



System Configuration

<code>system-config - *</code>	Configure various system settings
<code>system-config - *-tui</code>	Open text user interface version of system configuration tool
<code>system-config - printer</code>	Configure printer settings
<code>system-config - date</code>	Configure date and time settings
<code>timedatectl</code>	View and modify system's date and time
<u><code>date</code></u>	Displays current date and time in the system's default format
<code>ntpdate</code>	Manually synchronize system's clock with a specified NTP server
<code>chronyc</code>	Monitor and manage system's time synchronization
<code>system-config - keyboard</code>	Configure keyboard settings
<code>localectl</code>	Query and configure system's locale and keyboard settings
<u><code>ssh-keygen</code></u>	Generate, manage and convert authentication keys

File and Disk Management

<code>xfs</code>	A file system format that supports large file sizes, high scalability and fast performance
<code>gdisk</code>	Manage GPT partition tables
<code>ssm_create</code>	Creates simple storage service volumes on AWS
<code>fdisk</code>	Manage traditional MBR partition tables
<code>parted</code>	Manage partition tables including support for GPT and MBR formats
<code>ssm create</code>	Create and manage SSM volumes on AWS
<code>mkswap</code>	Format a device or partition as swap space

System Information

<code>subscription - manager identity</code>	Display the identity of the currently subscribed system in Red Hat's subscription management system
<code>rhnc_register</code>	Register with Red Hat network Classic for software updates and support
<code>sosreport</code>	Collect system diagnostic information for troubleshooting purposes
<code>demidecode</code>	Display hardware information
<code>lstopo</code>	Display the topology of the system's hardware, such as CPU cores and caches
<code>lscpu</code>	Display information about the system's CPU architecture
<code>cat /proc/cpuinfo</code>	Display detailed information about the system's CPU

Services

<code>chkconfig --list</code>	Displays the current status of services
<u><code>ls /etc/init.d/</code></u>	Lists the available startup scripts
<code>systemctl -at service</code>	Displays a list of all available services on the system
<u><code>ls /etc/systemd/system/*</code></u> <u><code>system/*</code></u> <u><code>.service</code></u>	Lists all systemd unit files ending in .service
<code>service -- status - all</code>	Displays the status of all available system services
<code>systemctl -t service -- state=active</code>	Displays a list of active services managed by systemd
<u><code>service name start</code></u>	Starts the specified system service
<u><code>service name stop</code></u>	Stops the specified system service
<code>systemctl start name .service</code>	Starts the specified systemd service
<code>systemctl stop name .service</code>	Stops the specified systemd service
<code>chkconfig name on</code>	Enables the specified service to start automatically at boot time



File and Disk Management

`mkfs.filesystem_type` (ext4, xfs) Format a device or partition with a specified file system type, such as ext4 or xfs

`xfs_fsr` Defragment XFS file systems

`ssm mount` Mount SSM volumes on AWS

`fsck` (look for 'non-contiguous inodes') Check and repair the file system on a device or partition including checking for non-contiguous inodes

`mount` Mount a file system to a specific directory

`swapon -a` Activate all defined swap devices

`lvs` Display information about logical volumes

`lvs` Display a summary of logical volumes

`vgdisplay` Display information about volume groups

`vgs` Display a summary of volume groups

`pvs` Display information about physical volumes

`pvs` Display a summary of physical volumes

`ssm create` (if backend in lvm) Create an SSM volume using Logical Volume Manager as the backend on AWS

`pvcreate` Initialize a physical volume for use with LVM

`vgcreate` Create a new volume group using one or more physical volumes

`lvcreate` Create a new logical volume within a volume group

`xfs_growfs` Expand an XFS file system after resizing a logical volume or partition

`ssm resize` Resize an SSM volume on AWS

`vgextend` Add one or more physical volumes to an existing volume group

Services

`chkconfig name off` Disables the specified service from starting automatically at boot time

`systemctl enable name.service` Enables the specified systemd service to start automatically at boot time

`systemctl disable name.service` Disables the specified systemd service from starting automatically at boot time

`systemctl status service` Displays the status of the specified system service

Software Management

`yum install` Install packages and dependencies from configured repositories

`yum group install` Install a group of related packages from configured repositories

`yum info` Display information about a specific package, including its version, size, and dependencies

`yum group info` Display information about a group of packages and their dependencies

`yum update` Update installed packages to the latest available versions

`yum upgrade` Upgrade all packages on the system to their latest available versions

`subscription-manager repos` Manage subscriptions and repositories

`rpm -qf` Display the package name that owns a specified file

`yum provides filenames -glob` Display which package provides a specific file or feature

`rpm -q packagename` Display information about a specified package, including its version and architecture

`yum list installed` Display a list of all installed packages

`yum module install` Install a specific module stream and its dependencies

`yum module info` Display information about a module, including its streams and profiles



File and Disk Management

<i>lvextend</i>	Expand the size of an existing logical volume
<i>lvreduce</i>	Shrink the size of an existing logical volume
<i>ssm check</i>	Check the health status of SSM volumes on AWS
<i>showmount -e</i>	Display the NFS exports on a given NFS server
<i>systemctl reload nfs.service</i>	Reload the configuration of the NFS service
<i>chmod</i>	Change the permissions of a file or directory
<i>chown</i>	Change the owner of a file or directory
<i>chgrp</i>	Change the group ownership of a file or directory
<i>umask</i>	Set the default file creation permissions
<i>chattr</i>	Set or remove file attributes such as making a file immutable or undeletable
<i>setfacl</i>	Modify file access control lists which allow fine-grained control over file permissions and access

Resource Management

<i>strace</i>	Traces system calls signals of a running program
<i>ltrace</i>	Traces library calls of a running program
<i>nice or renice</i>	Sets and modifies the priority of a running process
<i>taskset</i>	Assigns a specific processor or a set of processors to a running process
<i>kill</i>	Terminate a running process
<i>pkill</i>	Terminate a process or processes by their name or other attribute
<i>killall</i>	Terminate all processes with a specific name

Software Management

<i>yum module remove</i>	Remove a specific module stream and its dependencies
<i>yum module reset</i>	Reset a specific module stream and remove all of its profiles
<i>yum module list</i>	Display a list of all available modules and their streams
<i>rpm --checksig</i>	Check RPM signature

Archive Commands

<i>tar</i>	Create, extract and manage files in various archive format
<i>cpio</i>	Create or extract archives in the cpio format
<i>zip</i>	Compress files and directories into a .zip archive format
<i>xz</i>	Compress and decompress files using .xz compression format

Network Commands

<i>dig</i>	Queries DNS servers to get DNS details
<i>nmcli</i>	Manage network connections
<i>ip addr show</i>	Display IP addresses and network information of the system
<i>nmcli con show</i>	Show the available network connections and their status
<i>address</i>	Specifies the IP address to assign to a network interface
<i>nmcli con up</i>	Bring up a network connection
<i>nmcli con mod</i>	Modify a network connection



Resource Management

<code>ss</code>	Displays network connections statistics and information
<code>tuna</code>	Tune system performance
<code>pcp atop</code>	Monitors system resources and performance, including CPU usage, memory usage, and disk I/O
<code>top</code>	Displays real-time information about the processes running on the system
<code>ps</code>	Displays a snapshot of the processes running on the system, including process IDs, resource usage, and other attributes
<code>sar</code>	Collects and reports system activity data, including CPU usage, memory usage, disk I/O, and network activity
<code>iostat</code>	Reports input/output statistics for block devices, including CPU utilization, I/O operations per second
<code>vmstat</code>	Displays virtual memory statistics, including systemwide statistics on CPU usage, memory usage, and disk I/O
<code>mpstat</code>	Reports processor related statistics, including utilization, idle time, and other metrics
<code>numastat</code>	Reports non-uniform memory access allocation statistics for a system
<code>pcp dstat</code>	Collects system performance data
<code>pmiostat</code>	Reports input/output statistics for block devices with advanced features
<code>df</code>	Reports disk usage statistics for a file system, including the amount of free and used space

User Management

<code>system-config-user</code>	Manage user and group accounts
<code>gnome-control-center</code>	Manage system settings
<code>useradd</code>	Create a new user
<code>userdel</code>	Delete a user account
<code>usermod</code>	Modify an existing user account

Network Commands

<code>hostnamectl set-hostname</code>	Set the system's hostname
<code>netstat -rn</code>	Display the system's routing table
<code>route -n</code>	Show the routing table of the system
<code>tcpdump -i</code>	Capture and analyze network traffic
<code>tcpdump</code>	Capture and analyze network packets
<code>ping</code>	Test connectivity between two network hosts
<code>telnet</code>	Connect to a remote host using the Telnet protocol
<code>nslookup</code>	Query DNS servers to get information about domain names and IP addresses
<code>netstat</code>	Display network connections and routing tables

Kernel, Boot and Hardware Management

<code>append 1 or s or rd.break</code>	Adds kernel boot parameters to modify the default behavior during boot process
<code>init=/bin/bash</code>	Tells the init process to start a bash shell
<code>shutdown</code>	Stops the system and powers it off
<code>systemctl poweroff</code>	Shuts down the system and turns off power
<code>poweroff</code>	Shuts down the system and turns off power
<code>systemctl halt</code>	Halts the system and leaves it powered on
<code>halt</code>	Halts the system and leaves it powered on
<code>systemctl reboot</code>	Reboots the system
<code>reboot</code>	Reboots the system



User Management

id Display user and group ID information

groupadd Create a new group

groupdel Delete a group

groupmod Modify an existing group

/etc/group Stores group information

passwd Change a user's password

visudo Edit /etc/sudoers file

chage Manage password expiration and aging policies

w Display information about logged-in users

vipw Edit /etc/passwd file

Security and Identity

semanage Manage SELinux policy modules and configuration

setsebool Modify SELinux boolean values

system-config-selinux Manage SELinux policy settings

restorecon Restore default SELinux security contexts on files and directories

chcon Modify SELinux security contexts on files and directories

sealert Analyze SELinux audit logs and provide recommendations for policy changes

authconfig Configure various system authentication settings, including LDAP and Kerberos

authconfig -tui Launch the text-based user interface version of the authconfig tool

authconfig -gtk Launch the graphical user interface version of the authconfig tool

authselect Configure authentication settings for local users and services

getend Retrieve system account information, including user and group information

Kernel, Boot and Hardware Management

systemctl set - default Sets the default for the system at the boot time

grub2 -mkconfig Regenerate GRUB configuration file

grub -set -default Sets the default GRUB entry

lshw Displays detailed information about the system's hardware configuration

modprobe Add or remove kernel modules from the Linux kernel

udev Dynamic device management system for Linux

sysctl -a Displays kernel parameters and their values

modprobe -r Remove kernel modules from the Linux kernel

rpm -q kernel Display information about the installed kernel version

uname -r