DevOpsSchool

Course curriculum · November 2026

LEVEL 04 OF 04 · ADVANCED

Open Policy Agent (OPA) Advanced Training

Tune Rego performance, run OPA with high availability and govern policy lifecycles across clusters, services and clouds.

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/opa/opa-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 Open Policy Agent (OPA) course path, you will be able to:

1

Write and test Rego

Author readable, tested Rego policies that return clear decisions and reasons.

2

Enforce cloud-native guardrails

Apply OPA and Gatekeeper to Kubernetes admission, service authorization and infrastructure plans.

3

Govern policy at scale

Distribute, monitor and evolve policy bundles safely across many clusters and teams.

WHAT THE ADVANCED LEVEL ADDS

Performance, high availability and policy governance

Hands-on: Build an enterprise policy platform. Deliver versioned policy bundles to admission control, API authorization and Terraform plan checks, with coverage gates and performance benchmarks.

WHO SHOULD ATTEND

- Experienced Open Policy Agent (OPA) practitioners responsible for quality, security and scale.
- Senior engineers, architects and leads who design and troubleshoot Open Policy Agent (OPA) solutions.
- Teams making Open Policy Agent (OPA) an organisation-wide standard.

BEFORE YOU START

- The Intermediate level, or equivalent hands-on experience.
- You can already: Distribute policy as bundles, authorize microservice traffic with OPA and Envoy and gate Terraform plans with Rego.
- 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

Open Policy Agent (OPA) 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: Policy as code and Rego basics

Included from Foundation

1. Policy as code: decoupling decisions from enforcement and the OPA decision model of query, input and data
2. OPA in the cloud-native landscape: CNCF graduated project and use cases in Kubernetes, APIs, CI/CD and cloud
3. Architecture: OPA as a Go library, sidecar, host daemon or central service, and the REST Data API
4. Installing OPA: binary, Homebrew or Docker image, opa version and the opa run REPL
5. Rego fundamentals in OPA 1.x: packages, imports, rules with if and contains, default values
6. Data model: input, data, base and virtual documents and references into JSON
7. Expressions and iteration: some, every, comprehensions and AND/OR logic across rules
8. Built-in functions: strings, regex, sets, time, net.cidr_contains and JSON helpers
9. Evaluating policies: opa eval with input files, reading results and using --explain
10. Authoring tools: the Rego Playground and the VS Code OPA extension
11. First policy: allow or deny an HTTP request by user role and method, returning reasons

DAY 2 — Essential: Testing, tooling and Kubernetes admission control

Included from Essential

12. Writing tests: opa test, test packages and the with keyword to mock input and data
13. Code quality: opa fmt, opa check --strict and the Regal linter in pre-commit hooks
14. Structuring policies: packages per domain, helper functions and partial set rules for violation messages
15. Running OPA as a server: opa run --server, Data API queries and loading policy and data over REST
16. Kubernetes admission basics: validating and mutating webhooks and the AdmissionReview input
17. OPA Gatekeeper: Helm install, Rego-backed constraint kinds and constraints with match and parameters
18. Gatekeeper policy library: required labels, allowed registries, no privileged containers and resource limits
19. Audit and dry run: enforcementAction dryrun and warn, and audit results on constraint status
20. Gatekeeper mutation: Assign, AssignMetadata and ModifySet to apply defaults
21. Conftest: testing Kubernetes YAML, rendered Helm charts and Dockerfiles against Rego policies
22. Shift-left workflow: policy tests and Conftest in GitHub Actions or GitLab CI before merge
23. Developer-friendly results: structured deny messages and violation details

DAY 3 — Intermediate: Bundles, decision logs, service authorization and Terraform

Included from Intermediate

24. Bundles: opa build, bundle layout, manifest roots, signing and serving from S3 or OCI registries
25. Management APIs: bundle, status, decision log and discovery plugin configuration
26. Decision logging: masking sensitive fields and shipping logs to Elasticsearch or a SIEM
27. Microservice authorization: the OPA sidecar pattern and Envoy external authorization with opa-envoy-plugin
28. Istio integration: ext_authz providers, request attributes as input and JWT checks with io.jwt.decode_verify
29. Terraform plan checks: terraform show -json output evaluated with Conftest or opa eval
30. Cloud guardrails: Rego rules for encryption, public access and tagging on AWS, Azure and Google Cloud

31. External data: http.send with caching, kube-mgmt replication and Gatekeeper data sync
32. Multi-cluster rollout: Gatekeeper policies delivered to many clusters through Argo CD or Flux
33. Troubleshooting policies: opa eval --explain=full, print debugging and common Rego mistakes
34. Securing OPA itself: authentication and authorization on the OPA API, TLS and controlled policy updates
35. Policy coverage: opa test --coverage and coverage thresholds in CI

DAYS 4-5 **Advanced: Performance, high availability and policy governance** — **New at this level**

36. Performance tuning: rule indexing, opa bench, eval --profile and avoiding expensive iteration
37. Partial evaluation: compiling policies into residual queries for SQL and ORM data filtering
38. WebAssembly: compiling Rego with opa build -t wasm and embedding it in applications
39. Embedding OPA in Go: the rego package, prepared queries and custom built-in functions
40. High availability: sidecar versus central deployment, persisted bundles for offline start, fail-closed defaults
41. Scaling Gatekeeper: audit intervals, webhook timeouts, failurePolicy and replica sizing
42. Policy lifecycle governance: versioned bundles, review gates and staged rollout from dryrun to deny
43. Multi-tenant policy design: per-team data, policy ownership and an exceptions process
44. Compliance mapping: CIS Kubernetes Benchmark, Pod Security Standards and SOC 2 controls in Rego
45. Upgrades: converting v0 policies to Rego v1 with opa fmt and opa check, and capabilities files
46. Choosing the right engine: OPA compared with Kyverno and Kubernetes ValidatingAdmissionPolicy (CEL)
47. Capstone: enterprise policy platform for admission, API authorization and Terraform plans with signed bundles

PRACTICE

Hands-on labs

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

FOUNDATION **Write and evaluate your first Rego policy**
Install OPA, write an HTTP API authorization policy in Rego and evaluate it with opa eval against several inputs.

ESSENTIAL **Enforce Kubernetes guardrails with Gatekeeper**
Install Gatekeeper, add constraints for allowed registries and required labels in dry run, review audit results and switch them to deny.

INTERMEDIATE **Authorize microservices with OPA and Envoy**
Deploy OPA alongside Envoy to authorize API calls with JWT claims, load policies from signed bundles and ship decision logs.

ADVANCED **Build an enterprise policy platform**
Deliver versioned policy bundles to admission control, API authorization and Terraform plan checks, with coverage gates and performance benchmarks.

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 Open Policy Agent (OPA) 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 OPEN POLICY AGENT (OPA) 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/opa/

ENROL OR RESERVE A SEAT
Open Policy Agent (OPA) Advanced Training

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