# ngrok Public tunnels

## CONCEPTS

Free accounts get one random public URL per session; reserve a domain in the dashboard to keep it stable.

**Internet client** public URL
↓ HTTPS
**ngrok cloud** traffic policy
↓ tunnel
**ngrok agent** your machine
↓ forward
**Local service** localhost:port

Anyone with the URL can reach your service: add a traffic policy or auth before sharing it.

The agent logs requests in the inspector at http://127.0.0.1:4040, where you can replay them.

## SETUP

**`ngrok config add-authtoken`** *`<token>`*
Store your authtoken

**`ngrok version`**
Print the agent version

**`ngrok update`**
Update the agent

**`ngrok config check`**
Check the config file

## TUNNELS

**`ngrok http`** *`<port>`*
Expose a local HTTP port

**`ngrok http`** *`<host:port>`*
Forward to another host

**`ngrok http`** *`<port>`* **`--url`** *`<domain>`*
Serve on a specific domain

**`ngrok tcp`** *`<port>`*
Expose a raw TCP port

**`ngrok tls`** *`<port>`* **`--crt`** *`<file>`* **`--key`** *`<file>`*
TLS endpoint with your cert

**`ngrok tcp`** *`<port>`* **`--cidr-allow`** *`<cidr>`*
Only allow an IP range

## TRAFFIC POLICY

**`ngrok http`** *`<port>`* **`--traffic-policy-file`** *`<file>`*
Apply a policy file

## CONFIG & SERVICES

**`ngrok start`** *`<name>`*
Start one configured endpoint

**`ngrok start --all`**
Start every configured endpoint

**`ngrok http`** *`<port>`* **`--config`** *`<file>`*
Use an extra config file

**`ngrok diagnose`**
Test connectivity to ngrok