DevOpsSchool

Course curriculum · November 2026

LEVEL 04 OF 04 · ADVANCED

Consul Advanced Training

Design, tune and govern production Consul for multi-platform zero-trust networking with tested disaster recovery and upgrades.

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	40 topics · Foundation to Advanced
Hands-on labs	4 labs
Formats and fees	Live, 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/consul/consul-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 Consul course path, you will be able to:

1

Discover and check services

Register, health-check and discover services through DNS, API and UI.

2

Run a secure service mesh

Secure Consul with ACLs and TLS and control mesh traffic with intentions and config entries.

3

Operate Consul in production

Design, tune, federate, recover and govern Consul across datacenters and platforms.

WHAT THE ADVANCED LEVEL ADDS

Production design, enterprise features and DR

Hands-on: Zero-trust service network capstone. Design and build a Consul service network spanning VMs and Kubernetes with partitions, intentions, DR runbooks and GitOps-managed config.

WHO SHOULD ATTEND

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

BEFORE YOU START

- The Intermediate level, or equivalent hands-on experience.
- You can already: Manage mesh traffic, connect datacenters and clusters with gateways and peering, integrate Vault and automate network infrastructure.
- 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

Consul Advanced Training agenda

40 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: Architecture, service discovery and health checks

Included from Foundation

1. Service networking challenges: dynamic infrastructure, service discovery and why Consul
2. Architecture: servers and clients, Raft consensus, gossip with Serf and datacenters
3. Installation: binary, packages and Docker; consul agent -dev for learning
4. CLI and UI: consul members, consul catalog and a web UI tour
5. Registering services: service definitions in HCL or JSON and consul services register
6. Service discovery: DNS interface on port 8600 and the HTTP API
7. Health checks: HTTP, TCP, script, TTL and gRPC checks
8. Key/value store: consul kv put and get and common use cases
9. Agent configuration: datacenter, data_dir, bind and client addresses, retry_join
10. First cluster: bootstrapping three servers with bootstrap_expect

DAY 2 — Essential: Security, KV patterns and service mesh basics

Included from Essential

11. ACL system: bootstrapping ACLs, tokens, policies, roles and default deny
12. Encryption: gossip keys with consul keygen and TLS with consul tls ca create
13. Prepared queries: DNS failover and nearest-service queries
14. Dynamic configuration: consul watch handlers and rendering app config files from KV and catalog data
15. KV patterns: sessions, locks and leader election with consul lock
16. Service mesh introduction: sidecar proxies with Envoy and automatic mTLS
17. Intentions: allow and deny rules between services and L7 intentions
18. Consul on Kubernetes: Helm chart, consul-k8s, catalog sync and connect injection
19. Snapshots: consul snapshot save and restore
20. Telemetry basics: metrics, consul monitor and logs

DAY 3 — Intermediate: Traffic management, gateways and multi-datacenter

Included from Intermediate

21. Traffic management: service-router, service-splitter and service-resolver config entries
22. Gateways: ingress, terminating and mesh gateways and Consul API Gateway
23. Multi-datacenter: WAN federation and cluster peering
24. Kubernetes data plane: Consul dataplane and transparent proxy
25. Vault integration: Vault as the service mesh CA and for gossip and TLS secrets
26. Network infrastructure automation: Consul-Terraform-Sync
27. Mesh observability: Prometheus metrics, Grafana dashboards, tracing and UI topology
28. Autopilot: dead server cleanup, server health and upgrade migrations
29. Security operations: token rotation, ACL replication and audit logging
30. Troubleshooting: consul debug, consul troubleshoot proxy and upstreams, Raft peers

DAYS 4-5 **Advanced: Production design, enterprise features and DR** — New at this level

31. Production architecture: server sizing, three versus five servers, failure tolerance and redundancy zones
32. Performance tuning: raft_multiplier, gossip tuning, stale reads and non-voting servers
33. Enterprise features: admin partitions, namespaces, network segments and automated upgrades
34. Disaster recovery: outage recovery with peers.json, snapshot agent and multi-datacenter failover
35. Zero-trust networking: intentions and mTLS at scale with identity-based policies
36. Multi-platform mesh: VMs, Kubernetes, Amazon ECS and Nomad together
37. Upgrades: rolling upgrade procedures and version compatibility
38. Governance: config entries as code with the Terraform Consul provider and GitOps
39. Migration: from Eureka or DNS-based discovery and other meshes to Consul
40. Capstone: production zero-trust service network across platforms

PRACTICE

Hands-on labs

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

FOUNDATION **Bootstrap a cluster and discover services**
Start a three-server Consul cluster, register two services with health checks and resolve them through DNS and the API.

ESSENTIAL **Secure a cluster and enable the mesh**
Enable ACLs, gossip encryption and TLS, then connect two services through Envoy sidecars and control traffic with intentions.

INTERMEDIATE **Canary release across two datacenters**
Peer two Consul clusters, expose a service through a mesh gateway and shift traffic gradually to a new version with a splitter.

ADVANCED **Zero-trust service network capstone**
Design and build a Consul service network spanning VMs and Kubernetes with partitions, intentions, DR runbooks and GitOps-managed config.

HOW YOU CAN LEARN

Formats and fees

The same agenda in three 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**
Self-paced video	1-year LMS access	All four Consul 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). 1:1 training is also available on demand.	**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 CONSUL 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. Corporate and 1:1 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/consul/

ENROL OR RESERVE A SEAT **Consul Advanced Training**	WHATSAPP · INDIA **+91 99057 40781**
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