DevOpsSchool

Course curriculum · November 2026

LEVEL 04 OF 04 · ADVANCED

OpenFaaS Advanced Training

Operate OpenFaaS as a multi-tenant, highly available serverless platform with secure supply chain and edge deployments.

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/openfaas/openfaas-and-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 OpenFaaS course path, you will be able to:

1

Build serverless functions

Write, package and deploy functions in several languages with OpenFaaS and faas-cli.

2

Automate event-driven workloads

Trigger, autoscale and deliver functions through events, CI/CD and GitOps.

3

Operate a FaaS platform

Run OpenFaaS securely and reliably for many teams, at the edge and in the cloud.

WHAT THE ADVANCED LEVEL ADDS

Production scale, multi-tenancy and platform design

Hands-on: Run a multi-tenant serverless platform. Onboard two tenants into isolated namespaces with quotas, enforce signed images and fail functions over to a second cluster.

WHO SHOULD ATTEND

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

BEFORE YOU START

- The Intermediate level, or equivalent hands-on experience.
- You can already: Autoscale functions, trigger them from events, deliver them through CI/CD or GitOps and secure and monitor the gateway.
- 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

OpenFaaS 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: FaaS concepts, OpenFaaS install and first functions

Included from Foundation

1. Serverless and FaaS concepts: functions, events, scaling on demand and OpenFaaS compared with Lambda and Knative
2. OpenFaaS architecture: gateway, faas-netes provider, watchdog, queue-worker, NATS and Prometheus
3. Editions: Community Edition, faasd for single hosts and the commercial editions and how they differ
4. Prerequisites: Docker, a Kubernetes cluster with kind, k3d or k3s, kubectl and Helm
5. Installing OpenFaaS: Helm chart or arkade install openfaas, admin password and port-forwarding the gateway
6. faas-cli basics: login, list, store deploy, invoke, describe and remove
7. Function store: deploying ready-made functions such as figlet, nodeinfo and env
8. First custom function: faas-cli new --lang python3-http, the handler and stack.yml
9. Build, push and deploy: faas-cli build, push and deploy, or faas-cli up in one step
10. Invoking functions: /function/name routes, curl, query strings and headers
11. faasd quick start: OpenFaaS on a single VM with containerd for edge or small workloads

DAY 2 — Essential: Function development, configuration and secrets

Included from Essential

12. Language options: python3-http, node, golang-middleware, java and csharp, and pulling more from the store
13. Watchdogs: classic watchdog versus of-watchdog HTTP mode, timeouts and health checks
14. stack.yml in depth: environment, labels, annotations, constraints, limits, requests and build args
15. Secrets: faas-cli secret create and reading values from /var/openfaas/secrets
16. Configuration: environment variables, per-stage environment files and read-only root filesystems
17. Dependencies: requirements.txt, package.json and private package registries during builds
18. Asynchronous invocation: /async-function, the NATS JetStream queue-worker and X-Callback-Url
19. Logs and debugging: faas-cli logs, kubectl logs and local testing with faas-cli local-run
20. Multi-function stacks: several functions in one stack.yml with faas-cli up --filter and --regex
21. Multi-arch images: faas-cli publish with buildx for amd64 and arm64
22. Data access: connecting functions to PostgreSQL, Redis and S3 with reused connections
23. Team workflow: repository layout, code review and image tags based on Git SHAs

DAY 3 — Intermediate: Autoscaling, events, CI/CD and security

Included from Intermediate

24. Autoscaling: min and max replica labels and the rps, capacity and cpu scaling modes
25. Scale to zero: idle detection, cold starts, readiness and the trade-offs involved
26. Event connectors: cron-connector schedules and Kafka, AWS SQS and NATS triggers
27. CI/CD: GitHub Actions or GitLab CI with faas-cli publish and deploy, and GitOps with Argo CD or Flux
28. Monitoring: Prometheus metrics such as gateway_function_invocation_total and Grafana dashboards
29. Alerting: error rate and latency alerts and function-level SLOs
30. Securing the gateway: basic auth, TLS through ingress and cert-manager and custom domains

31. Function-level authentication: verifying tokens or HMAC signatures inside handlers
32. Isolation: openfaas and openfaas-fn namespaces, multiple function namespaces and network policies
33. Resource management: memory and CPU limits and read, write, exec and upstream timeouts
34. Troubleshooting: functions not becoming ready, image pull errors, timeouts and queue backlogs
35. REST API automation: deploying and querying functions through the gateway API

DAYS 4-5 **Advanced: Production scale, multi-tenancy and platform design** **New at this level**

36. Production architecture: HA gateway replicas, queue-worker scaling and NATS JetStream persistence
37. Performance tuning: max_inflight concurrency, keep-alive, warm replicas and benchmarking with hey or k6
38. Multi-tenancy: namespaces per team or customer, resource quotas and dedicated node pools
39. Function Builder API: building functions from source inside the cluster without Docker
40. Identity and access: SSO with OIDC for the dashboard and API and fine-grained permissions
41. Supply chain security: image scanning, signing with Cosign and admission policies for function images
42. Disaster recovery: redeploying from Git, backing up secrets and stack definitions, multi-cluster failover
43. Edge and IoT: faasd on Raspberry Pi and edge nodes, offline operation and updates
44. Cost management: right-sizing, scale-to-zero policies and cluster consolidation
45. Migration: moving functions from AWS Lambda or other FaaS platforms and packaging existing containers
46. Platform engineering: functions as a self-service product with catalogues and golden paths
47. Capstone: an event-driven, autoscaling serverless platform with CI/CD, monitoring and security

PRACTICE

Hands-on labs

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

FOUNDATION **Deploy your first OpenFaaS functions**
Install OpenFaaS on a local k3d cluster, deploy a store function and build and invoke your own Python function.

ESSENTIAL **Build an asynchronous processing function**
Create a function that reads a secret, stores results in PostgreSQL and is invoked asynchronously with a callback to a second function.

INTERMEDIATE **Deliver event-driven functions with GitOps**
Deploy functions through a GitOps pipeline, trigger them from cron and Kafka, autoscale under load and alert on error rate.

ADVANCED **Run a multi-tenant serverless platform**
Onboard two tenants into isolated namespaces with quotas, enforce signed images and fail functions over to a second cluster.

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 OpenFaaS 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 OPENFAAS 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/openfaas/

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OpenFaaS Advanced Training

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