

RED HAT ENTERPRISE LINUX 5, 6, AND 7

Common administrative commands

	TASK	RHEL5	RHEL6	RHEL7
SYSTEM BASICS	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	ssoreport dmidecode hwbrowser		ssoreport dmidecode 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 rhnstatus package not included in Minimal installation](#)

	TASK	RHEL5	RHEL6	RHEL7
BASIC CONFIGURATION	Graphical configuration tools	system-config-*		gnome-control-center
	Configure network	system-config-network		nmcli nmui nm-connection-editor
	Configure system language	system-config-language		localectl
	Configure time and date	system-config-date		timedactl date
	Synchronize time and date	ntdate /etc/ntp.conf		timedactl /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/ssh_config ~/.ssh/config ssh-keygen		

	TASK	RHEL5	RHEL6	RHEL7
JOBS AND SERVICES	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/* service
	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/auditlog		
	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
KERNEL, BOOT, AND HARDWARE	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 grub2-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	

	TASK	RHEL5	RHEL6	RHEL7
SOFTWARE MANAGEMENT	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 -q filename	
	View software version		rpm -q packagename	
	View installed software		rpm -qa	

	TASK	RHEL5	RHEL6	RHEL7
USER MANAGEMENT	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		
SECURITY AND IDENTITY	Report on system security	sealert		
	LDAP, SSSD, Kerberos	authconfig authconfig-tui authconfig-gtk		
	Network users	getent		
	Configure system security		/etc/selinux/config chcon restorecon semanage setsebool system-config-selinux	
	Change group permissions	groupmod /etc/sudoers		

	TASK	RHEL5	RHEL6	RHEL7
FILE SYSTEMS, VOLUMES, AND DISKS	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') xfs_fsr	
	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		pvccreate	pvccreate 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		lvsdisplay 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
NETWORKING	Configure firewall	iptables and ipTables /etc/sysconfig/iptables	iptables and ipTables /etc/sysconfig/iptables system-config-firewall	firewall-cmd firewall-config
	Configure DHCP client	/etc/dhcpd.conf /etc/dhclient.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 nmui
	View network interface info		ip addr ifconfig brctl bridge	ip addr nmcli dev show teamctl brctl bridge
	Configure network interface	/etc/sysconfig/network-scripts/ifcfg-*		/etc/sysconfig/network-scripts/ifcfg-* nmcli con [add mod edit] nmui 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
RESOURCE MANAGEMENT	View system usage	top ps sar iostat netstat ss 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	

