# Red Hat Certified Engineer (RHCE) exam

Kód kurzu: EX294

The performance-based Red Hat Certified Engineer (RHCE) exam (EX294) tests your knowledge and skill in managing multiple systems using Red Hat® Ansible® Engine and executing common system administration tasks across a number of systems with Ansible. The skills tested in this exam are the foundation for system administration across many Red Hat products.By passing this exam, you become a Red Hat Certified Engineer. An RHCE® is a Red Hat Certified System Administrator (RHCSA) who is ready to use Ansible and scripting to automate Red Hat® Enterprise Linux® tasks, integrate Red Hat emerging technologies, and apply automation for efficiency and innovation. Current RHCSA certification is required to earn RHCE certification. If you choose to continue your learning journey beyond RHCE, the credential can also serve as a foundational step on your path toward our highest level of certification—Red Hat Certified Architect.Objectives listed for this exam are based on the most recent Red Hat product version available.

| Pobočka | Dnů | Cena kurzu | ITB |
|---------|-----|------------|-----|
| Praha | 1 | 450 € | 0 |
| Bratislava | 1 | 450 € | 0 |

Uvedené ceny jsou bez DPH.

## Termíny kurzu

| Datum | Dnů | Cena kurzu | Typ výuky | Jazyk výuky | Lokalita |
|-------|-----|------------|-----------|-------------|----------|

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## Pro koho je kurz určen

- Experienced Red Hat Enterprise Linux system administrators seeking validation of their skills or require a certification either by their organization or based on a mandate (DoD 8570 directive)
- Students who have taken Red Hat System Administration III: Linux Automation (RH294) and are on the path to becoming a Red Hat Certified Engineer (RHCE)
- Students who are on the path to becoming a Red Hat Certified Architect (RHCA)
- Systems administrators who want to demonstrate competency in managing multiple systems
- IT professionals who work in a DevOps environment and want to demonstrate competency in automating part of their workload
- Red Hat Certified Engineers who are noncurrent or who are about to become noncurrent and wish to recertify as RHCEs

## Požadované vstupní znalosti

- Earn the Red Hat Certified System Administrator (RHCSA) certification. This is required in order to earn the Red Hat Certified Engineer (RHCE) certification.
- Have either taken both Red Hat System Administration I (RH124) and Red Hat System Administration II (RH134) or RHCSA Rapid Track Course (RH199), or have comparable work experience as a system administrator on Red Hat Enterprise Linux
- Have taken Red Hat System Administration III: Linux Automation with Ansible (RH294) or have comparable work experience
- Review the Red Hat Certified System Administrator (RHCSA) exam (EX200) objectives
- Review the Red Hat Certified Engineer (RHCE) exam for Red Hat Enterprise Linux 8 (EX294) objectives

## Preparation

Red Hat encourages you to consider taking Red Hat System Administration I (RH124), Red Hat System Administration II (RH134), and Red Hat System Administration III: Linux Automation (RH294) to help prepare. Attendance in these classes is not required; students can choose to take just the exam.

While attending Red Hat classes can be an important part of your preparation, attending class does not guarantee success on the exam. Previous experience, practice, and native aptitude are also important determinants of success. Many books and other resources on system administration for Red Hat products are available. Red Hat does not endorse any of these materials as preparation guides for exams. Nevertheless, you may find additional reading helpful to deepen your understanding.

## Exam format

This hands-on, practical exam requires you to use Red Hat Ansible Engine to perform real-world tasks. You will be provided with multiple systems and will be required to install and configure Ansible Engine and then use it to perform standard system administration tasks similar to what you would do on the job.

You will be required to create Ansible Playbooks and use those playbooks to configure systems for specific roles and behaviors. Your work will be evaluated by applying the playbooks created during the exam against freshly installed systems and verifying that those systems and services work as specified.

During the exam, you will be provided a list of tasks to accomplish related to the exam objectives. In most cases, the tasks will be described in terms of a specific end state that you must achieve. Your exam will be evaluated on whether your systems meet the criteria specified.

Internet access is not provided during the exam, and you will not be permitted to bring any hard copy or electronic documentation into the exam. This prohibition includes notes, books, or any other materials. For most exams, the documentation that ships with the product is available during the exam.

## Scores and reporting

Official scores for exams come exclusively from Red Hat Certification Central. Red Hat does not authorize examiners or training partners to report results to candidates directly. Scores on the exam are usually reported within 3 U.S. business days.

Exam results are reported as total scores. Red Hat does not report performance on individual items, nor will it provide additional information upon request.

## Osnova kurzu

As an RHCE exam candidate, you should be able to handle all responsibilities expected of a Red Hat Certified System Administrator, including these tasks:

**Be able to perform all tasks expected of a Red Hat Certified System Administrator**
- Understand and use essential tools
- Operate running systems
- Configure local storage
- Create and configure file systems
- Deploy, configure, and maintain systems
- Manage users and groups
- Manage security

**Understand core components of Ansible**
- Inventories
- Modules
- Variables
- Facts
- Loops

- Conditional tasks
- Plays
- Handling task failure
- Playbooks
- Configuration files
- Roles
- Use provided documentation to look up specific information about Ansible modules and commands

## Use roles and Ansible Content Collections
- Create and work with roles
- Install roles and use them in playbooks
- Install Content Collections and use them in playbooks
- Obtain a set of related roles, supplementary modules, and other content from content collections, and use them in a playbook.

## Install and configure an Ansible control node
- Install required packages
- Create a static host inventory file
- Create a configuration file
- Create and use static inventories to define groups of hosts

## Configure Ansible managed nodes
- Create and distribute SSH keys to managed nodes
- Configure privilege escalation on managed nodes
- Deploy files to managed nodes
- Be able to analyze simple shell scripts and convert them to playbooks

## Run playbooks with Automation content navigator
- Know how to run playbooks with Automation content navigator
- Use Automation content navigator to find new modules in available Ansible Content Collections and use them
- Use Automation content navigator to create inventories and configure the Ansible environment

## Create Ansible plays and playbooks
- Know how to work with commonly used Ansible modules
- Use variables to retrieve the results of running a command
- Use conditionals to control play execution
- Configure error handling
- Create playbooks to configure systems to a specified state

## Automate standard RHCSA tasks using Ansible modules that work with:
- Software packages and repositories
- Services
- Firewall rules
- File systems
- Storage devices
- File content
- Archiving
- Task scheduling
- Security
- Users and groups

## Manage content
- Create and use templates to create customized configuration files
- Use Ansible Vault in playbooks to protect sensitive data

As with all Red Hat performance-based exams, configurations must persist after reboot without intervention.

## Co musíte vědět

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This exam can also be taken virtually as part of our remote testing format. Find out more about remote exams to see if this is the right choice for you.

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