

## Installing ngrok

### 1. Download ngrok:

```
brew install ngrok/ngrok/ngrok
```

```
choco install ngrok
```

```
sudo snap install ngrok
```

Other distros and package managers: [ngrok.com/download](https://ngrok.com/download)

### 2. Sign-up and get a token in [dashboard.ngrok.com/signup](https://dashboard.ngrok.com/signup)

### 3. Add the authtoken to ngrok client: `ngrok config add-authtoken <TOKEN>`

## Exposing different types of servers

1. Web server (port 8080): `ngrok http 8080`
2. File or folder: `ngrok http "file:///C:\temp"`
3. SSH server (port 22): `ngrok tcp 22`
4. Postgres server (port 5432): `ngrok tcp 5432`
5. RDP server (port 3389): `ngrok tcp 3389`
6. Server in a diff machine: `ngrok http 10.0.0.2:8080`

## Add Social Login ([learn more](#))

1. Facebook: `ngrok http 8080 --oauth=facebook`
2. Google for specific email domains: `ngrok http 8080 --oauth=google --oauth-allow-domain=example.com`
3. Github with consent for repository management: `ngrok http 8080 --oauth=github --oauth-scopes=repo`

## Add webhook verification ([learn more](#))

1. Slack: `ngrok http 8080 --verify-webhook=slack --verify-webhook-secret=secret-token`
2. Shopify: `ngrok http 8080 --verify-webhook=shopify --verify-webhook-secret=secret-token`
3. Stripe: `ngrok http 8080 --verify-webhook=stripe --verify-webhook-secret=secret-token`
4. Twilio: `ngrok http 8080 --verify-webhook=twilio --verify-webhook-secret=secret-token`

## Other Cool Features ([learn more](#))

1. Allow access only to your IP: `ngrok http 8080 --cidr-allow $(curl http://ifconfig.me/ip)/32`
2. Deny access to any IPv6 requesters: `ngrok http 8080 --cidr-deny ::/0`
3. Reject requests if 5XX errors >15% (circuit breaker): `ngrok http 8080 --circuit-breaker 0.15`
4. Add HTTP compression: `ngrok http 8080 --compression`
5. Add requester's country to header: `ngrok http 8080 --request-header-add "country: \${.ngrok.geo.country_code}"`
6. Add requester's geo latitude to request header:  
`ngrok http 8080 --response-header-add "geo-lat: \${.ngrok.geo.latitude}"`
7. Add security header to HTTP response:  
`ngrok http 8080 --response-header-add "content-security-policy: self;"`

## Putting everything together:

**Example 1:** HTTP access with Facebook Login, compression, and circuit-breaker at 50%  
`ngrok http 8080 --oauth=facebook --compression --circuit-breaker 0.5`

**Example 2:** SSH access restricted to your IP  
`ngrok tcp 22 --cidr-allow $(curl http://ifconfig.me/ip)/32`

**Example 3:** Access to a file only for your best friend with Google Social Auth  
`ngrok http "file:///C:\super-important\file.pdf" --oauth=google --oauth-allow-email=mybff@gmail.com`

In addition to development, ngrok can be used for:

- Enabling remote access without VPNs
- Accessing and managing remote software agents and IoT devices
- Enable remote access to web applications

To learn more or share what you're working on, check out <https://ngrok.com/slack>

## Whats Next?