

RED HAT ENTERPRISE LINUX 5, 6, AND 7

Common administrative commands

TASK	RHEL5	RHEL6	RHEL7
View subscription information	/etc/sysconfig/rhn/systemid	/etc/sysconfig/rhn/systemid subscription-manager identity	subscription-manager identity
Configure subscription	rhn_register	rhn_register rhnreg_ks subscription-manager	subscription-manager ¹ rhn_register ²
View system profile	sosreport dmiidecode hwbrowser		sosreport dmiidecode lshw
View RHEL version information		/etc/redhat-release	

¹ subscription-manager is used for Satellite 6, Satellite 5.6 with SAM and newer, and Red Hat's CDN.

² RHN tools are deprecated on Red Hat Enterprise Linux 7. rhn_register should be used for Satellite server 5.6 and newer only. For details, see: [Satellite 5.6 unable to register RHEL 7 client system due to rhn-setup package not included in Minimal installation](#)

TASK	RHEL5	RHEL6	RHEL7
Graphical configuration tools	system-config-*		gnome-control-center
Configure network	system-config-network		nmcli nmtool nm-connection-editor
Configure system language	system-config-language		localectl
Configure time and date	system-config-date		timedatectl date
Synchronize time and date	ntpdate /etc/ntp.conf		timedatectl /etc/chrony.conf
Configure keyboard	system-config-keyboard		localectl
Text-based configuration tools	system-config-* -tui		
Configure printer	system-config-printer		
Configure samba	smbclient /etc/samba/smb.conf smbpasswd		
Configure SSH	/etc/ssh/ssh_config /etc/ssh/sshd_config ~/.ssh/config ssh-keygen		

TASK	RHEL5	RHEL6	RHEL7
Configure logging	/etc/syslog.conf	/etc/rsyslog.conf	/etc/rsyslog.conf /etc/rsyslog.d/* /var/log/journal systemd-journald.service
List all services	chkconfig --list ls /etc/init.d/		systemctl --at service ls /etc/systemd/system/* ls /usr/lib/systemd/system/*
List running services	service --status-all		systemctl -t service --state=active
Start/stop service	service name start service name stop		systemctl start name.service systemctl stop name.service
Enable/disable service	chkconfig name on chkconfig name off		systemctl enable name.service systemctl disable name.service
View service status	service name status		systemctl status name.service
Check if service is enabled	chkconfig name		systemctl is-enabled name
Create new service file or modify configuration	chkconfig --add		systemctl daemon-reload
View run level/target	runlevel who -r		systemctl get-default who -r
Change run level/target	/etc/inittab init run_level		systemctl isolate name.target systemctl set-default
View logs	/var/log		/var/log journalctl
Configure system audit		add audit=1 to kernel cmdline auditctl /etc/audit/auditd.conf /etc/audit/audit.rules authconfig /etc/pam.d/system-auth pam_tty_audit kernel module	
View audit output		aureport /var/log/audit	
Schedule tasks		cron at	
Configure batch tasks		batch	
Find file by name		locate	
Find file by characteristic		find	
Create archive		tar cpio zip gzip bzip2	

TASK	RHEL5	RHEL6	RHEL7
Single user/rescue mode	append 1 or s or init=/bin/bash to kernel cmdline		append rd.break or init=/bin/bash to kernel cmdline
Shut down system	shutdown		systemctl shutdown
Power off system	poweroff		systemctl poweroff
Halt system	halt		systemctl halt
Reboot system	reboot		systemctl reboot
Configure default run level/target	/etc/inittab		systemctl set-default
Configure GRUB bootloader	/boot/grub/grub.conf		/etc/default/grub grub2-mkconfig grub-set-default
View hardware configured	hwbrowser		lshw
Configure kernel module	modprobe		
Configure hardware device	udev		
View kernel parameters	sysctl -a cat /proc/cmdline		
Load kernel module	modprobe		
Remove kernel module	modprobe -r		
View kernel version	rpm -q kernel uname -r		

TASK	RHEL5	RHEL6	RHEL7
Install software	yum install yum groupinstall		yum install yum group install
View software info	yum info yum groupinfo		yum info yum group info
Update software	yum update		
Upgrade software	yum upgrade		
Configure software repository	/etc/yum.repos.d/*.repo		
Find file in package	rpm -qf filename		
View software version	rpm -q packagename		
View installed software	rpm -qa		

TASK	RHEL5	RHEL6	RHEL7
Configure system security		/etc/selinux/config chcon restorecon semanage setsebool system-config-selinux	
Report on system security		sealert	
LDAP, SSSD, Kerberos		authconfig authconfig-tui authconfig-gtk	
Network users		getent	

TASK	RHEL5	RHEL6	RHEL7
Graphical user management	system-config-users		
Create user account	useradd		
Delete user account	userdel		
Change user account details	usermod		
View user account details	usermod /etc/passwd		
Create user group	groupadd		
Delete user group	groupdel		
Change group details	groupmod		
Change user password	passwd username		
Change user permissions	usermod /etc/sudoers		
Change group permissions	groupmod /etc/sudoers		
Change password policy	chage		
Encrypted password location	/etc/shadow		
View/end user sessions	w		

TASK	RHEL5	RHEL6	RHEL7
Default file system	ext3	ext4	xfs
Defragment disk space	copy data to new file system fsck (look for 'non-contiguous inodes')	copy data to new file system fsck (look for 'non-contiguous inodes')	
Create/modify disk partitions		fdisk parted	fdisk gdisk parted ssm create
Format disk partition		mkfs.filesystem_type (ext4, xfs) mkswap	mkfs.filesystem_type (ext4, xfs) mkswap ssm create
Mount storage		mount /etc/fstab	mount /etc/fstab ssm mount
Create physical volume		pvcreate	pvcreate ssm create (if backend is lvm)
Create volume group		vgcreate	vgcreate ssm create (if backend is lvm)
Create logical volume		lvcreate	lvcreate ssm create (if backend is lvm)
Enlarge volumes formatted with default file system		vgextend lvextend resize2fs	vgextend lvextend xfs_growfs ssm resize
Shrink volumes formatted with default file system		resize2fs lvreduce vgreduce	XFS cannot currently be shrunk; copy desired data to a smaller file system.
Check/repair file system		fsck	fsck ssm check
Configure NFS share		/etc/exports service nfs reload	/etc/exports systemctl reload nfs.service
Mount and activate swap			/etc/fstab swapon -a
Automatically mount at boot			/etc/fstab
View free disk space			df
View logical volume info			lvdisplay lvs vgdisplay vgs pvdisplay pvs
View NFS share			showmount -e mount
Automatically mount after boot			/etc/auto.master.d/*.autoifs /etc/auto.*
Change file permissions			chmod chown chgrp umask
Change access control list			setfacl

TASK	RHEL5	RHEL6	RHEL7
Configure firewall	iptables and ip6tables /etc/sysconfig/ip*tables	iptables and ip6tables /etc/sysconfig/ip*tables system-config-firewall	firewall-cmd firewall-config
Configure DHCP client	/etc/dhcpd.conf /etc/dhcp6c.conf		dhcpcd /etc/dhcp/dhcpd.conf /etc/sysconfig/dhcpd
Configure name resolution		/etc/hosts /etc/resolv.conf	/etc/hosts /etc/resolv.conf nmcli con mod
Configure hostname		/etc/sysconfig/network	hostnamectl /etc/hostname nmcli
View network interface info		ip addr ifconfig brctl	ip addr nmcli dev show teamdctl brctl bridge
Configure network interface		/etc/sysconfig/network-scripts/ifcfg-*	/etc/sysconfig/network-scripts/ifcfg-* nmcli con [add mod edit] nmcli nm-connection-editor
View ports/sockets		ss lsof netstat	ss lsof
View routes			ip route
Configure routes			/etc/sysconfig/network system-config-network

TASK	RHEL5	RHEL6	RHEL7
View system usage	top ps sar iostat netstat vmstat mpstat numastat	top ps sar iostat netstat ss vmstat mpstat numastat tuna	top ps sar iostat ss vmstat mpstat numastat tuna
View disk usage	df		df iostat
Trace system calls		strace	
Trace library calls		ltrace	
Change process priority		nice renice	
Change process run location		taskset	
Kill a process		kill pkill killall	