Redhat

RHCSA / RHCE

Linux Contents:

Linux is an open source and community-developed operating system for computers, servers, mainframes, mobile devices and embedded devices.It is supported on almost every major computer platform including x86, ARM and SPARC, making it one of the most widely supported operating systems. Linux Certification is world no. 1 certification in open source family. It has two parts:

1- RHCSA (Red hat Certified system Administrator)
2- RHCE (Red hat certified Engineer)

PART-1

RHCSA:

RHCSA is an entry-level certification that focuses on actual competencies at system administration, including installation and configuration of a Red Hat Enterprise Linux system and attach it to a live network running network services. An IT professional who has earned the Red Hat Certified System Administrator (RHCSA) is able to perform the core system administration skills required in Red Hat Enterprise Linux environments.
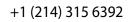
SECTION-1

Introduction to Linux:

What is Linux
Linux History
Linux use in global world
Difference between Windows, Linux and Unix
Linux Distributions
File System and Swap

Selection of Hardware:

Ram
Hard disk
CPU
Motherboard

Installation planning:

Hard disk size
Hard disk Type

Linux Installation:

Installation with Bootable Device / DVD
Installation by Kikstart Method

Section 2:-

Linux Structure:

Linux directory structure
Linux Partition Name
Boot loader
Kernel
File Systems
Shell
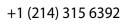Difference between Redhat 6 and Redhat 7/8

Linux Commands:

Basic Commands
Linux Shells
Administrative commands
Boot, reboot, and shut down the system normally

Input / Output Redirectors:

>
>>
2>
&>
2>

Getting Help in Red Hat Enterprise Linux

Learn "man" Terminology
Learn Find Syntax and how to use Find
Become Aware of The importance of less-noticed man section

User Management:

Create, Delete and Modify Users
Policies Implement on users
Password Implement
Password Aging, User login shell, User Home Directory, User Expiry

Group Management:

Create, Delete and Modify Groups
Put the Users on Primary and Secondary Groups
Policies implement on Groups

Permissions:

Local Permissions
Admin Permissions
Sudo
Special Permission
Ownership
Attributes
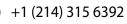Permission on Groups
List, Interpret, Change ugo / rwx

Section 2:-

Backup Management:

System Backup
Backup compression and decompression
Backup with date and time
Backup and Restore

Network Configuration:

Types of Interfaces
NIC Management
Old Naming Scheme of Interfaces
Diagnose and correct misconfigured networking settings
Diagnose and correct hostname resolution problems
Use SSH and VNC to access remote systems

Software Management:

Install and Remove the Software with RPM
Management with the YUM Technology
Repositories Concepts
Repositories Management
Create Local YUM Repository

Cron Job Management:

Automation
Scheduling the Programs and tasks
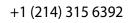Backdoor Jobs execute and modify

Security Management:

Linux Process Management
ACL
Boot Process
Grub Password
Run Levels
Password Break and Grub Password
Use single-user mode to gain access to a system if Root Password Forgot
Boot systems into different run levels for troubleshooting
Trouble Shoot of Linux with Linux Rescue
Selinux Introduction
Modes of Selinux
Selinux Bolions
Selinux Context
Selinux Errors
Firewall-d Configuration
Firewall-d Services addition
Securely Transfer Files Between Machines

Virtualization:

Types of Hypervisors
Add Module of Virtualization in Linux
Installation of KVM
Access KVM from GUI as well as from CMD

Shortcuts:

Difference between Soft and Hard Link
Soft Link
Hard Link

Process Management:

Usable commands
Configure and Understand Netdata
Configure and Understand Monit
Process Priority
Logs

Disk Management:

Partition Tables
Standard Partition
LVM
Create and Resize PV,VG,LV
Disk Quota
Partition Table
Install bootloader and modify the system bootloader
Understand MBR-Style Partitions (Primary, Extended, Logical) list/create/delete partitions

LDAP Authentication:

Understand LDAP Authentication
Understand and Installation of Free IPA
Configure Client for Free IPA