



# QDROP

## X-PROTOCOL

Files and messages, friend to friend —  
house to house, sealed end to end, no center.

LINUX EDITION

USER MANUAL · OCTOBER 2026

### 777 SOFTWARE

FREE — AND IT STAYS FREE

# 1 – WHAT QDROP IS

QDROP sends files and short messages straight from your computer to a friend's computer. Not up to a cloud and back down. Not through a company's server farm. Your machine talks to your friend's machine — house to house — and everything the two of you exchange is sealed (encrypted) before it leaves the sender's machine.

This is the second generation of QDROP, and it rides the X-Protocol: the apps' own road, built so two people can find each other and swap drops with no center at all — no directory in the sky, no landlord, nobody in the middle. There is no account to make, no sign-up, no password, and nothing to log into.

QDROP is a 777 Software program. The public edition is FREE — not a trial, not a teaser. There is also an Enclave Members edition, which belongs to the Enclave and is covered in §3. Everything else in this manual applies to both editions unless a section says otherwise.

The one-sentence version: the connect code is the introduction, the pipe is direct, and the drop is sealed. Only people you have actually become friends with can send you anything — a stranger gets refused at the door.

# 2 – HOW IT WORKS

Four ideas run the whole program. Here they are in plain words first; the technical names are at the end of the section, for the curious.

## Your card — the identity you hold

When QDROP first starts, it creates your identity keys on your own computer. Those keys never leave your machine. From them the program makes your card, and your Q-Number — your name in the Q world, in the form **77-000000**. Nobody issues that number and nobody can take it away: it is figured from the card itself, and the keys are the proof it is yours.

## The connect code — the introduction

A connect code is how two people introduce their programs when nothing else exists yet — no server, no phone book, no mutual friend online. It is one block of text beginning **QCODE1.** and it carries four things: your Q-Number and public keys, the doors where your program can currently be reached, a one-time introduction secret, and an expiry. The whole code is signed by your key, so the way you send it — text, email, read aloud — does not need to be trusted.

**QCODE1.7f3a...** (one long block of text — copy the whole thing, from **QCODE1.** to the very end)

- A code works once, for one friend. The first knock spends the secret; a second knock on the same code is refused.

- A code dies in 24 hours. Your screen says so in plain words: this code works once, for one friend, and stops working tomorrow at this time. A fresh code is one press — “Fresh code.”
- Given a code to the wrong person? Press “Cancel unused codes.” Every unused code you have out dies at once, and QDROP hands you a fresh one. Codes already spent on real friendships are not affected — friends stay friends.
- One swap is enough. When your friend's program knocks with your code, the introduction rides back on the same connection, and you are friends both ways.

## The ladder — how two computers find each other

You never climb this ladder yourself. QDROP climbs it for you, in seconds, every time — and most pairs meet on the first rungs and never think about any of it. The line under your friend's name in the program tells you which way you connected.

1. Same house, same network. Two computers under one roof talk straight across the home network. Nothing leaves the house.
2. Through a connection you already have. If your program and your friend's already share any live connection, they use it to swap their current doors, then meet directly.
3. Both sides knock at once. Each program knocks on the other's door at the same moment — each knock opens its own side's door just as the other's arrives, and the two meet in the doorway.
4. The doors written into the connect code. A code carries every door its maker had when the code was made, and the other side can knock on those.
5. Your router opens its own door. Most home routers will open a door for a program that asks politely, and hold it open. QDROP asks yours by itself — you touch nothing.
6. The last resort — one door, opened by you. If everything above fails, QDROP says so plainly, and the last door is a door number you open yourself on your router (§5). It is always the last resort, it is always explained up front, and it is never sprung on you.

There is one honest exception, and QDROP will name it rather than hide it: some internet providers keep their customers behind a locked gate of the provider's own (carrier-grade NAT), and no program on Earth can open that gate from inside. If that is your wall, QDROP tells you in plain words (§11) — it never spins forever and never shows you an error code.

## The seal — what's agreed, what rides in it, what an attacker must break

What's agreed: when two friends connect, their programs prove to each other that they hold the private halves of their cards, and both arrive at the same fresh secret keys — a secret neither side ever sends, and no listener can rebuild from what crossed the wire. The signed cards and codes mean neither side can be impersonated.

What rides in it: every message and every piece of every file is sealed with those keys before it moves. Each new message gets a fresh key, stepped from a one-way chain — so the keys keep moving forward, and yesterday's traffic stays sealed even in tomorrow's storm.

What an attacker would have to break: to read a drop, someone would have to take the private key off your computer itself, or break the mathematics outright. There is no server holding a copy to steal, no password database to leak, no helpdesk to sweet-talk. Anyone watching the road — a provider, a stranger, any watcher at all — sees sealed boxes, sizes, and timing. Never the contents.

The labels, for the record: X3DH-style key agreement over Curve25519 identity and signed-prekey bundles (X25519 key agreement, Ed25519 signatures), ChaCha20-Poly1305 AEAD sealing with an HKDF-SHA-256 hash-chain ratchet, and SHA-256 verification of every piece and of the whole file.

### The fingerprint — your proof it's really them

Your screen shows your card's fingerprint under your name. Before QDROP ever trusts a code, it checks the signature and the keys behind it — a code that doesn't check out is refused, and nothing is added. For anything that matters, take one extra step: read your Q-Numbers to each other over an ordinary phone call. If the number your friend sees for you matches the one on your screen, it is really them.

## 3 — THE TWO EDITIONS

QDROP gen-2 comes in two editions. Same program, same seal, same ladder — one difference: whether the house is built in.

### The public edition

This is the edition at [777software.net/qdrop](https://777software.net/qdrop), free for anyone in the world. It contains no house service, none of our servers in any form, and no relay of any kind — not ours, and not one you bring yourself. The ladder in §2 is the whole road: if it connects you, you are connected directly, and if it cannot, QDROP says so in plain words (§11) — there is no relay fallback. The last door, if it is ever needed, is a door number you open on your own router. Nobody's computer — ours included — ever carries your drops or even knows they happened.

### The Enclave Members edition

Members of the Enclave get their own edition, through the Enclave only — it is never on the public site. In this edition the house service is built in: it introduces members to each other by name (no codes needed between members), keeps track of who is around, and stands as the members' road when two members' doors can't meet head-on. Your drops themselves still travel sealed, friend to friend.

The house address is built in — and locked. The members edition carries the house service's address inside it, and the program offers no way to see it, change it, or remove it. That is on purpose: a setting that cannot be reached cannot be broken by accident, by a curious grandchild, or by a bad day. In the program's own words: "The address is built in and can't be changed."

### Which edition do I have?

- Members edition: a MEMBERS banner across the top of the window, and a panel titled "THE HOUSE SERVICE." Friends can be added by name.
- Public edition: no banner, no house panel — friends are added by connect code only, and there are no house settings to find. That absence is the design, not a fault.
- The two editions are still friends with each other: a member and a public user swap connect codes and connect the ordinary way (§6).

## 4 — INSTALLING QDROP

1. Download QDROP gen-2 for Linux from [777software.net/qdrop](http://777software.net/qdrop). (Members: your edition comes through the Enclave — see §3.)
2. Unpack the tarball. You get one folder, QDROP-Gen2 — the program with its working parts beside it. Nothing else to install, and no Python to set up: it runs as it stands.
3. Run the QDROP-Gen2 program inside that folder (double-click it, or `./QDROP-Gen2` from a terminal; if your system asks, make it runnable first with `chmod +x QDROP-Gen2`). There is nothing to configure and no server to set up — pick the name your card will call you, and press "Make my card."

One program, your machine, your rules. QDROP asks for no account, sends no telemetry, and stores everything on your own computer (§5).

## 5 — FIRST RUN

The first screen asks for exactly one thing: the name your card will call you. Pick it and press "Make my card." Your identity is created on your computer at that moment; nothing is sent anywhere. From then on, the main window's header says it plainly: "X-Protocol · no servers · no accounts — your computer talks straight to your friend's."

### Your doors, in plain words

The YOUR DOORS panel tells you how reachable you are, translated out of network-speak. It will say one of three things:

- "You have a door the outside world can knock on — friends away from home should be able to reach you." Good: the ladder has everything it needs.

- “Right now, only your home network can reach this computer.” Not an error — information. Friends in your house can reach you today; a friend outside may need a later rung of the ladder, and QDROP will say plainly if it comes to the last door.
- “No doors found yet.” The computer may not be on a network yet. Connect it, then press “Check my doors again.”

## Your door number

QDROP listens on a door number (a port, in the old language). It is shown next to “Your door number:”, and you can set it yourself with Change — any whole number from 1024 to 65535. You only need to care about this number for the ladder's last resort (§11): a number you chose stays put, which is what a router needs if you ever open a door by hand. One warning the program itself gives: codes you already gave out carry the old number — after changing it, make a fresh code for new friends.

Where things live: QDROP keeps everything in `.qdrop-gen2`, inside your home folder (`~/ .qdrop-gen2`). Files you receive land in its downloads folder.

## 6 — ADDING A FRIEND

### With a connect code (everybody)

1. Both of you open QDROP and make your cards (§5).
2. Press “Copy my code” and send the code to your friend — by text, email, anything. Your friend does the same for you.
3. Paste your friend's code into “Paste their code here” and press “Add their code.” QDROP checks the code's signature first; a code that doesn't check out is refused, in plain words.
4. Wait for the knock. The program will say “Knocking on their doors — this can take a little while on a slow link...” — that is the ladder being climbed (§2).
5. You're friends. For anything that matters, do the Q-Number check from §2 — read your numbers to each other on a call.

### By name (Enclave Members edition)

1. In the THE HOUSE SERVICE panel, type your friend's member name and press “Ask to be friends.”
2. They accept, and they appear in your friends list — introduced by the house. No codes change hands between members.

If the house answers that it doesn't know that name yet, it means your friend hasn't opened their members QDROP yet — the house learns a member's card the first time they open the program. Ask them to open it once, then ask again.

From then on, the two programs remember each other. You never need a second code for the same friend.

## 7 – SENDING MESSAGES AND FILES

### Messages

1. Select your friend in the Friends list.
2. Type in the message box and press "Send words."
3. Watch the line under it: Delivered — with how you connected — or a plain-words reason if it couldn't go yet.

### Files

1. Select your friend and press "Send a file...", then pick the file.
2. Your friend's program accepts the offer on its own — between friends, that's the arrangement — and the file starts moving in small sealed pieces, with the percentage on screen.
3. When it lands, the receiving side checks every byte against the file's SHA-256 fingerprint. Your friend sees "Received — every byte checks out." A file that doesn't check out is never presented as finished.

Resume is real — and it survives almost anything. Both sides keep the map of which pieces have landed on disk, not in memory. Connection dies, program closes, computer sleeps, router reboots: send the same file again and only the missing pieces travel. Nothing starts over unless it has to.

### Receiving

Receiving asks nothing of you — your program just needs to be running. Incoming words appear in the conversation; incoming files show their progress and land in QDROP's downloads folder (§5), with the history kept on your machine only.

### If your friend is offline — the Outbox

If a drop can't be delivered right now, it doesn't vanish and it doesn't sit on anyone's server. It waits in your Outbox — on your machine — and QDROP keeps retrying on its own. When your friend comes back, it goes by itself, and the program tells you it went. An Outbox item waits up to three days; after that it expires, and QDROP says so in plain words rather than letting you wonder.

## 8 – SLOW SKIES: SATELLITE AND WEAK CONNECTIONS

QDROP was built for the worst sky first. A satellite link can take most of a second just to answer — that makes everything slower to answer, not slower to move — so every patience in the program was set for that sky, and fast networks simply finish early inside the same generous waits:

- Pairing waits a full half-minute for a handshake before it says a word about trouble.

- A transfer is allowed to ride out ten minutes of closed sky before it gives up — and giving up still keeps every piece that landed.
- A lost piece is re-asked for calmly, every couple of seconds — never a shouting match with a weak link.

And the dropout rule is absolute: an interruption is a pause, never a restart. In the house's own testing, the receiving program was killed outright in the middle of a file and left dead for a full minute — when it came back, the transfer picked up from the exact piece it had reached, needed no new introduction, and the finished file checked out perfectly. Unplug your router mid-file if you like. QDROP has seen worse.

On its way — the mailbox favor. In the X design, a mutual friend's program can hold a sealed package for you while you're offline — a mailbox favor. The holder can see a sealed box and who it's for, never what's inside, and the favor lasts at most three days. That helper arrives in a later update; today, your Outbox on your own machine does the waiting (§7).

Members have one more bridge over a bad sky: the house service (§3) keeps members findable and introduced even when a member's own doors are hard to reach.

## 9 – STAYING SAFE

- A code is an introduction, not a password — but hand it out like a phone number you'd only give people you mean to talk to. It works once, it dies in a day, and “Cancel unused codes” burns every spare at a press.
- Check the Q-Number. When you add a friend, read your Q-Numbers to each other over a second channel — a voice call, a separate text thread. It takes ten seconds and it is the whole proof.
- Your computer is the vault. A code holds only public material, so sending one anywhere is safe. Your private keys live only on your computer, in an owner-only identity file. Guard the machine and you guard the identity.
- Back up your QDROP folder. Copying your `.qdrop-gen2` folder somewhere safe is your seatbelt — it carries your card, your friends, and your history. On a new computer, that folder is how your identity moves with you.
- If you lose the machine and the backup, you lose the identity. There is no account to recover, and nobody — including 777 Software — holds a copy of your keys. On a new computer, just install QDROP, pick your name, and swap fresh codes with your friends. (Members: open the members edition once and the house learns your new card.)

## 10 – LIMITS, STATED STRAIGHT

- Both computers on, both running QDROP, for a live drop to travel. Your Outbox bridges a friend's absence for up to three days — from your side.

- The provider's gate is physics, not a bug. If an internet provider locks a customer behind carrier-grade NAT, no program can open that gate from inside — for anyone, not just us. The public edition's answer is the ladder and, at the very last resort, your own opened door (§11). The members edition's answer is the built-in house service (§3).
- No small-print size cap. Unlike the old edition, gen-2 writes no fixed file-size limit into the program — files travel in small sealed pieces and resume when interrupted. A file is still loaded whole on the sending side, so a gigantic file wants a machine with room to hold it and a link with patience.
- One friend at a time. QDROP is person-to-person: words and files between two people. No group drops, no calls.
- Codes expire; friendships don't. A code lives 24 hours and works once. A friendship, once made, is remembered until you remove it.
- Windows and Linux. Those are the editions that exist.
- What QDROP never does: no accounts, no telemetry, no ads, no uploads of your data anywhere, no copy of your drops kept by anyone but you and the friend you sent them to.

## 11 — TROUBLESHOOTING

### QDROP says “I couldn't reach them.”

That is the wall, in the program's own words: “I couldn't reach them. If their internet provider keeps their computer behind a locked gate, there is no door to knock on from here. They can still swap files with people on their home network. The last door is a door number opened on the router — yours or theirs — and QDROP will say plainly if it comes to that. Nothing is wrong with your computer.” Before the last door, check the simple things: is your friend's QDROP open? Was the code fresh? Are you both on the network you think you are?

### The last door — opening one door number on your router.

1. In QDROP, set your door number yourself (§5) — pick one and set it, so it stays the same from then on.
2. On your router's settings page, find port forwarding and forward that number — UDP — to this computer.
3. Press “Check my doors again.” Then make a fresh code (old codes carry the old number) and swap again.

Every router's settings page looks a little different; your router's own manual covers where its forwarding page lives. You only ever open the one number, and only for QDROP.

### A code “didn't work.”

Codes are refused for honest reasons: it was already used, it expired (24 hours), it was cancelled, or the copy is incomplete. Copy the whole code, exactly, from **QCODE1** . to the end — or simply ask for a fresh one. Making codes is free and instant.

**It worked yesterday; today the knock goes unanswered.**

Addresses change — routers hand out new ones, computers move. The programs remember each other's last known doors and re-climb the ladder on their own; if a friend also changed their door number, old codes went stale with it. Swap a fresh code and you're back.

**The house doesn't know that name (members).**

Your friend needs to open their members QDROP once so the house learns their card. After that, asking by name works.

**A transfer stopped near the end, or a receipt "didn't come back clean."**

Nothing unfinished is ever presented as a finished file — that's the seal doing its job. Send the same file again: resume means only the missing pieces travel, so the retry is cheap even on a bad link.

**Which edition do I have?**

Members edition: a MEMBERS banner and a "THE HOUSE SERVICE" panel. Public edition: neither. Full answer in §3.

## **12 — THE Q STORY, AND THE X TURN**

Why the letter Q? Three reasons, from the founder. One: the QAnon hook — the letter already carries a charge. Two: X was IRC's letter first — Steven scripted IRC bots from the age of twelve, and the letter X was taken from that culture. Three, and simplest: Q stands for Quick.

And now the X turn: the second generation of the apps rides the X-Protocol — Q's own idea, rebuilt so the apps need no center at all — while the Enclave's websites go on speaking Q, unchanged. QDROP is one face of that floor; QChat — the same friends, the same seal, in conversation — rides it too. One name in the family is not an app at all: the Q-Relay server program is a separate 777 Software product that organizations and members run to stand up a house service of their own — the public QDROP app never uses one.

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QDROP gen-2 is a 777 Software program. The public edition is offered free.  
777 Software is an independent software company from Alabama, USA.

Founder & Architect: Steven Jesse

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Manual edition: October 2026 — the gen-2 release edition. This manual is written to describe QDROP gen-2 exactly as it ships. If a claim isn't in here, the program doesn't make it.