Overview HTTPS & TLS

Traefik supports HTTPS & TLS, which concerns roughly two parts of the configuration:

- **Routers:** Define how HTTPS traffic is handled.
- **TLS Connection:** Manage certificates and TLS-specific settings.

> For Automated Certification Check this post:
>
> https://wiki.aeoneros.com/books/traefik-reverse-proxy-for-docker-swarm/page/lets-encrypt

Configuring HTTPS in Routers

When a router needs to handle HTTPS traffic, it should include a `tls` field in its definition. For detailed instructions, refer to the TLS section of the routers documentation.

Managing TLS Connections

To configure the TLS connection itself, you need to:

- **Obtain TLS Certificates:** This can be done either through:
    - **Dynamic Configuration:** Define certificates directly in your dynamic configuration files.
    - **Let's Encrypt (ACME):** Automate certificate generation and renewal. Refer to Let's Encrypt (ACME) Wiki Post for more details.

- **Configure TLS Options:** Set security policies like minimum TLS version and cipher suites.
- **Manage Certificate Stores:** Store and retrieve certificates used in TLS connections.

Example: Configuring HTTPS in a Router

```
http:
  routers:
    secure-router:
      rule: "Host(`example.com`)"
      entryPoints:
        - websecure
      service: my-service
      tls:
        certResolver: "myresolver"
```

Example: Defining Certificates in Dynamic Configuration

```
tls:
  certificates:
    - certFile: "/path/to/cert.crt"
      keyFile: "/path/to/cert.key"
```

Example: Using Let's Encrypt with ACME

```
certificatesResolvers:
  myresolver:
    acme:
      email: "your-email@domain.com"
      storage: "/acme.json"
      httpChallenge:
        entryPoint: "web"
```

TLS Options Example

```
tls:
  options:
    default:
      minVersion: VersionTLS12
      cipherSuites:
```

```
        - TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256

        - TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
```

For a deeper dive into certificate management, TLS options, and other HTTPS configurations, see the official Traefik documentation.