Remove to free a seat.

Manage members from **MyDraco → Your organization** in the portal — the same place you see your own devices. You do not need a separate console.

1. Type an employee's email and choose **Add member**.
2. If they already have a URSA account they are added at once. If they do not, they are **emailed an invite** automatically — a sign-in link and a temporary password — and the seat activates.
3. Remove a member to release the seat.

Note

Each member gets your organization's device cap automatically — the **Enterprise** or **Business** tier, applied to everyone. You do not set a cap per person.

Note

A member's Draco entitlement follows the team. Remove them and their access ends at the next check — no need to change anything on their device. Removing drops them to the free tier; their account and its mesh address are kept.

6.3 Pick from your directory

☐ Pick from your directory

☒ 1 tick people amber.payton@ursamobile.com

☐ Andre Lorie · andre.lorie@ursamobile.com

☐ Edwin Tharp · edwin.tharp@ursamobile.com

☐ Add selected 2 Add selected

With single sign-on, tick people from your company directory and Add selected.

If your company uses single sign-on, you can add people without typing each address.

1. In **Your organization**, choose **Pick from your directory**.
2. Tick the people you want, then **Add selected** — each is added (and invited if needed).
3. Only people on your own company domain are listed.

Note

This needs one Microsoft permission on your sign-on app: in **Entra → App registrations → (your URSA SSO app) → API permissions**, add **Microsoft Graph → Application → User.Read.All** and **Grant admin consent**. Until then the picker shows this same reminder.

6.4 Who can reach whom

☐ **Your organization** 3 of 250 seats used

Add employees to your Draco plan. Each member gets your organization's device cap and joins your private mesh. Someone without a URSA account yet is emailed an invite to set their password — or, on your company domain with SSO, they can just sign in with their work account.

Employee email

name@company.com

☐ Pick from your directory

☒ Amber Payton · amber.payton@ursamobile.com

☐ Andre Lorie · andre.lorie@ursamobile.com

☐ Edwin Tharp · edwin.tharp@ursamobile.com

The mesh grid: each member's own devices always reach each other; tick a box to allow one member to reach another, then Save.

Members share one private mesh. Each member's own devices always reach each other; reaching across members is off by default and you grant it explicitly.

1. In **Your organization**, find the **Who can reach whom** grid (shown once you have two or more members).
2. Tick a box to let one member reach another across the mesh.

3. Choose **Save permissions**.**Note**

Permissions are one-way and per pair — ticking A→B does not grant B→A. Nothing is shared until you save.

8. Troubleshooting

User

Team admin

Problem	Try this
Connected, nothing loads	Disconnect and reconnect — a fresh exit is chosen. If a second VPN is running, it may own DNS; on macOS check network service order.
Will not connect on this network	Transport → TCP-443 , then Stealth → On .
Sign-in refused	Sign in with your email , not a handle. Handles are a Lyra convention.
Mesh device unreachable	Both devices must be online and enabled . A disabled device keeps its address but is not routable.
Cannot add a member	Seat cap reached — add seats.
macOS: extension will not load	App must be in /Applications, then approve it in System Settings → General → Login Items & Extensions.

Tip

Before escalating, note the exit country, the transport in use and whether another VPN is active. Those three answer most reports without further questions.