REDHAT LINUX Training Syllabus

RHCSA -1(Red Hat Certified System Administrator)



RHCSA-1 TRAINING MODULE

- **Module 1:** Accessing the Command Line
- Log in to a Linux system and run simple commands using the shell.
- **Module 2:** Managing Files from the Command Line
- Copy, move, create, delete, and organize files from the bash shell prompt.
- **Module 3:** Getting Help in Red Hat Enterprise Linux
- Resolve problems by using online help systems and Red Hat support utilities.
- **Module 4:** Creating, Viewing, and Editing Text Files
- Manage local Linux users and groups, and administer local password policies.
- **Module 5:** Managing Local Linux Users and Groups
- Obtain information about the system, and control processes running on it.
- **Module 6:** Controlling Access to files with Linux File system Permissions
- Control and monitor network services and system daemons using systemd
- **Module 7:** Configure and secure OpenSSH service

RHCSA TRAINING MODULE CONTD....

- Access and provide access to the command line on remote systems securely using OpenSSH
- Module 8: Analyse and store logs
- ▶ Locate and accurately interpret relevant system log files for troubleshooting purposes.
- Module 9 : Managing Red Hat Enterprise Linux Networking
- Configure basic IPv4 networking on Red Hat Enterprise Linux systems...
- Module 10: Archiving and Copying Files between Systems
- Archive files and copy them from one system to another.
- Module 11: Installing and Updating Software Packages
- Download, install, update, and manage software packages from Red Hat and yum package repositories..
- ► Module 12: Accessing Linux File Systems
- Access and inspect existing file systems on a Red Hat Enterprise Linux system.
- Module 13: Using Virtualized Systems
- Create and use Red Hat Enterprise Linux virtual machines with KVM and libvirt.
- ► Module 14: Comprehensive Review
- Practice and demonstrate the knowledge and skills learned in this course.

RHCSA -2(Red Hat Certified System Administrator)



RHCSA-2 TRAINING MODULE

- **Module 1:** Automating Installation with Kickstart
- Automate the installation of Red Hat Enterprise Linux systems with Kickstart.
- **Module 2:** Using Regular Expressions with Grep
- Write regular expressions that, when partnered with grep, will allow you to quickly isolate or locate content within text files.
- **Module 3:**Creating and Editing Text Files with Vim
- Introduce the vim text editor, with which you can open, edit, and save text files.
- **Module 4:** Scheduling Future Linux Tasks
- Schedule tasks to automatically execute in the future.
- **Module 5:** Managing Priority of Linux Processes
- Influence the relative priorities at which Linux processes run.
- **Module 6:** Controlling Access to Files with Access Control Lists
- Manage file security using POSIX access control lists.

RHCSA-2 TRAINING MODULE CONTD...

- Module 7: Managing SELinux Security
- Manage the Security Enhanced Linux (SELinux) behaviour of a system to keep it secure in case of a network service compromise.
- Module 8: Connecting to Network-defined Users and Groups
- Configure systems to use central identity management services.
- Module 9: Adding disks, Partitions, and File Systems to a Linux System
- Manage simple partitions and file systems...
- ► Module 10: Managing Logical Volume Management (LVM) Storage
- Manage logical volumes from the command line.
- ► Module 11: Accessing Network Storage with Network File System
- Access (secure) NFS shares.
- Module 12: Accessing Network Storage with SMB

RHCSA-2 TRAINING MODULE CONTD...

- Use autofs and the command line to mount and unmount SMB file systems
- Module 13: Controlling and Troubleshooting the Red Hat Enterprise Linux Boot Process
- Module 14: Limiting Network Communication with firewalld
- Configure a basic firewall.
- Module 15: Comprehensive Review of System Administration 11
- Practice and demonstrate knowledge and skills learned in this course.

RHCE(Red Hat Certified Engineer)



RHCE TRAINING MODULE

- **Module 1:** Controlling Services and Daemons
- Review how to manage services and the boot-up process using systemctl
- **Module 2:** Managing IPV6 Networking
- Configure and troubleshoot basic IPv6 networking on Red Hat Enterprise Linux systems.
- **Module 3:** Configuring Link Aggregation and Bridging
- Configure and troubleshoot advanced network interface functionality including bonding, teaming, and local software bridges
- **Module 4:** Network Port Security
- Permit and reject access to network services using advanced SELinux and firewalld filtering 1echniques
- **Module 5:** Managing DNS for Servers
- Set and verify correct DNS records for systems and configure secure DNS caching.
- **Module 6:** Configuring Email Transmission
- Relay all email sent by the system to an SMTP gateway for central delivery
- **Module 7:** Providing Remote Block Storage
- Provide and use networked iSCSI block devices as remote disks

RHCE TRAINING MODULE

- Module 8: Providing File Based Storage
- Provide NFS exports and SMB file shares to specific systems and users
- Module 9:Configuring MariaDB Databases
- Provide a MariaDB SQL database for use by programs and database administrators
- Module 10:Providing Apache HTTPD Web Service
- Configure Apache HTTPD to provide Transport Layer Security (TLS)-enabled websites and virtual hosts
- Module 11:Writing Bash Scripts
- Write simple shell scripts using Bash
- Module 12:Bash Conditionals and Control Structures
- Use Bash conditionals and other control structures to write more sophisticated shell commands and scripts
- Module 13: Configuring the Shell Environment
- Customize Bash start up and use environment variables, Bash aliases, and Bash
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RHCE TRAINING MODULE

- Module 14: Linux Containers and Docker
- Preview the capabilities of Linux containers, Docker, and other related technologies in Red Hat Enterprise Linux 7s
- Module 15: Comprehensive Review
- Practice and demonstrate knowledge and skills learned in Red Hat System Administration III

AWS(AMAZON WEB SERVICES - CLOUD)



AWS TRAINING MODULE

- Module 1: AWS Overview
- **AWS Introduction**
- **AWS Cloud Service**
- History and Evolution of AWS
- Overview of AWS Products and Services
- Module 2: Identity Access Management(IAM)
- Identity and Access Management(IAM)
- Overview and Policies
- IAM Users, Groups, and Roles
- Configuring IAM Access and Permission
- IAM (Lab)

- Module 3: AWS Object Storage CDN S3
- Amazon Simple Storage Service(S3)
- S3 Overview and Buckets
- Create an S3 Bucket (Lab)
- Version Control (Lab)
- S3 Life Cycle Management
- CloudFront
- Create a CDN (Lab)
- S3- Security and Encryption
- Import/Export

- Module 4: Amazon Virtual Private Cloud(VPC)
- Introduction and Overview
- Build Your Own Custom VPC
- Network Address Translation (NAT)
- Access Control Lists (ACLs)
- Module 5: Elastic Compute Cloud (EC2)
- Amazon EC2 Overview
- Amazon Machine Image(AMI)
- Launch an EC2 Instance
- Access EC2 Instance
- Security Groups Basics
- Volume and snapshots
- Create an AMI
- Load Balancer and Health Checks
- Cloud Watch EC2

- Module 6: Databases
- Databases Overview
- Create RDS Instance (Lab)
- ► RDS Backups, Multi -AZ & Read Replicas
- DynamoDB
- Redshift
- Aurora
- AWS Database Migration Services (DMS)
- Module 7: Amazon Route 53
- Route 53 Overview
- Route 53 Concepts
- Route 53 (Lab)
- Routing Policies

- **Module 8: Application Services**
- SQS
- **SWF**
- SNS
- **Elastic Transcoder**

- Module 9: Disaster Recovery
- Disaster Recovery
- Overview and Products for Disaster Recovery
- Disaster Recovery Circumstances with AWS

Q&A