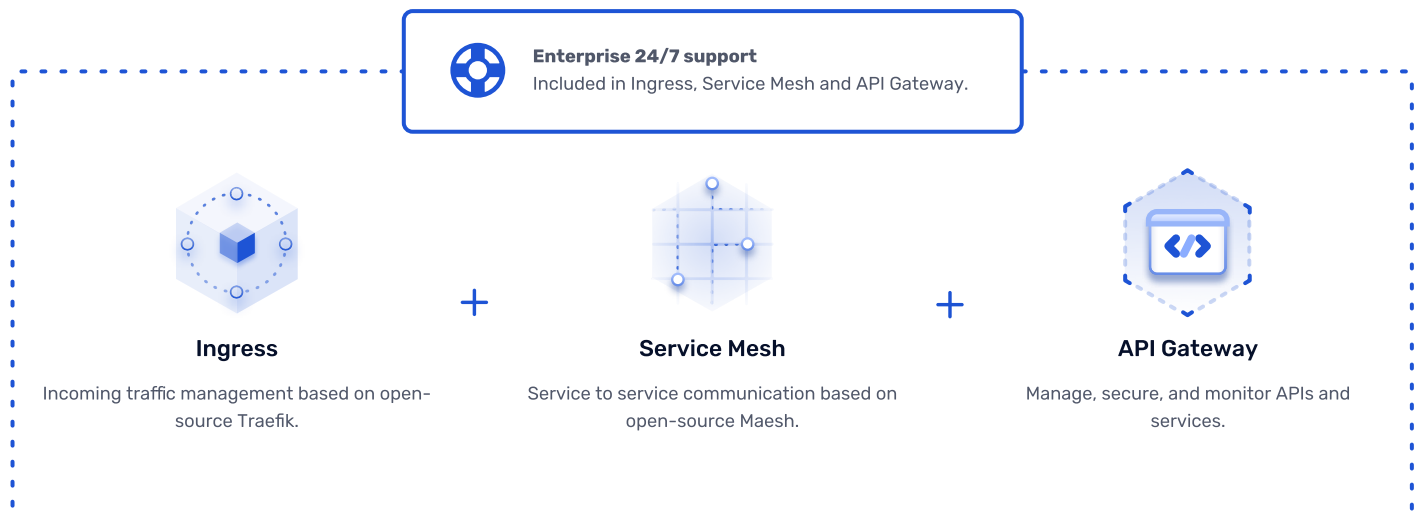# træfik labs

træfik enterprise

Connect, Secure, and Monitor Microservices at Scale

Traefik Enterprise is a **unified cloud-native networking solution** that brings **API management, ingress control, and Service Mesh all together** in one simple control plane. Traefik Enterprise eases microservices networking complexity for developers and operations teams across the organization.

Built on top of open source Traefik Proxy and Traefik Mesh, Traefik Enterprise brings exclusive **all-in-one,**

highly-available, scalable, and distributed features combined with premium bundled support for production grade deployments.

With **hybrid support for both legacy and cloud-native applications**, Traefik Enterprise is the best solution to help companies migrate progressively and safely to a microservices platform.

Enterprise 24/7 support
Included in Ingress, Service Mesh and API Gateway.

Ingress
Incoming traffic management based on open-source Traefik.

+

Service Mesh
Service to service communication based on open-source Maesh.

+

API Gateway
Manage, secure, and monitor APIs and services.

Why Traefik Enterprise?

Run Everywhere, Integrate Everything
- Deploy applications anywhere, on-premises or in the cloud, and natively integrate with leading infrastructure tooling.

Reduce Complexity
- Save time and give better consistency while deploying, managing, and scaling applications by leveraging dynamic and automatic Traefik Enterprise features.

Simplify Apps Modernization
- Ease transition of legacy applications to cloud-native microservices architectures.

Complete cluster visibility
- Improve the application development and delivery cycle by giving developers the visibility and ownership of their services.

Traefik Enterprise Features

All-in-one Ingress, Mesh and API management

- Ingress management
- Service Mesh: service-to-service communication
- API Gateway

Traffic Management

- HTTP, HTTP/2, TCP, UDP, Websockets, GRPC
- Mirroring
- Canary deployments
- Stickiness
- Active health checks
- Middlewares (circuit breakers, automatic retries, buffering, response compression, headers)
- Distributed In-flight request limiting
- Distributed rate limiting (per-IP, per-host, per-header)

Availability & Scalability

- One line cluster deployment through CLI
- Controllers & proxies resilience
- Scalability (adaptive scale out)
- Backup & Restore

Security

- LDAP authentication
- JWT authentication
- oAuth2 authentication
- OpenID Connect (OIDC)
- HMAC authentication
- Automatic HTTPS
- Distributed Let's Encrypt
- Unlimited Let's Encrypt certificates
- Custom certificates
- Encrypted cluster communication

Observability

- Cluster-wide dashboard
- Distributed tracing (Jaeger, Open Tracing, Zipkin)
- Real time traffic metrics (Datadog, Graphana, InfluxDB, Prometheus, StatsD)

Cloud Native Migration

- Hybrid routing (legacy and cloud-native)
- Legacy infrastructure support
- Progressive migration model

Supported Platforms

Environment

- Bare Metal / On Premise
- Virtual Machines
- Containers
- Public, Private, and Hybrid Clouds

Cloud

aws   Azure   Google Cloud   DigitalOcean

Containers

docker — Docker Swarm, DockerEE

kubernetes — AKS, EKS, GKE, OpenShift, k3s, Konvoy

Supported Ecosystem

Orchestrators

- Kubernetes
- Docker Swarm
- Red Hat OpenShift
- Rancher
- Mesos
- Marathon

Supported Protocols

- Websockets
- gRPC
- Let's Encrypt
- HTTP/HTTPS
- TCP/UDP

Cloud Services

- Microsoft Azure Service Fabric
- Amazon ECS
- Google Cloud Platform

Monitoring

- Prometheus
- Datadog
- InfluxDB
- StatsD
- Graphana

Service Discovery

- Consul
- ZooKeeper
- Amazon DynamoDB
- ETCD

Tracing

- Jaeger
- Zipkin
- Opentracing
- Instana
- Haystack