Manual de Configuración de Cloudflare Tunnel (ciberpty-web)

Este manual describe paso a paso todo el proceso para instalar, configurar y dejar corriendo como servicio un túnel de Cloudflare (túnel **ciberpty-web**) que expone los tres subdominios:

- n8n.ciberpty.com
- barberia.ciberpty.com
- bonyelectric.ciberpty.com

Deja un espacio donde se indica para insertar capturas de pantalla o diagramas.

1. Prerrequisitos

- Servidor Ubuntu con acceso root (o sudo).
- Apache 2.4 configurado con VirtualHosts en los puertos :80 para cada subdominio.
- Docker + n8n corriendo en localhost: 5678.
- Carpetas web:
 - o /var/www/html/barberia
 - o /var/www/html/bony
- Dominio ciberpty.com gestionado en Cloudflare.

2. Instalación de cloudflared

```
# Descarga del paquete .deb oficial
wget -q
https://github.com/cloudflare/cloudflared/releases/latest/download/clou
dflared-linux-amd64.deb
# Instalación
sudo dpkg -i cloudflared-linux-amd64.deb
```

3. Autenticación en Cloudflare

cloudflared tunnel login

```
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$ cloudflared tunnel login
A browser window should have opened at the following URL:
https://dash.cloudflare.com/argotunnel?aud=&callback=https%3A%2F%2Flogin.cloudflareaccess.org%2FB0Cy5UM9sxY

If the browser failed to open, please visit the URL above directly in your browser.
2025-06-11103:04:36Z INF Waiting for login...
2025-06-11103:05:30Z INF Waiting for login...
2025-06-11703:06:25Z INF Waiting for login...
2025-06-11703:06:51Z INF You have successfully logged in.
If you wish to copy your credentials to a server, they have been saved to:
/home/gar16/.cloudflared/cert.pem
```

- Copia la URL que muestra y pégala en tu navegador.
- Selecciona la zona ciberpty.com y autoriza.
- Al finalizar, se generará ~/.cloudflared/cert.pem.

Captura 2: Pantalla de "Autorizar Cloudflare Tunnel"



Verifica:

```
ls -l ~/.cloudflared/cert.pem
# -rw------ 1 gar16 gar16 ... cert.pem
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$ ls -l ~/.cloudflared/cert.pem
-rw------ 1 gar16 gar16 266 jun 10 22:06 /home/gar16/.cloudflared/cert.pem
gar16@ciberseguridad:~$
qar16@ciberseguridad:~$
```

4. Creación del túnel

Creamos el túnel ciberpty-web:

cloudflared tunnel create ciberpty-web

- Se genera un JSON de credenciales en ~/.cloudflared/<TUNNEL ID>.json.
- Anota el Tunnel ID, p.ej. abe66880-bd61-491d-8907-0a903ba2c230.

Captura 3: Salida de "tunnel create"

```
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$
cloudflared tunnel create ciberpty-web
Tunnel credentials written to /home/gar16/.cloudflared/abe66880-bd61-491d-8907-0a903ba2c230.json. cloudflared chose icate was found. Keep this file secret. To revoke these credentials, delete the tunnel.

Created tunnel ciberpty-web with id abe66880-bd61-491d-8907-0a903ba2c230
```

5. Configuración de config.yml

Creamos el config global en /etc/cloudflared/config.yml:

```
sudo mkdir -p /etc/cloudflared
sudo nano /etc/cloudflared/config.yml
origincert: /etc/cloudflared/cert.pem
tunnel: abe66880-bd61-491d-8907-0a903ba2c230
credentials-file: /etc/cloudflared/abe66880-bd61-491d-8907-
0a903ba2c230.json

ingress:
    - hostname: n8n.ciberpty.com
    service: http://localhost:5678
    - hostname: barberia.ciberpty.com
    service: http://localhost:80
    - hostname: bonyelectric.ciberpty.com
    service: http://localhost:80
    - service: http.//localhost:80
    - service: http_status:404
```

Copia también los archivos:

```
sudo cp ~/.cloudflared/cert.pem /etc/cloudflared/
sudo cp ~/.cloudflared/abe66880-bd61-491d-8907-0a903ba2c230.json
/etc/cloudflared/
sudo chown -R root:root /etc/cloudflared
sudo chmod 600 /etc/cloudflared/*
```

6. Enrutamiento DNS automático

Para que Cloudflare cree los registros CNAME:

```
cloudflared tunnel route dns ciberpty-web n8n.ciberpty.com cloudflared tunnel route dns ciberpty-web barberia.ciberpty.com cloudflared tunnel route dns ciberpty-web bonyelectric.ciberpty.com
```

Captura 5: Salida de tunnel route dns

```
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$
cloudflared tunnel route dns ciberpty-web n8n.ciberpty.com
2025-06-11T03:24:26Z INF Added CNAME n8n.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8907-6
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$
cloudflared tunnel route dns ciberpty-web barberia.ciberpty.com
2025-06-11T03:24:45Z INF Added CNAME barberia.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8
gar16@ciberseguridad:~$ cloudflared tunnel route dns ciberpty-web bonyelectric.ciberpty.com
2025-06-11T03:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.ciberpty.com which will route to this tunnel tunnelID=abe66880-bd61-491d-8010-303:25:00Z INF Added CNAME bonyelectric.cib
```

En el panel DNS de Cloudflare deberían verse tres CNAME apuntando a abe66880-bd61-491d-8907-0a903ba2c230.cfargotunnel.com con la nube en **gris** (DNS only).

	••	, ,			ŕ
0	Α	truenas	190.33.247.11	Redirigido mediante proxyAutomático	Editar 🕨
	Α	wg	190.33.247.11	Redirigido mediante proxyAutomático	Editar 🕨
0	CNAME	barberia	abe66880-bd61-491d-8	Redirigido mediante proxyAutomático	Editar 🕨
	CNAME	bonyelectric	abe66880-bd61-491d-8	Redirigido mediante proxyAutomático	Editar 🕨
0	CNAME	n8n	abe66880-bd61-491d-8	Redirigido mediante proxyAutomático	Editar 🕨

7. Prueba en primer plano

Verificamos que todo funcione antes de instalar como servicio:

cloudflared tunnel --config /etc/cloudflared/config.yml run ciberptyweb

Salida esperada:

```
INFO Starting tunnel abe66880-...
INFO Connected to network edge
INFO Serving tunnel traffic...
```

Captura 6: Logs en foreground "Serving tunnel traffic"

```
gar10@ciberseguridad:~$ cloudflared tunnel --config ~/.cloudflared/config.yml run ciberpty-web 2025-06-11T03:39:33Z INF Starting tunnel tunnelID=abe66880-bd61-491d-8907-0a903ba2c230 2025-06-11T03:39:33Z INF Version 2025.5.0 (Checksum a62266fd02041374f1fca0d85694aafdf7e26e171a314467356b471c 2025-06-11T03:39:33Z INF GOOS: linux, GOVersion: go1.22.10, GoArch: amd64 2025-06-11T03:39:33Z INF Settings: map[config:/home/gar16/.cloudflared/config.yml cred-file:/home/gar16/.cloudflared/abe66880-bd61-491d-8907-0a903ba2c230.json origincert:/home/gar16/.2025-06-11T03:39:33Z INF Cloudflared will not automatically update i installed by a package manager. 2025-06-11T03:39:33Z INF Generated Connector ID: a4d7999e-5cde-4a17-b523-b050e4caa798 2025-06-11T03:39:33Z INF Initial protocol quic 2025-06-11T03:39:33Z INF Initial protocol quic 2025-06-11T03:39:33Z INF ICMP proxy will use 192.168.0.158 as source for IPv4 2025-06-11T03:39:33Z INF ICMP proxy will use ::48f8:2b67:ab74:ae5a in zone enp2s0 as source for IPv6
```

8. Ajustes en Apache (VirtualHosts sin redirección a HTTPS)

Para que el túnel obtenga el contenido por HTTP:

• Barbería (/etc/apache2/sites-available/barberia.ciberpty.com.conf):

```
apache
Copiar
<VirtualHost *:80>
   ServerName barberia.ciberpty.com
   DocumentRoot /var/www/html/barberia
   <Directory /var/www/html/barberia>
        Options Indexes FollowSymLinks
        AllowOverride All
        Require all granted
        </Directory>
        ErrorLog ${APACHE_LOG_DIR}/barberia_ciberpty_error.log
        CustomLog ${APACHE_LOG_DIR}/barberia_ciberpty_access.log
        combined
        </VirtualHost>
```

• Bonyelectric (bonyelectric.ciberpty.com.conf):

```
apache
Copiar
<VirtualHost *:80>
   ServerName bonyelectric.ciberpty.com
   DocumentRoot /var/www/html/bony
   <Directory /var/www/html/bony>
        Options Indexes FollowSymLinks
        AllowOverride All
        Require all granted
   </Directory>
    ErrorLog ${APACHE_LOG_DIR}/bonyelectric_ciberpty_error.log
        CustomLog ${APACHE_LOG_DIR}/bonyelectric_ciberpty_access.log
        combined
   </VirtualHost>
```

Recarga Apache:

```
sudo systemctl reload apache2
```

```
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$ sudo nano /etc/apache2/sites-available/barberia.ciberpty.com.conf
[sudo] password for gar16:
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$ sudo nano /etc/apache2/sites-available/bonyelectric.ciberpty.com.conf
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$
```

Captura 7: Prueba local con curl -H "Host: ..."

9. Instalación como servicio

Dado que ya tienes el service file en /etc/systemd/system/cloudflared.service, usamos un override para indicar el túnel y config:

```
sudo systemctl edit cloudflared
gar16@ciberseguridad:~$
gar16@ciberseguridad:~$ sudo systemctl stop cloudflared
gar16@ciberseguridad:~$ sudo systemctl edit cloudflared
```

En el editor, pega solo esto:

```
[Service]
ExecStart=
ExecStart=/usr/bin/cloudflared --no-autoupdate tunnel --config
/etc/cloudflared/config.yml run ciberpty-web
```

Guarda y cierra.

Luego:

```
sudo systemctl daemon-reload
sudo systemctl restart cloudflared
sudo systemctl enable cloudflared
```

```
/etc/systemd/system/cloudflared.service.d/.#override.conffa16b65c0d2903a8
### Editing /etc/systemd/system/cloudflared.service.d/override.conf
### Anything between here and the comment below will become the contents of the drop-in file
ExecStart=/usr/bin/cloudflared --no-autoupdate tunnel run ciberpty-web --config /etc/cloudflared/config.yml
### /etc/systemd/system/cloudflared.service
# [Unit]
# Description=cloudflared
# After=network-online.target
# Wants=network-online.target
 [Service]
TimeoutStartSec=0
 Tume-doctors active
Type-enotify
ExecStart=/usr/bin/cloudflared --no-autoupdate tunnel run --token eyJhIjoiNDRiY2U3MDU10DgyYzczNjFjNzRkMjY2NzM4YjYyNjAiLCJ0IjoiZTQ5Mjc30TAtZjg0Mi00MDI2LWI4Mj
# Restart=on-failure
# RestartSec=5s
 [Install]
WantedBy=multi-user.target
  gar16@ciberseguridad:~$ sudo systemctl daemon-reload
  gar16@ciberseguridad:~$ sudo systemctl restart cloudflared
  gar16@ciberseguridad:~$
  gar16@ciberseguridad:~$
  gar16@ciberseguridad:~$
  gar16@ciberseguridad:~$
  gar16@ciberseguridad:~$ dig +short n8n.ciberpty.com
   104.21.80.1
   104.21.64.1
   104.21.16.1
   104.21.112.1
   104.21.96.1
```

10. Verificación final

1. Estado del servicio

```
sudo systemctl status cloudflared

Debe mostrar Active: active (running).
```

2. Logs en tiempo real

```
sudo journalctl -fu cloudflared
```

3. Resolución DNS

```
dig +short n8n.ciberpty.com
```

Debe devolver el CNAME al túnel.

4. Acceso público

o https://n8n.ciberpty.com

- o https://barberia.ciberpty.com
- o https://bonyelectric.ciberpty.com

11. Limpieza del túnel antiguo

En el dashboard de Cloudflare **Zero Trust** \rightarrow **Access** \rightarrow **Tunnels**, elimina el túnel **HOGAR** para evitar recursos huérfanos.