Cloudflare Tunneling (Cloudflared)

Pre-requisites

1. Cloudflare Account
2. Domain Name
3. EC2 Instance

We will start the Cloudflare tunnel and access the nginx page.

Steps

1. SSH to EC2 instance.
2. Run the following commands to install & start the nginx:

```
sudo yum update
sudo yum install -y nginx
sudo nginx
```

3. Run the following commands to install cloudflared:

```
curl -fsSL
https://github.com/cloudflare/cloudflared/releases/latest/download/cloudflared-
linux-amd64 -o cloudflared
chmod +x cloudflared
sudo mv cloudflared /usr/local/bin/
```

4. Authenticate Cloudflare Tunnel by running:

```
cloudflared tunnel login
```

> Copy & paste the browser URL and select the domain name. Thus, the certificate will be installed.

5. Run the following command to create the tunnel and list it's tunnel-id. Note the tunnel id in the notepad as we will need it in further steps.

```
cloudflared tunnel create dev-example
cloudflared tunnel list
```

6. Run the following commands to configure the tunnel:

```
mkdir -p ~/.cloudflared
vim ~/.cloudflared/config.yml
```

7. Copy the following configuration in the above opened vim editor:

```
tunnel: <tunnel-id>   # Replace with your tunnel ID
credentials-file: /home/user/.cloudflared/<tunnel-id>.json
originRequest: # Top-level configuration
  connectTimeout: 30s

ingress:
  - hostname: dev.example.com
    service: http://localhost:80   # Change port based on your web server
```

> Substitute the *<tunnel-id>* with the above noted **tunnel-id** & *<dev.example.com>* with your domain name.

8. Validate the tunnel ingress rules by running the following:

```
cloudflared tunnel ingress validate
cloudflared tunnel ingress rule https://dev.example.com
```

> Replace *<dev.example.com>* with your domain name.

9. Now, run the tunnel:

```
cloudflared tunnel run dev-example
```

10. Now head to Cloudflare Console and open your domain.
11. Select the **DNS** option from the sidebar
    ○ Add the DNS Record of *Type* **CNAME**.
    ○ In *Name*, provide **dev**
    ○ In *Target* add *<tunnel-id>*.cfargotunnel.com
    ○ Enable the *Proxy status* to **orange cloud** and save the record.
12. Now, try accessing the domain name on the browser and the nginx page will be loaded.