DevOpsSchool

Course curriculum · November 2026

LEVEL 04 OF 04 · ADVANCED

Puppet Fundamental Advance Training Course online

Extend Puppet with custom functions, secrets and reports, run a hardened PE CA, and maintain, upgrade and troubleshoot PE at scale.

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	53 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/puppet/puppet-fundamental-advance-training-course-online.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 Puppet course path, you will be able to:

1

Automate configuration with Puppet

Write idempotent Puppet code, classes and modules that keep servers in their desired state.

2

Develop and test modules

Build, test and package modules with PDK, rspec-puppet, Hiera data and Forge content.

3

Operate Puppet Enterprise

Install, secure, orchestrate, upgrade and troubleshoot Puppet Enterprise across many nodes.

WHAT THE ADVANCED LEVEL ADDS

Custom functions, secrets, reports, CA, upgrades and security

Hands-on: Run an end-to-end PE deployment. Deploy Puppet Enterprise, ship a tested module with a secrets-backed function and custom report processor, orchestrate a change and troubleshoot it live.

WHO SHOULD ATTEND

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

BEFORE YOU START

- The Intermediate level, or equivalent hands-on experience.
- You can already: Develop tested modules with PDK and rspec-puppet, orchestrate multi-node changes with Bolt, and manage certificates and troubleshooting in PE.
- 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

Puppet Fundamental Advance Training Course online agenda

53 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: Configuration management, Puppet architecture and installation

Included from Foundation

1. Introduction to configuration management: why automation and configuration management are critical
2. Why Puppet: comparison with Ansible, Chef and Salt, the declarative model and idempotency
3. Puppet open source vs Puppet Enterprise: differences, use cases, Puppet Core and the OpenVox community fork
4. Puppet 2025 release overview: Puppet Enterprise 2025 highlights, key changes and deprecated features
5. Puppet architecture and core concepts: Puppet Server (primary server) and Puppet Agent workflow
6. Catalog compilation: how facts, manifests and data become a catalog; PuppetDB overview; run lifecycle and transactions
7. Getting started with Puppet Enterprise: documentation overview, monolithic vs split architecture, infrastructure requirements
8. Installing Puppet Server: running the PE installer, puppet.conf basics and service checks
9. Installing Puppet Agent on Linux and Windows: packages, the server setting and the first certificate request
10. Crash demo: setting up Puppet Server, agent and environment and running the first catalog with puppet agent -t
11. Puppet Enterprise console: accessing the console, first logins and navigating the GUI
12. Working with Facter: facts and their role in configuration management, viewing built-in facts
13. Adding simple custom facts: external facts in facts.d and a first Ruby custom fact

DAY 2 — Essential: Puppet language, Hiera, modules and PE administration

Included from Essential

14. Puppet DSL overview: manifests, resource declarations, puppet apply and puppet parser validate
15. Working with resources: file, package, service, user, group, exec and notify types and their attributes
16. Variables and ordering basics: variables, facts in manifests, before, require, notify and subscribe
17. Classes (introductory level): defining and including classes and simple class parameters
18. Simple EPP files: Embedded Puppet with the epp() function to generate configuration files
19. Hiera basics: what is Hiera, configuring hiera.yaml at intro level and simple key-value data lookup
20. Working with modules: what modules are and why they matter, module structure basics
21. Using Puppet Forge modules: puppet module install, supported modules and Puppetfile basics
22. Puppet Development Kit quick intro: pdk new module, pdk new class and pdk validate
23. Node management basics in the PE console: node inventory, facts and run reports
24. Classifying nodes and access: node groups and rules at intro level, managing access with RBAC
25. Running Puppet on demand: orchestrator basics from the console and puppet job run
26. SSL and certificates essentials: how Puppet uses certificates, a simple signing workflow and autosigning basics
27. Troubleshooting for beginners: reading Puppet logs and debugging a failed Puppet run

DAY 3 — Intermediate: Advanced language, PDK testing, orchestration and SSL

Included from Intermediate

28. Facter in depth: core facts, custom facts, external facts and configuring facter.conf

29. Language in depth: expressions, conditionals, operators, built-in functions, relationships and chaining arrows
30. Nodes and defined types: node definitions and classes, defined resource types for repeatable resources
31. EPP and ERB in depth: expressions, iteration and Hiera-driven values in generated configuration files
32. Hiera and data management: hiera.yaml structure, hierarchy levels, data lookups and overrides, using Hiera in manifests
33. Module development with PDK: installing PDK, creating new modules, converting existing modules, customising configuration
34. Building and packaging modules: metadata.json, pdk build and publishing to the Forge or a private repository
35. Testing and best practices: the Puppet style guide, puppet-lint and metadata-json-lint
36. Unit testing: rspec-puppet, rspec-puppet-facts and Rubocop for Ruby code; writing, validating and testing a module
37. Puppet Enterprise administration: managing nodes, node classification and groups, access and permissions, inspecting infrastructure
38. Orchestration with Puppet: orchestrator and on-demand runs, Bolt tasks and plans, orchestrating multi-node runs
39. SSL and certificates: puppetserver ca commands, autosigning and CSR attributes, regenerating certificates, external CA intro
40. Maintenance and troubleshooting: common errors, debugging catalogs, logs and report analysis, PE backup and restore overview

DAYS 4-5 **Advanced: Custom functions, secrets, reports, CA, upgrades and security** **New at this level**

41. Writing custom functions in Puppet: Puppet language functions and custom functions written in Ruby
42. Secrets: secrets store integrations, Deferred functions for agent-side data retrieval, a function to store secrets
43. Working with Hiera in depth: getting started, configuring Hiera, creating and editing data, looking up data
44. Hiera backends: writing new data backends, encrypted data with hiera-eyaml and upgrading to Hiera 5
45. Tracking Puppet activity with reports: reporting, the report reference and the report format
46. Custom report processors: writing report processors and sending reports to external systems
47. Puppet certificate authority: Puppet Server CA commands, intermediate CA, CSR attributes and certificate extensions
48. External CA and SSL termination: external CA, external SSL termination with Puppet Server, regenerating certificates
49. Puppet Enterprise maintenance: routine maintenance tasks, log management, backup and recovery
50. Upgrades: upgrading Puppet Enterprise and Puppet agents, migrating from Puppet open source to PE
51. Security: securing PE infrastructure, RBAC, certificate lifecycle management and securing Puppet code
52. Troubleshooting: common errors and fixes, debugging catalogs and manifests, SSL issues and case-study labs
53. Capstone: end-to-end PE deployment, write, test and deploy a module, orchestrate a change, monitor and troubleshoot

PRACTICE

Hands-on labs

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

FOUNDATION

Install Puppet Enterprise and run a catalog

Install a monolithic Puppet Enterprise server, connect a Linux and a Windows agent, sign their certificates and apply a first catalog.

ESSENTIAL

Build a web server module

Write a module that installs and configures Nginx with package, file and service resources, EPP and Hiera data, then classify nodes in PE.

INTERMEDIATE

Test and orchestrate a module rollout

Convert a module to PDK, add rspec-puppet tests and linting, then deploy and orchestrate it across several nodes with Bolt and troubleshoot a failing run.

ADVANCED

Run an end-to-end PE deployment

Deploy Puppet Enterprise, ship a tested module with a secrets-backed function and custom report processor, orchestrate a change and troubleshoot it live.

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 Puppet 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 PUPPET 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/puppet/

ENROL OR RESERVE A SEAT
Puppet Fundamental Advance Training Course online

WHATSAPP · INDIA
+91 99057 40781

WHATSAPP · USA
+1 (469) 756-6329

EMAIL
contact@DevOpsSchool.com