RED HAT ENTERPRISE LINUX 5, 6, AND 7
Common administrative commands

SYSTEM BASICS

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 dmidecode hwbrowser	sosreport 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 rhn-setup package not included in Minimal installation

BASIC CONFIGURATION

TASK	RHEL5	RHEL6	RHEL7
Graphical configuration tools	system-config-*		gnome-control-center
Configure network	system-config-network		nmcli nmtui 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		

JOBS AND SERVICES

TASK	RHEL5	RHEL6	RHEL7
Configure logging	/etc/syslog.conf	/etc/rsyslog.conf	/etc/rsyslog.conf /etc/rsyslog.d/*.conf /var/log/journal systemd-journald.service
List all services	chkconfig --list ls /etc/init.d/		systemctl -at service ls /etc/systemd/system/*.service 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
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/faillog		
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		

KERNEL, BOOT, AND HARDWARE

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		

SOFTWARE MANAGEMENT

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		

SECURITY AND IDENTITY

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	

USER MANAGEMENT

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	

FILE SYSTEMS, VOLUMES, AND DISKS

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') 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	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/*.autofs /etc/auto.*		
Change file permissions	chmod chown chgrp umask		
Change access control list	setfacl		

NETWORKING

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	dhcpd /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 nmtui
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] nmtui nm-connection-editor
View ports/sockets	ss lsof netstat		ss lsof
View routes	ip route		
Configure routes	/etc/sysconfig/network system-config-network		

RESOURCE MANAGEMENT

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		

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