

New Version



RHCE

AIROMAN INSTITUTE

of Professional Training

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Red Hat Certified Engineer

EX294 — Ansible Automation Platform

Beginner to Expert

Hands-On Labs

Job Assistance

EX294 Exam Prep

Latest 2025 RHCE EX294 v9 Updated Syllabus | RHEL 9 Content

Industry-Recognized Training | 100% Placement Assistance



40-Hour Instructor-led Training

Live instructor-led sessions with RHCE certified trainers having 10+ years of real enterprise Linux experience.



Red Hat Authorized Partner

Official RH Partner curriculum — aligned with latest RHCE EX294 v9 exam objectives on RHEL 9.



Practical Training on Latest Tools

Hands-on labs using Ansible Core 2.14+, Ansible Automation Platform 2, RHEL 9 environment throughout.



Highly Interactive Sessions

Small batch sizes (max 12 students) ensuring personal attention, live doubt clearing and direct trainer interaction.



Hands-on Labs

91+ guided lab exercises covering real enterprise scenarios — automation, system administration and security hardening.



98% Exam Pass Rate

Our structured mock exams, practice environments and exam tips consistently deliver industry-leading pass rates.



Access to Recorded Sessions

Lifetime access to all recorded class sessions, lab recordings and updated study materials post course completion.



Extended Post Training Support

6-month post-training support: doubt clearing, additional practice labs and exam preparation assistance.



Career Guidance & Mentorship

1-on-1 career mentoring, resume review, interview preparation and 100% placement assistance till you get placed.

About Course

The Red Hat Certified Engineer (RHCE) EX294 certification validates your ability to automate Red Hat Enterprise Linux tasks and manage infrastructure at scale using Ansible Automation Platform.

The latest RHCE v9 (EX294) on RHEL 9 focuses entirely on Ansible automation — deploying playbooks, managing inventories, configuring roles, working with Ansible Vault, using collections and automating common system administration tasks.

Through hands-on labs, real enterprise simulations and performance-based exam preparation, participants will become proficient in writing Ansible playbooks, managing Red Hat systems, configuring services, implementing security policies and deploying multi-tier applications — all using automation.

Tools Covered

1. Ansible Core Tools

- ✓ ansible
- ✓ ansible-playbook
- ✓ ansible-doc
- ✓ ansible-galaxy
- ✓ ansible-vault
- ✓ ansible-navigator
- ✓ ansible-lint

3. Storage & FS Tools

- ✓ parted
- ✓ lvcreate
- ✓ vgcreate
- ✓ mkfs.xfs
- ✓ mount
- ✓ stratis
- ✓ vdo

5. Security & Crypto

- ✓ openssl
- ✓ ssh-keygen
- ✓ gpg
- ✓ sscg
- ✓ dnf
- ✓ rpm
- ✓ rpm-ostree

2. System Admin Tools

- ✓ systemctl
- ✓ nmcli
- ✓ firewall-cmd
- ✓ semanage
- ✓ restorecon
- ✓ timedatectl
- ✓ hostnamectl

4. Container Tools

- ✓ podman
- ✓ buildah
- ✓ skopeo
- ✓ podman-compose
- ✓ systemd-quadlet

6. Network & Monitoring

- ✓ ss
- ✓ ip
- ✓ ping
- ✓ traceroute
- ✓ tcpdump
- ✓ journalctl
- ✓ sar

Course Content

Module 1 Linux Fundamentals & RHEL 9 Setup

- ✓ Linux File System Hierarchy & Navigation
- ✓ User/Group Management & Permissions (ACL)
- ✓ Package Management: DNF, RPM, Modules
- ✓ Boot Process: GRUB2, systemd, Targets
- ✓ Shell Scripting Basics & Bash Automation

Module 3 Ansible Playbooks & Variables

- ✓ Writing YAML Playbooks
- ✓ Variables, Facts & Magic Variables
- ✓ Conditionals (when) & Loops
- ✓ Handlers & Notify Directives
- ✓ Templates with Jinja2

Module 5 Ansible Vault & Security

- ✓ Encrypting Files with ansible-vault
- ✓ Vault IDs & Password Files
- ✓ Encrypted Variables in Playbooks
- ✓ Privilege Escalation (become)
- ✓ Managing SSH Keys Securely

Module 2 Ansible Fundamentals

- ✓ Ansible Architecture & Components
- ✓ Installing Ansible Core & AAP 2
- ✓ Inventory Files (Static & Dynamic)
- ✓ Ad-hoc Commands & Modules
- ✓ Configuration Files: ansible.cfg

Module 4 Roles & Ansible Galaxy

- ✓ Creating & Structuring Ansible Roles
- ✓ Role Dependencies & Defaults
- ✓ Using Roles from Ansible Galaxy
- ✓ Installing Collections from Hub
- ✓ Requirements.yml & Collections

Module 6 System Automation with Ansible

- ✓ Managing Services & Systemd Units
- ✓ Configuring FirewallD via Ansible
- ✓ SELinux Policy Management with Ansible
- ✓ Managing Software Repos & Packages
- ✓ Scheduling: Cron & At via Ansible

Module 8 Containers & Podman

- ✓ Container Fundamentals & OCI Images
- ✓ Running Containers with Podman
- ✓ Rootless Containers & Security
- ✓ systemd-Quadlet for Persistent Containers
- ✓ Building Images with Buildah & Containerfiles

Module 10 Exam Prep & Live Projects

- ✓ EX294 Exam Pattern & Tips
- ✓ Performance-based Lab Simulations
- ✓ 3 Full Mock Exams (3hr each)
- ✓ Live Project: Deploy Multi-tier App
- ✓ Automation Platform (AAP) Console

Module 7 Networking & Storage Automation

- ✓ Network Config with nmcli & Ansible
- ✓ Configuring Bonding, Teaming & VLANs
- ✓ LVM, VDO & Stratis via Playbooks
- ✓ Mounting NFS & SMB File Systems
- ✓ iSCSI Target & Initiator Automation

Module 9 Advanced Ansible Features

- ✓ Async Tasks & Poll Strategies
- ✓ Custom Modules with Python
- ✓ Callback Plugins & Logging
- ✓ Error Handling: ignore_errors, rescue
- ✓ Tags, Includes & Imports

Red Hat Certification Roadmap

ENTRY



**RHCSA
EX200**

**Red Hat Certified
System Administrator**

Foundation cert for RHEL administration. User mgmt, storage, networking, security basics. Prerequisite for RHCE.

ENGINEER ☆



**RHCE
EX294**

**Red Hat Certified
Engineer**

Our flagship course! Ansible automation, playbooks, roles, vault, collections on RHEL 9. Most in-demand RH cert.

SPECIALIST



**EX200/EX342
Linux Storage**

**RHCS in
Linux Storage**

Advanced storage: LVM, RAID, VDO, Stratis, iSCSI, GlusterFS, Ceph for enterprise storage administration.

SPECIALIST



**EX280
OpenShift**

**RHCS in
OpenShift Admin**

Managing OpenShift Container Platform (OCP 4.x) — deploying applications, networking, storage, security policies.

ARCHITECT



**EX283
Ansible AAP**

**RHCS in
Ansible Automation**

Advanced Ansible Automation Platform (AAP 2.x), execution environments, automation mesh & Ansible Controller.

EXPERT



RHCA

**Red Hat Certified
Architect**

Highest Red Hat credential. Requires 5 specialist exams. Recognized globally as top Linux/cloud expert.

Target Audience

- ✓ Linux System Administrators
- ✓ Cloud Engineers (AWS/Azure/GCP)
- ✓ Network Administrators
- ✓ Site Reliability Engineers (SREs)
- ✓ DevOps Engineers
- ✓ Infrastructure Automation Engineers
- ✓ IT Operations Teams
- ✓ Developers moving to DevOps

Pre-Requisites

- ✓ Basic Linux command-line knowledge
- ✓ Understanding of networking concepts (TCP/IP, DNS)
- ✓ RHCSA certification or equivalent experience recommended

Exam Information

Certification Name	RHCE (Red Hat Certified Engineer)
Exam Code	EX294 — RHEL 9
Exam Format	Performance-based (Practical)
Number of Tasks	14–16 Hands-on Tasks
Exam Duration	4 Hours (240 Minutes)
Passing Score	70% (score of 210 out of 300)
Exam Delivery	Remote Proctored / Test Center
Validity	3 Years from Date of Issue

Course Objectives

- ✓ Deploy and manage Ansible Automation Platform (AAP 2.x) on RHEL 9 environment.
- ✓ Write advanced Ansible playbooks using variables, conditionals, loops, handlers and templates.
- ✓ Create and manage Ansible roles from scratch and from Ansible Galaxy collections.
- ✓ Implement Ansible Vault to protect sensitive data within playbooks and inventories.
- ✓ Automate system administration tasks: users, groups, software packages, services and scheduling.
- ✓ Configure networking using nmcli, firewalld and SELinux policies through Ansible automation.
- ✓ Manage storage using LVM, VDO, Stratis and automate with Ansible storage modules.
- ✓ Deploy and manage Podman containers including rootless containers and systemd integration.
- ✓ Configure and manage iSCSI, NFS and SMB storage via Ansible automation playbooks.
- ✓ Implement multi-tier application deployment using Ansible roles and inventory groups.

Differences Between RHCSA, RHCE & RHCA

	RHCSA (EX200)	RHCE (EX294)	RHCA
Level	Foundation	Professional	Expert/Architect
Exam Format	Performance-Based	Performance-Based (Ansible)	5 Specialist Exams
RHEL Version	RHEL 9	RHEL 9	Various
Duration	2.5 Hours	4 Hours	Varies per exam
Questions	10–15 Tasks	14–16 Tasks	Per specialist
Passing Score	70%	70%	70% each
Focus	Linux Admin Basics	Ansible Automation	Multiple Specialties
Validity	3 Years	3 Years	3 Years
Pre-requisite	None	RHCSA Required	5 RHCS Certs

Top Roles & Salary Range

✓ Linux / RHCE Engineer	₹5L – ₹16L
✓ Ansible Automation Engineer	₹6L – ₹18L
✓ DevOps Engineer (Linux)	₹7L – ₹22L
✓ Cloud Engineer (RHEL)	₹8L – ₹24L
✓ SRE / Infrastructure Engineer	₹10L – ₹30L

Placement Services

Mock Interview Preparation

10+ rounds technical & HR mock interviews with Linux/DevOps industry professionals.

Resume & LinkedIn Optimization

Expert profile review to maximize your visibility with top RHCE/DevOps recruiters.

Alumni Network Access

Connect with 500+ Airoman alumni at TCS, Wipro, Infosys, Red Hat partners & more.

100% Job Assistance

Dedicated placement team — we work actively until you land your dream IT job.

Top Hiring Partners

TCS, Infosys, HCL, Wipro, Cognizant, Redington, IBM, Red Hat partners & ISVs.



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