Puppet Enterprise 601: Automate at Scale

Private Training Service Description

Learn how to deploy Puppet tasks and plans to deliver more automation quickly without compromising consistency and security.

Overview

In *Puppet Enterprise 601: Automate at Scale*, you'll learn how to deliver more automation by building ad hoc tasks and Puppet plans into advanced orchestration, enabling you to deploy system changes quickly, consistently, and safely. This one-day, instructor-led course — with hands-on labs for both Linux and Windows users — gives you the tools for achieving your organization's infrastructure automation, compliance, and security goals.

Course Topics

In this course, you'll learn how to:
- Write secure Puppet tasks and validate their parameters to guard against remote code execution and keep your systems safe.
- Convert existing scripts into tasks, enabling you to reuse what you have and scale it to meet new challenges.
- Develop, test, run, and manage cross-platform plans from both the Puppet Enterprise console and the command line, giving you maximum flexibility and control of task orchestration.
- Trigger code deployments and view and run Puppet jobs, tasks, and plans by invoking Puppet Orchestrator APIs, further increasing your ability to automate tasks to save time.

Concepts covered include:
- Puppet Query Language (PQL)
- Task target types: node lists, PQL queries
- Task orchestration (automating tasks to run on an as-needed basis or as part of a greater workflow)
- Puppet Plans
- Puppet Orchestrator
- Role-based access control and granting access to jobs, tasks, and plans

Course Agenda

Class duration is about 8 hours including 10-minute breaks throughout the day and a one-hour break for lunch. Topics covered include:

Welcome and objectives
Develop Puppet tasks
      Lab 1.0 Convert a backup script into a Puppet task
      Lab 1.1 Develop a cross-platform Puppet task
Develop Puppet plans
      Lab 2.0 Develop a Puppet plan to orchestrate a backup
      Lab 2.1 Develop a Puppet plan to run multiple tasks
Orchestrate Puppet

Course conclusion

Delivery Options

This instructor-led course is taught in a cloud-hosted classroom environment and can be delivered virtually or at your facility.

Prerequisites

This course is for you if you're familiar with the basics of Puppet software and are a site reliability engineer (SRE), sysadmin, or DevOps engineer who manages Windows or Linux. You should already know how to complete these tasks in Puppet Enterprise:

- Use basic Git workflow, with commands such as pull and push.
- Use class parameters and data types to design roles and profiles that are easy to reuse and maintain.
- Develop Puppet modules.
- Perform unit testing and syntax validation using Puppet Development Kit.
- Implement environment-based testing using node groups so that you can test and deploy with confidence.

We also strongly recommend that you take the first three courses in this series: *Puppet Enterprise 101: Deploy & Discover*, *Puppet Enterprise 201: Design & Manage*, and *Puppet Enterprise 301: Develop & Maintain*.

Class Maximum

The attendee limit for this course is 15 students.

Technical Requirements

Puppet courses have specific technical requirements. You will need access to Zoom to access this course. For the best classroom experience, we recommend that you use two monitors and we also recommend using Google Chrome as your browser. Mozilla Firefox, Apple Safari, and Microsoft Edge are not suitable for this class.

To access the labs used in class, you must create a free account with our Practice Lab partner, Instruqt. We recommend having your Instruqt login credentials ready when you come to class.

Fees

Product Description	Length	Amount
PE601: Automate at Scale	1 day	$6,000.00

This class will be delivered virtually unless the Customer and Puppet mutually agree that the class will be delivered onsite at the Customer's facility. Onsite delivery requires a minimum of 2 days of private training scheduled consecutively, and the Customer will be responsible for travel and expenses in addition to the fees above. A travel and expense estimate will be provided on the quote and billed at actuals not to exceed the estimate unless otherwise specified in the quote that travel and expenses will be invoiced in full at the time of purchase. Any quote that does not include a travel and expense estimate will be performed remotely.