

# Rosetta Stone for Unix

## A Sysadmin's Universal Translator (Rosetta Stone) OR What do they call that in this world?

**OPERATING SYSTEM** Contributions and corrections gratefully [accepted](#). Please help us fill in the blanks. New "activities" are welcome, too!  
[framed version](#), [PDF version](#). (Print the PDF version with landscape orientation for best result.) Based on [Pat Wilson's version](#); PDF courtesy of [Sebastien Routier](#).  
 OS versions in parentheses; e.g. 10+ means version 10 and greater; 9- means version 9 and previous. \$=extra cost

ACTIVITY	AIX	DG-UX	FreeBSD	HP-UX	IRIX	Linux (rh) = Red Hat, Mandrake, Suse,... (deb) = Debian, Corel, Storm,...	NetBSD	OpenBSD	Solaris	SunOS	Tru64 (Digital Unix, OSF/1)	Ultrix	ACTIVITY
<b>list hardware configuration</b>	lscfg	dg_sysreport -g hardware	dmesg	joscanc dmesg (if you're lucky) adb stm (from the SupportPlus CDROM)	hinv	dmesg (if you're lucky) /proc/cpuinfo /proc/pci	dmesg cat /kernel/msgbuf	dmesg	prtconf prtdiag -v psrinfo -v dmesg	dmesg (if you're lucky)	uerf -R -o full (if you're lucky)	uerf -R -o full (if you're lucky)	<b>list hardware configuration</b>
<b>show/set EEPROM/NVRAM values</b>				setboot bootadmin (at boot PROM) stm	nvrnm	hwclock		openprom (on OpenFirmware architectures)	eeeprom		consvar (DU 4.0D+)		<b>show/set EEPROM/NVRAM values</b>
<b>administrative GUI</b>	smit smitty	sysadm	/stand/sysinstall	sam	/usr/sysadm/bin/sysmgr (6.3+)	(rh) linuxconf			solstice admintool				<b>administrative GUI</b>
<b>read a disk label</b>	lspv -l	admpdisk -o list admvdisk -o list	disklabel -r	diskinfo pvdisk	prtvtoc	fdisk -l	disklabel -r	fdisk -r OR disklabel -rl	prtvtoc	dkinfo	disklabel -r	chpt -q	<b>read a disk label</b>
<b>whole disk in partition</b>	N/A		c		l0		d (on i386) c (everything else)	c	2	c	c	c	<b>whole disk in partition</b>
<b>label a disk</b>	mkvg	admpdisk	fdisk disklabel -wr sysinstall	pvcreate	dvhtool		disklabel -wr	disklabel -wr	format	format	disklabel -wr	chpt -a	<b>label a disk</b>
<b>partition a disk</b>	crfs	admpdisk	fdisk sysinstall	sam	fx -x	fdisk	disklabel	fdisk -e OR disklabel -E	format frnthard	format	disklabel -e	chpt -p	<b>partition a disk</b>
<b>check swap space</b>	lspv -a	admswap -o list -buv dg_sysreport -p freeswap	swapinfo	swapinfo	swap -s swap -l	cat /proc/meminfo free	swaptel	swaptel	swap -s swap -l	pstat -s	swapon -s		<b>check swap space</b>
<b>kernel</b>	/unix	/dgux	/kernel	/hpux (9) /stand/vmunix (10+)	/unix	/boot/vmlinuz	/netbsd	/bsd	/kernel/genunix /platform/uname -m/ kernel/unix /platform/uname -m/ kernel/sparcv9/unix (7+)	/vmunix	/vmunix		<b>kernel</b>
<b>show/set kernel parameters</b>			/boot/kernel.conf	sam sysdef kmtune (11+)	systeme	/proc/* /proc/sys*		etc/boot.conf	cat /etc/system		sysconfig dkkerneltuner		<b>show/set kernel parameters</b>
<b>startup scripts</b>	/etc/rc*	/etc/rc*	/etc/rc* /usr/local/etc/rc.d/	/etc/rc* (9) /sbin/rc* (10+)	/etc/rc*	/etc/rc* (but may vary)	/etc/rc*	/etc/rc*	/etc/rc*	/etc/rc*	/sbin/rc*	/etc/rc*	<b>startup scripts</b>
<b>"normal" filesystem</b>	jfs	dg/ux	ufs	hfs	efs, xfs	ext2	ffs (was ufs)	ffs (was ufs)	ufs	4.2	ufs	ufs	<b>"normal" filesystem</b>
<b>volume based filesystem</b>	jfs		ccd vinum	jfs (vxfs)	xlvm, xfs		ccd, raidframe	ccd			Advfs LSM		<b>volume based filesystem</b>
<b>file system description</b>	/etc/filesystems	/etc/fstab	/etc/fstab	/etc/checklist (9) /etc/fstab (10+)	/etc/fstab	/etc/fstab	/etc/fstab	/etc/fstab	/etc/vfstab	/etc/fstab	/etc/fstab	/etc/fstab	<b>file system description</b>
<b>volume manipulation</b>			vinum	/usr/sbin/vg* lv* pv* extendfs	xlvmgr xvmm				/opt/VRTSvxva/bin/vxva (Veritas) /usr/opt/SUNWmd/ sbin/metatool (DiskSuite)		AdvFS: mkfdmn, mkfset, advvol, showfdmn LSM: volassist or volmake, volume, volplex and volsd, volprint		<b>volume manipulation</b>
<b>create non-0-length empty file</b>				prealloc	mkfile				mkfile				<b>create non-0-length empty file</b>
<b>NFS share definitions</b>			/etc/exports	/etc/exports	/etc/exports	/etc/exports	/etc/exports	/etc/exports	/etc/dfs/dfstab	/etc/exports	/etc/exports		<b>NFS share definitions</b>
<b>NFS share command</b>			kill -s HUP `cat /var/run/mount.pid`	exportfs -a	exportfs	exportfs -a	kill -s HUP `cat /var/run/mount.pid`		share shareall	exportfs -a	/sbin/init.d/nfs start; /sbin/init.d/nfsmount start		<b>NFS share command</b>
<b>encrypted passwords in</b>	/etc/security/passwd	/etc/shadow	/etc/master.passwd	/etc/passwd (not Trusted) /secure/etc/passwd (Trusted 9) /etc/files/auth/ (10+)	/etc/shadow	/etc/shadow (may vary)	/etc/master.passwd (etc/pwd.db)	/etc/master.passwd (etc/pwd.db)	/etc/shadow		/etc/files/auth (only with Enhanced Security)	/etc/shadow	<b>encrypted passwords in</b>
<b>allow/deny root logins</b>	/etc/security/user	/etc/default/login	/etc/login.access; etc/tty	/etc/security	/etc/default/login	/etc/security	/etc/tty	/etc/tty	/etc/default/login		/etc/security		<b>allow/deny root logins</b>
<b>default syslog</b>			/var/log/messages	/var/adm/syslog/syslog.log	/var/adm/SYSLOG	/var/log/syslog /var/log/messages	/var/log/messages	/var/log/messages	/var/log/syslog		/var/adm/syslog		<b>default syslog</b>
<b>system error reporting tool</b>	errpt	admsyslog -o report	dmesg	dmesg sysdiag (9 and early 10) stm/cstm/mstm/xstm (10.20+)	sysmon	dmesg	dmesg cat /kernel/msgbuf	dmesg	prtdiag	dmesg	uerf	uerf	<b>system error reporting tool</b>
<b>show installed software</b>	lspp -L	pkginfo	pkg_info	rmfn, what (HP-UX 9) swist (HP-UX 10+)	versions -lb	(rh) rpm -a -i (rh) rpm -qa (deb) dselect (deb) dpkg -l	pkginfo	pkginfo	pkginfo		setid -i		<b>show installed software</b>
<b>add software</b>	smitty install_all /usr/lib/instl/sm_inst install_cmd -a -d 'device' -c 'N';g*'X		/stand/sysinstall /usr/ports make	swinstall	inst swmgr	(rh) rpm -hiv (deb) dselect (deb) apt-get install pkg (deb) dpkg -i	pkg_add /usr/pkgsrc && make	pkg_add /usr/ports && make	pkgadd		setid -l		<b>add software</b>
<b>show patch level</b>	instfix -ivq			swlist -l product   grep someStringOfInterest	versions -b patch	(rh) rpm -q (deb) dpkg -s	cat /kernel/version		showrev -p prodreg (2.6+)		setid -i   grep patchname		<b>show patch level</b>
<b>patch tool</b>	installp	dg_sysreport -p patches	cvsup	update (9) swinstall (10+)	inst	(deb) apt-get update (deb) apt-get upgrade	cvs	cvs/CTM	installpatch (2.5.1-) patchadd (2.6+)		setid -i dupatch		<b>patch tool</b>
<b>tracing utility</b>	trace		ktrace	trace (freeware) tuse (11+, freeware)	par	strace	ktrace	ktrace ptrace	truss sotrus	trace	trace		<b>tracing utility</b>
<b>show network interface info</b>			ifconfig -A	lanadmin landiag lanscan netstat -in	ifconfig -a netstat -ia	/sbin/ifconfig	ifconfig -a	ifconfig -A	add ifconfig -a netstat -in		ifconfig -a netstat -in		<b>show network interface info</b>
<b>change network address</b>			edit /etc/rc.conf (option ifconfig_interface)	/sbin/set_parms initial	edit: /etc/[hosts, sysid, resolv.conf, TIMEZONE], /etc/config/[static-route-options, ifconfig-1-options]; reboot	edit: /etc/hosts, /etc/sysconfig/network, /etc/config/[static-route-options, ifconfig-1-options]; reboot	edit /etc/ifconfig.interface dhclient	edit /etc/hostname.driver	edit /etc/resolv.conf; /usr/sbin/sys-unconfig; reboot				<b>change IP</b>
<b>ping one packet</b>	ping -c 1 hostname	ping -s -c 1 hostname	ping -c 1 hostname	ping hostname 10 1 (9) ping hostname -n 1 (10+)	ping -c 1 hostname	ping -c 1 hostname	ping -c 1 hostname	ping -c 1 hostname	ping hostname packetsize 1	ping hostname packetsize 1	/usr/sbin/ping -c 1		<b>ping one packet</b>

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route definitions			<i>edit /etc/rc.conf (option defaultrouter)</i>	/etc/rc.config.d/netconf	/etc/config/ static-route.options	<i>(rh) /etc/sysconfig/network (rh) /etc/sysconfig/static-routes (deb) /etc/init.d/network (deb) /etc/network</i>			/etc/defaultrouter /etc/notrouter	/etc/routes		route definitions	
<b>C compiler</b>	/usr/ibmcxx/bin/cc	/usr/sde/default/usr/bin/cc	/usr/bin/cc ( <i>gcc</i> )	/opt/softbench/bin/cc (S) /bin/cc (9) /usr/bin/cc (10+; <i>not ANSI; kernel builder only</i> )	/opt/MIPSPro/ bin/cc (S) /usr/bin/cc	gcc	/usr/bin/cc	/usr/bin/cc	/opt/SUNWsprow/ bin/cc (S)	/usr/bin/cc	/usr/bin/cc	<b>C compiler</b>	
<b>precompiled binaries of GPLware and freeware</b>	<a href="http://aixpdslib.seas.ucla.edu/aixpdslib.html">aixpdslib.seas.ucla.edu/aixpdslib.html</a> <a href="http://www.frec.bull.com/docs/download.htm">www.frec.bull.com/docs/download.htm</a>		<a href="http://ftp.freebsd.org/0/FreeBSDports/3386/packages-4.0-release">ftp://ftp.freebsd.org/0/FreeBSDports/3386/packages-4.0-release</a>	<a href="http://hpux.cae.wisc.edu/">http://hpux.cae.wisc.edu/</a>	<a href="http://www.sgi.com/fun">freeware.sgi.com www.sgi.com/fun</a>	<a href="http://www.linux.org/linux.uucows.com">http://www.linux.org/linux.uucows.com</a>	<a href="http://ftp.netbsd.org/pub/NetBSD/packages/">ftp://ftp.netbsd.org/pub/NetBSD/packages/</a>		<a href="http://www.sunfreeware.com/">http://www.sunfreeware.com/</a>		<a href="http://www.tru64unix.compaq.com/demos">www.tru64unix.compaq.com/demos</a>	<b>precompiled binaries of GPLware and freeware</b>	
<b>mailing list</b>	AIX-L@pucc.princeton.edu (LISTSERV)		<a href="http://www.freebsd.org/handbook/eresources.html">www.freebsd.org/handbook/eresources.html</a> <a href="mailto:#ERESOURCES-MAIL">#ERESOURCES-MAIL</a>	<a href="mailto:hpux-admin@dutchworks.nl">hpux-admin@dutchworks.nl</a> (majordomo)		<a href="http://www.linux.org/help/lists.html">www.linux.org/help/lists.html</a>	<a href="http://www.netbsd.org/MailingLists">www.netbsd.org/MailingLists</a>	<a href="http://www.openbsd.org/mail.html">www.openbsd.org/mail.html</a>	<a href="mailto:sun-managers@sunmanagers.eecs.uc.edu">sun-managers@sunmanagers.eecs.uc.edu</a> (majordomo)	<a href="mailto:sun-managers@sunmanagers.eecs.uc.edu">sun-managers@sunmanagers.eecs.uc.edu</a> (majordomo)	<a href="mailto:alpha-osf-managers@ornl.gov">alpha-osf-managers@ornl.gov</a> (majordomo)	<a href="mailto:decstation-managers@ornl.gov">decstation-managers@ornl.gov</a> (majordomo)	<b>mailing list</b>
<b>mailing list archives</b>	<a href="http://www.marist.edu/hbbin/wlvindex?ADSM-L">www.marist.edu/hbbin/wlvindex?ADSM-L</a>		<a href="http://www.freebsd.org/search.html#mailinglists">www.freebsd.org/search.html#mailinglists</a>	<a href="http://www.dutchworks.nl/hbbin/hpsysadmin">www.dutchworks.nl/hbbin/hpsysadmin</a>			<a href="http://www.netbsd.org/MailingLists">www.netbsd.org/MailingLists</a>	<a href="http://www.openbsd.org/mail.html">www.openbsd.org/mail.html</a>	<a href="http://www.latech.edu/sunman.html">www.latech.edu/sunman.html</a>	<a href="http://www.latech.edu/sunman.html">www.latech.edu/sunman.html</a>	<a href="http://www.archive.ornl.gov/8000/">www.archive.ornl.gov/8000/</a>	<a href="http://www.archive.ornl.gov/8000/">www.archive.ornl.gov/8000/</a>	<b>mailing list archives</b>
<b>newsgroup(s)</b>	<a href="mailto:comp.unix.aix">comp.unix.aix</a>		<a href="mailto:comp.unix.bsd.freebsd.misc">comp.unix.bsd.freebsd.misc</a>	<a href="mailto:comp.sys.hp.hpux">comp.sys.hp.hpux</a>	<a href="mailto:comp.sys.sgi.admin">comp.sys.sgi.admin</a>	comp.os.linux.* (esp. answers)	<a href="mailto:comp.unix.bsd.netbsd.misc">comp.unix.bsd.netbsd.misc</a>	<a href="mailto:comp.unix.bsd.openbsd.misc">comp.unix.bsd.openbsd.misc</a>	<a href="mailto:comp.sys.sun.admin">comp.sys.sun.admin</a> , <a href="mailto:comp.unix.solaris">comp.unix.solaris</a>	<a href="mailto:comp.sys.sun.admin">comp.sys.sun.admin</a>	<a href="mailto:comp.unix.dec">comp.unix.dec</a> , <a href="mailto:comp.unix.osf.osf1">comp.unix.osf.osf1</a>	<a href="mailto:comp.unix.ultrix">comp.unix.ultrix</a>	<b>newsgroup(s)</b>
<b>user groups</b>				<a href="http://www.imerex.org/">http://www.imerex.org/</a>		<a href="http://www.deadly.org/">http://www.deadly.org/</a>							<b>user groups</b>
<b>magazines</b>			<a href="http://www.daemonnews.com">http://www.daemonnews.com</a>	<a href="http://www.hpchronicle.com">http://www.hpchronicle.com</a>		<a href="http://www.linuxjournal.com/">http://www.linuxjournal.com/</a>	<a href="http://www.daemonnews.com/">http://www.daemonnews.com/</a>		<a href="http://www.sunworld.com/">www.sunworld.com/</a>				<b>magazines</b>
<b>vendor home page</b>	<a href="http://www.rs6000.ibm.com/">http://www.rs6000.ibm.com/</a>	<a href="http://www.dg.com/products/html/dg_ux.html">www.dg.com/products/html/dg_ux.html</a>	<a href="http://www.freebsd.org/">http://www.freebsd.org/</a>	<a href="http://www.unixsolutions.hp.com/products/hpux/">www.unixsolutions.hp.com/products/hpux/</a>	<a href="http://www.sgi.com/software/software.html#IRIX">www.sgi.com/software/software.html#IRIX</a>	<a href="http://www.linux.org/">http://www.linux.org/</a> <a href="http://www.redhat.com/">http://www.redhat.com/</a>	<a href="http://www.netbsd.org/">http://www.netbsd.org/</a>	<a href="http://www.openbsd.org/">http://www.openbsd.org/</a>	<a href="http://www.sun.com/solaris/">http://www.sun.com/solaris/</a>		<a href="http://www.unix.digital.com/">http://www.unix.digital.com/</a>	<a href="http://www.supelec.fr/decus/faq/faq-ultrix.html">www.supelec.fr/decus/faq/faq-ultrix.html</a>	<b>vendor home page</b>
<b>vendor docs and patches</b>			<a href="http://www.freebsd.org/handbook">www.freebsd.org/handbook</a> <a href="http://www.freebsd.org/releases/4.0R/errata.html">www.freebsd.org/releases/4.0R/errata.html</a>	<a href="http://docs.hp.com">docs.hp.com</a> <a href="http://itrc.hp.com">itrc.hp.com</a>	<a href="http://www.sgi.com/support/patch_intro.html">www.sgi.com/support/patch_intro.html</a> <a href="http://support.sgi.com">support.sgi.com</a>	<a href="http://www.linuxdoc.org/rpmfind.net/linux/RPM">http://www.linuxdoc.org/rpmfind.net/linux/RPM</a>	<a href="http://www.netbsd.org/Security">www.netbsd.org/Security</a>	<a href="http://www.openbsd.org/errata.html">www.openbsd.org/errata.html</a>	<a href="http://docs.sun.com">docs.sun.com</a> <a href="http://sunsolve.sun.com">sunsolve.sun.com</a>				<b>vendor docs and patches</b>
<b>vendor phone (US)</b>				800-633-3600	800-800-4SGI				800-USA-4SUN				<b>vendor phone</b>
<b>ACTIVITY</b>	<b>AIX</b>	<b>DG-UX</b>	<b>FreeBSD</b>	<b>HP-UX</b>	<b>IRIX</b>	<b>Linux</b>	<b>NetBSD</b>	<b>OpenBSD</b>	<b>Solaris</b>	<b>SunOS</b>	<b>Tru64 (Digital Unix, OSF/1)</b>	<b>Ultrix</b>	<b>ACTIVITY</b>

See also Heiner Steven's AWK dialects page at <http://www.oase-shareware.org/shell/articles/awkcompat.html>

Last updated 2000.08.10 by [Bruce Hamilton](#)