DevOpsSchool

Course curriculum · November 2026

LEVEL 04 OF 04 · ADVANCED

Puppet Fundamental Advanced Training

Run Puppet at scale with r10k and Code Manager, orchestration, external node classification, PuppetDB reporting and a CI-tested control repo.

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	49 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.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 Fundamental course path, you will be able to:

1

Understand Puppet fundamentals

Explain Puppet's run cycle, resources, facts and catalog compilation and write correct manifests.

2

Manage Linux and Windows

Use modules, Hiera and Windows-specific resources to automate mixed server fleets.

3

Deliver Puppet code safely

Manage environments with r10k or Code Manager and test code in CI before it reaches nodes.

WHAT THE ADVANCED LEVEL ADDS

Code management, orchestration, classification and scale

Hands-on: Run a control repo pipeline. Create a control repository with roles, profiles and a Puppetfile, test it in CI, deploy it with r10k or Code Manager and run it across Linux and Windows nodes.

WHO SHOULD ATTEND

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

BEFORE YOU START

- The Intermediate level, or equivalent hands-on experience.
- You can already: Manage Windows servers with Puppet: install agents, use Windows resources and modules, and automate IIS, SQL Server and Chocolatey packages.
- 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 Advanced Training agenda

49 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: Puppet concepts, run cycle and first manifests

Included from Foundation

1. Introduction to configuration management: desired state, drift, idempotency and why Puppet
2. Puppet agents and Puppet servers: roles, communication over HTTPS and certificate trust
3. Cross-platform Puppet: managing Linux and Windows from one code base, current Puppet 8 and Puppet Core releases
4. Introduction to the Puppet run cycle: facts, catalog request, compilation, application and reporting
5. Gathering system facts: Facter, core facts and using facts in decisions
6. Node matching and catalog compilation: how the server picks a node's classes and builds its catalog
7. Puppet resources: how to define system resources with type, title and attributes
8. Applying a simple Puppet manifest: puppet apply, --noop and puppet parser validate
9. Puppet types: file, package, service, user, group, exec, cron and notify, and puppet describe
10. The package, file, service pattern: installing, configuring and running a service in order
11. Applying conditional logic in Puppet: if, unless, case and selectors
12. Fact conditionals: choosing a course of action by operating system family and other facts

DAY 2 — Essential: Nodes, modules, parameters, Hiera and reporting

Included from Essential

13. Defining nodes: node definitions, default nodes and why classification beats long node files
14. Puppet modules: reusable code, module layout, manifests, files and the module path
15. Provisioning a web server: a module that installs and configures Apache or Nginx
16. Class parameters: applying variables, defaults, data types and resource-like class declarations
17. Hiera parameters: defining variables in Hiera, automatic parameter lookup and hiera.yaml hierarchy
18. Executing modules against a Puppet server with an agent: puppet agent -t, environments and certificate signing
19. Reporting with Puppet: run reports, changes, failures and the last run summary
20. Roles and profiles: separating business roles from technology profiles in a control repository
21. Puppet Forge modules: finding, evaluating and installing modules with puppet module install
22. Understanding Puppet environments: directory environments, environment.conf and per-environment code
23. Understanding node classification: node groups and external classification basics
24. Understanding Puppet Facter: custom and external facts for classification and conditionals

DAY 3 — Intermediate: Puppet on Windows: resources, modules and applications

Included from Intermediate

25. Install and configure the Puppet agent for a Windows environment: MSI install, service account and puppet.conf
26. Writing your first Puppet manifest for Windows: paths, line endings and running Puppet as administrator
27. Using Windows resources: exec, file, group, host, interface, notify, package, scheduled_task, service and user
28. Deploying packages with Chocolatey: the puppetlabs-chocolatey provider, sources and versions
29. Install Windows Puppet modules: acl, registry, reboot, powershell, wsus_client, windows_env, windowsfeature and download_file

30. Permissions and registry: fine-grained access control with puppetlabs-acl, registry keys and values with puppetlabs-registry
31. PowerShell integration: running PowerShell through the Puppet DSL and managing reboots with puppetlabs-reboot
32. Manage Windows Server using DSC: PowerShell Desired State Configuration resources from Puppet
33. Managing IIS using Puppet: sites, application pools and virtual applications
34. Managing MS SQL Server with Puppet: instances, features, logins and databases
35. Managing Splunk with Puppet: deploying and configuring Splunk forwarders on Windows and Linux
36. Module development on Windows: developing Puppet modules on Windows and testing them with rspec-puppet
37. Troubleshooting Puppet on Windows and avoiding common Windows gotchas: paths, encoding, permissions and UAC

DAYS 4-5 **Advanced: Code management, orchestration, classification and scale** **New at this level**

38. MCollective and live management: what it did, why it was retired and its replacement by Bolt and the orchestrator
39. MCollective with Puppet: interacting with services and Puppet runs, and the equivalent Bolt tasks and plans today
40. Librarian-Puppet: managing modules and dependencies with the Puppetfile format
41. Managing directory environments and modules with r10k: control repository branches to environments
42. Code Manager in Puppet Enterprise: webhook-triggered code deploys and file sync
43. External node classifiers: writing an ENC script, the PE classifier and node group rules
44. Reporting with Puppet Dashboard and its successors: PuppetDB queries, Puppetboard and PE console reports
45. Scaling Puppet: compilers behind a load balancer, PuppetDB tuning and agent run splay
46. CI for Puppet code: puppet-lint, rspec-puppet and Onceover tests in a pipeline before deploying
47. Security hardening: certificate lifecycle, autosign policies, encrypted Hiera data and least-privilege RBAC
48. Wrap-up and further resources: Puppet documentation, Forge, community fork OpenVox and the path to certification
49. Capstone: build a CI-tested control repository with roles and profiles for mixed Linux and Windows fleets

PRACTICE

Hands-on labs

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

FOUNDATION

Apply your first Puppet manifest

Write a manifest that installs, configures and starts a service using the package, file, service pattern with fact-based conditionals, then apply it locally.

ESSENTIAL

Provision a web server with modules

Build a role and profile that provisions a web server from parameterised modules and Hiera data, run it with an agent and read the report.

INTERMEDIATE

Automate a Windows web server

Use Puppet to install IIS features, deploy a site and app pool, install packages with Chocolatey and set registry and ACL settings on Windows Server.

ADVANCED

Run a control repo pipeline

Create a control repository with roles, profiles and a Puppetfile, test it in CI, deploy it with r10k or Code Manager and run it across Linux and Windows nodes.

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 Fundamental 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 FUNDAMENTAL 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/

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WHATSAPP · INDIA
+91 99057 40781

WHATSAPP · USA
+1 (469) 756-6329

EMAIL
contact@DevOpsSchool.com