DevOpsSchool

Course curriculum · November 2026

LEVEL 04 OF 04 · ADVANCED

Traefik Advanced Training

Design highly available, hardened Traefik deployments for multi-cluster production traffic and API gateway use cases.

LIVE ONLINE **Max 8-10 hours**	CORPORATE (DAY-WISE) **5 days · Days 1-5**	SELF-PACED VIDEO **1-year LMS access**
BATCH SIZE **Max 10 learners**	NEXT BATCHES **1st of every month · weekends: first Saturday**	CERTIFICATE **Verifiable certificate of completion**

Foundation	Essential	Intermediate	Advanced
1 day · Included	2 days · Included	3 days · Included	5 days · This curriculum

INSIDE THIS CURRICULUM

What you will achieve	Outcomes and level focus
Who should attend	Audience and prerequisites
Agenda	47 topics · Foundation to Advanced
Hands-on labs	4 labs
Formats and fees	Live, 1:1, self-paced, corporate
Trainer and reviews	Rajesh Kumar
Enrolment	Batches, payment, contacts

WHY DEVOPSSCHOOL

- Rated 4.6 on Google
- 1,500+ verifiable certificates issued in the public registry
- Trainer Rajesh Kumar: 20 years in industry
- Small batches: max 10 learners, every session recorded

Course page: www.devopsschool.com/courses/traefik/traefik-advance-training.html
Talk to us: WhatsApp +91 99057 40781 · +1 (469) 756-6329 · contact@DevOpsSchool.com · reply within 1 hour

OUTCOMES

What you will achieve

By the end of the Traefik course path, you will be able to:

1

Route traffic dynamically

Configure entryPoints, routers, services and middlewares for Docker and Kubernetes workloads.

2

Secure the edge

Automate HTTPS, authentication and traffic protection and harden Traefik for production.

3

Operate at scale

Monitor, troubleshoot and run highly available Traefik with canary releases and GitOps.

WHAT THE ADVANCED LEVEL ADDS

High availability, security hardening and enterprise patterns

Hands-on: Capstone: hardened highly available Traefik edge. Deploy a multi-replica Traefik edge managed by GitOps with mTLS to backends, rate limits, dashboards and a documented failover test.

WHO SHOULD ATTEND

- Experienced Traefik practitioners responsible for quality, security and scale.
- Senior engineers, architects and leads who design and troubleshoot Traefik solutions.
- Teams making Traefik an organisation-wide standard.

BEFORE YOU START

- The Intermediate level, or equivalent hands-on experience.
- You can already: Run Traefik as the ingress controller on Kubernetes with CRDs or Gateway API, and monitor and troubleshoot its traffic.
- Basic computer skills and a laptop with a stable internet connection for the live sessions and labs.
- This curriculum includes every earlier level, so it is complete on its own.

AGENDA · FOUNDATION TO ADVANCED

Traefik Advanced Training agenda

47 topics. Each level builds on the one before it, so this curriculum lists every earlier level in full. Days are for corporate (day-wise) delivery; live online batches cover the same agenda in max 8-10 hours.

DAY 1 — Foundation: Reverse proxy concepts, architecture and first routes

Included from Foundation

1. Reverse proxies and edge routers: load balancing, TLS termination and why dynamic discovery matters
2. Traefik Proxy overview: open source edge router, Traefik v3 features and where it is used
3. Core concepts: entryPoints, routers, services and middlewares and how a request flows through them
4. Static versus dynamic configuration: CLI flags, traefik.yml and provider-supplied routing
5. Providers: Docker, Kubernetes, file, Consul and other sources of dynamic configuration
6. Installing Traefik: binary, official Docker image and Helm chart options
7. Running with Docker: docker-compose setup, Docker socket access and container labels
8. First routes: Host and PathPrefix rules and exposing a demo whoami service
9. Dashboard and API: enabling, securing and reading routers, services and middleware status
10. Basic logging: Traefik log levels and enabling access logs
11. File provider: defining routers and services in YAML for non-container backends

DAY 2 — Essential: HTTPS, middlewares and everyday routing

Included from Essential

12. Automatic HTTPS: ACME certificate resolvers with Let's Encrypt using HTTP-01, TLS-ALPN-01 and DNS-01
13. TLS options: minimum versions, cipher suites, default certificates and storing acme.json safely
14. Redirects: HTTP to HTTPS with redirectScheme and path changes with redirectRegex
15. Authentication middlewares: basicAuth, digestAuth and forwardAuth to an identity provider
16. Request shaping: headers, stripPrefix, addPrefix, replacePath and compress middlewares
17. Traffic protection: rateLimit, inFlightReq, ipAllowList and buffering limits
18. Middleware chains: reusing ordered middleware stacks across many routers
19. Load balancing: weighted round robin, sticky sessions and passive and active health checks
20. Router rules and priority: Host, Path, Header, Query and ClientIP matchers in Traefik v3 syntax
21. TCP and UDP routing: HostSNI rules, TLS passthrough and non-HTTP services
22. Configuration reloads: hot reloading dynamic configuration without restarts
23. Team workflow: label conventions, naming and keeping routing configuration in Git

DAY 3 — Intermediate: Kubernetes ingress, observability and troubleshooting

Included from Intermediate

24. Kubernetes install: Helm chart values, Deployment versus DaemonSet and service exposure
25. Kubernetes providers: Ingress, IngressRoute CRDs and the Kubernetes Gateway API provider
26. IngressRoute resources: IngressRoute, Middleware, TLSOption, ServersTransport and TraefikService objects
27. Certificates on Kubernetes: cert-manager integration and TLS secrets with Traefik
28. Canary and blue-green: weighted TraefikService and traffic mirroring for safe releases
29. Resilience middlewares: retry, circuitBreaker and timeouts on servers transports
30. Metrics: Prometheus and OpenTelemetry metrics and the key router and service series

31. Tracing: OpenTelemetry tracing in Traefik v3 and correlating requests across services
32. Access logs: JSON format, field filtering and shipping to Loki or ELK
33. Plugins: installing community plugins and the Yaegi and WebAssembly plugin models
34. Troubleshooting: 404 and 502 causes, provider errors, rule conflicts and debug logging
35. Upgrading from v2 to v3: rule syntax changes, renamed middlewares and migration checks

DAYS 4-5 **Advanced: High availability, security hardening and enterprise patterns** **New at this level**

36. High availability: multiple replicas, pod disruption budgets, anti-affinity and external load balancers
37. Certificates in HA: shared certificate storage limits and cert-manager as the issuing source of truth
38. Security hardening: dashboard exposure, least-privilege RBAC, Docker socket proxying and read-only filesystems
39. Zero trust at the edge: mutual TLS to backends, client certificate authentication and secure headers
40. Performance tuning: connection reuse, timeouts, buffering, resource limits and load testing with k6
41. Multi-cluster and multi-provider routing: combining Kubernetes, Consul Catalog and file providers
42. Service mesh interplay: Traefik at the edge with Linkerd or Istio inside the cluster
43. API gateway patterns: authentication offload, quotas, versioned routes and Traefik Hub capabilities
44. GitOps: managing Traefik and its CRDs with Argo CD or Flux and policy checks before merge
45. Migration: moving from NGINX Ingress or HAProxy to Traefik with parallel run and cut-over
46. Governance: routing standards, middleware catalogues and change review for shared ingress
47. Capstone: a production-grade, observable and hardened Traefik edge for several teams

PRACTICE

Hands-on labs

You build these yourself during the course, guided by the trainer.

FOUNDATION **Expose containers through Traefik with labels**
Run Traefik and two demo services with Docker Compose, route them by host name and path using labels and inspect the routes in the dashboard.

ESSENTIAL **Secure services with automatic HTTPS**
Issue Let's Encrypt certificates through a DNS-01 resolver, redirect HTTP to HTTPS and protect an admin service with forwardAuth and rate limiting.

INTERMEDIATE **Run Traefik as Kubernetes ingress**
Install Traefik with Helm, publish two services with IngressRoute and Gateway API, run a weighted canary and watch the traffic split in Prometheus and Grafana.

ADVANCED **Capstone: hardened highly available Traefik edge**
Deploy a multi-replica Traefik edge managed by GitOps with mTLS to backends, rate limits, dashboards and a documented failover test.

HOW YOU CAN LEARN

Formats and fees

The same agenda in four formats. Fees are in Indian rupees as of November 2026; the course page shows them in your currency.

FORMAT	DURATION	WHAT YOU GET	FEE
Live & interactive (online)	Max 8-10 hours	Instructor-led public batch of max 10 learners with demos, labs, Q&A and assignment review. Weekday batches start on the 1st of every month, weekend batches on the first Saturday of every month.	**INR 34,999**
1:1 live training (online)	Max 8-10 hours, one-to-one	The same agenda, taught one-to-one by the trainer. Starts immediately, without waiting for the next batch; sessions planned around your working hours, at your pace.	**INR 99,999**
Self-paced video	1-year LMS access	All four Traefik levels, plus 20+ more courses and 50+ tools, at your own pace.	**INR 833/month** billed yearly at INR 9,996
Corporate (day-wise)	5 days for this level	A private batch for your team, on demand. Foundation 1 day, Essential 2, Intermediate 3, Advanced 5 (cumulative).	**Quote on request**

ASSESSMENT AND CERTIFICATE

Your progress is checked through hands-on labs and assignments at every level. On completion you receive a DevOpsSchool certificate of completion with a unique credential ID that anyone can verify at devopsschool.com/certificates.

INCLUDED WITH EVERY LIVE BATCH

- Every live session is recorded and stays in your LMS for a year.
- Can't attend your batch? Move to next month's batch.
- Free demo class before you pay.
- Free 10-15 minute call with an advisor or the trainer to check the course fits you.

YOUR TRAINER

Learn from Rajesh Kumar

Principal Architect, trainer and mentor in DevOps, SRE, DevSecOps and platform engineering, with 20 years across 8+ software MNCs, including Staff DevOps/SRE Engineer for a leading Japanese mobile-payment platform and Principal DevOps Architect and Manager in Europe.

Profile: www.rajeshkumar.xyz · Videos: youtube.com/@TheDevOpsSchool

20 years in industry	**200+** corporate trainings
10,000+ engineers mentored	**70+** organisations coached

REVIEWS

What learners say

Rated 4.6 on Google · more reviews at devopsschool.com/testimonials and in our video testimonials.

> “Rajesh is very good trainer. Rajesh was able to resolve our queries and question effectively. We really liked the hands-on examples covered during this training program.”
>
> Indrayani, India

> “The training was very useful and interactive. Rajesh helped develop the confidence of all.”
>
> Abhinav Gupta, Pune

START YOUR TRAEFIK TRAINING

Join the next batch

Weekday batches start on the 1st of every month and weekend batches on the first Saturday of every month, with max 10 learners each. 1:1 training can start immediately; corporate batches run on demand. We reply within 1 hour.

Pay by UPI, credit and debit cards, net banking or PayPal. Before you pay, read our refund policy. All levels of this course: www.devopsschool.com/courses/traefik/

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Traefik Advanced Training

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