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

ngrok config edit
Open the config in an editor

ngrok config upgrade
Migrate config to the newest format

ngrok completion
Print shell completion code

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

TUNNELS (cont.)

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

ngrok tcp *<port>* **--cidr-deny** *<cidr>*
Block an IP range

ngrok http *<port>* **--inspect=false**
Disable the traffic inspector

ngrok http *<port>* **--pooling-enabled**
Load-balance across agents

ngrok http *<port>* **--upstream-tls-verify=false**
Skip upstream cert check

ngrok tls *<port>* **--mutual-tls-cas** *<file>*
Require client certificates

TRAFFIC POLICY

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

ngrok http *<port>* **--traffic-policy-url** *<url>*
Fetch the policy from a URL

ngrok http *<port>* **--description** *<text>*
Label the endpoint

ngrok http *<port>* **--metadata** *<text>*
Attach custom metadata

Policy phases

Phase	When it runs
`on_tcp_connect`	a TCP connection opens
`on_http_request`	a request arrives
`on_http_response`	a response returns

CONFIG & SERVICES

ngrok start *<name>*
Start one configured endpoint

CONFIG & SERVICES (cont.)

ngrok start --all
Start every configured endpoint

ngrok start --none
Connect without endpoints

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

ngrok service install --config *<file>*
Run the agent as a service

ngrok service start
Start the installed service

ngrok service stop
Stop the service

ngrok service restart
Restart the service

ngrok service uninstall
Remove the service

ngrok diagnose
Test connectivity to ngrok

RECIPES

Share a dev server

```
ngrok config add-authtoken <token>
ngrok http 3000
# inspector: http://127.0.0.1:4040
```

Basic auth via policy

```
# policy.yml
on_http_request:
  - actions:
      - type: basic-auth
        config:
          credentials:
            - user:<password>

ngrok http 3000 --traffic-policy-
file policy.yml
```

Config file with endpoints

```
# ~/.config/ngrok/ngrok.yml
version: 3
endpoints:
  - name: web
    upstream:
      url: 3000

ngrok start web
```

Expose SSH

```
ngrok tcp 22 --cidr-allow <cidr>
```