

Venus login: root

warning: cannot change to home directory

BusyBox v1.1.3 (2008.04.09-04:56+0000) Built-in shell (ash)

Enter 'help' for a list of built-in commands.

/ # ls -als

```
 1 drwxr-xr-x  14 root    root    1024 Feb 11 17:41 .
 1 drwxr-xr-x  14 root    root    1024 Feb 11 17:41 ..
61 -rwxr-xr-x   1 500    default 61440 Apr  9  2008 Test.fat
 1 drwxr-xr-x   2 500    default 1024 Feb 11 17:38 bin
 0 drwxr-xr-x   1 root    root     0 Jan  1  1970 dev
 1 drwxr-xr-x   3 500    default 1024 Feb 11 17:38 etc
 1 drwxr-xr-x   3 500    default 1024 Feb 11 17:38 lib
 0 lrwxrwxrwx   1 500    default  11 Feb 11 17:38 linuxrc -> bin/busy
box
12 drwx-----  2 root    root   12288 Feb 11 17:36 lost+found
 1 drwxr-xr-x   7 500    default 1024 Feb 11 17:38 mnt
 0 dr-xr-xr-x  73 root    root     0 May  5 16:59 proc
 1 drwxr-xr-x   2 500    default 1024 Feb 11 17:38 sbin
 0 drwxr-xr-x  11 root    root     0 May  5 16:59 sys
 0 drwxr-xr-x  13 root    root     0 May  5 17:03 tmp
 1 drwxr-xr-x  10 500    default 1024 Feb 11 17:38 tmp_orig
 1 drwxr-xr-x   6 500    default 1024 Feb 11 17:38 usr

 0 lrwxrwxrwx   1 500    default   4 Feb 11 17:41 var -> tmp/
4857 -rwxr-xr-x   1 500    default 4952287 Apr  9  2008 vmlinux
```

/ # cd /bin

/bin # ls -als

```
 1 drwxr-xr-x   2 500    default 1024 Feb 11 17:38 .
 1 drwxr-xr-x  14 root    root    1024 Feb 11 17:41 ..
 0 lrwxrwxrwx   1 500    default   7 Feb 11 17:38 addgroup -> busybox
 0 lrwxrwxrwx   1 500    default   7 Feb 11 17:37 adduser -> busybox
 0 lrwxrwxrwx   1 500    default   7 Feb 11 17:38 ash -> busybox
968 -rwxr-xr-x   1 500    default 985192 Apr 17  2008 busybox
 0 lrwxrwxrwx   1 500    default   7 Feb 11 17:38 cat -> busybox
 0 lrwxrwxrwx   1 500    default   7 Feb 11 17:38 chmod -> busybox
 0 lrwxrwxrwx   1 500    default   7 Feb 11 17:38 chown -> busybox
 0 lrwxrwxrwx   1 500    default   7 Feb 11 17:38 cp -> busybox
 0 lrwxrwxrwx   1 500    default   7 Feb 11 17:37 date -> busybox
```

0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	dd -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:37	delgroup -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	deluser -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	df -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	dmesg -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	echo -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	egrep -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:37	false -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	fgrep -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:37	getopt -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	grep -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	hostname -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	kill -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	ln -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	login -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	ls -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	mkdir -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	mknod -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	mktemp -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:37	more -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	mount -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	mv -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	nice -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	pidof -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	ping -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	ps -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	pwd -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:37	rm -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	rmdir -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	sed -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	sh -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	sleep -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	stty -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	sync -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	tar -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	touch -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:37	true -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	umount -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	uname -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	usleep -> busybox
0	lrwxrwxrwx	1	500	default	7 Feb 11 17:38	vi -> busybox

/bin #

```
/bin # busybox
```

```
BusyBox v1.1.3 (2008.04.09-04:56+0000) multi-call binary
```

```
Usage: busybox [function] [arguments]...
```

```
or: [function] [arguments]...
```

BusyBox is a multi-call binary that combines many common Unix utilities into a single executable. Most people will create a link to busybox for each function they wish to use and BusyBox will act like whatever it was invoked as!

```
Currently defined functions:
```

```
[, [[, addgroup, adduser, ash, basename, busybox, cat, chmod, chown, chroot, clear, cp, cut, date, dd, delgroup, deluser, devfsd, df, dirname, dmesg, du, e2fsck, echo, egrep, eject, expr, false, fdisk, fgrep, find, free, fsck, fsck.ext2, fsck.ext3, ftpget, ftpput, getopt, grep, halt, head, hexdump, hostname, httpd, hwclock, id, ifconfig, inetd, init, insmod, ipcrm, ipcs, kill, killall, klogd, linuxrc, ln, logger, login, losetup, ls, lsmod, lzmacat, mkdir, mke2fs, mkfs.ext2, mkfs.ext3, mkfs.extk, mknod, mkswap, mktemp, modprobe, more, mount, mv, nice, passwd, pidof, ping, pivot_root, poweroff, printf, ps, pwd, readlink, reboot, rm, rmdir, rmmmod, route, sed, sh, sleep, sort, stty, swapoff, swapon, sync, syslogd, tail, tar, tee, telnetd, test, tftp, time, touch, tr, true, tune2fs, udhcpc, udhcpd, umount, uname, unlzma, unzip, uptime, usleep, vi, wc, wget, which, yes
```

```
/bin #
```

```
/bin # cd /etc
```

```
/etc # ls -als
```

```
1 drwxr-xr-x    3 500      default    1024 Feb 11 17:38 .
1 drwxr-xr-x   14 root      root       1024 Feb 11 17:41 ..
6 -rw-r--r--    1 500      default    5368 Apr  9  2008 devfsd.conf
1 -rw-r--r--    1 500      default     335 Apr  9  2008 fstab
1 -rw-r--r--    1 500      default     107 Apr  9  2008 group
1 -rw-r--r--    1 500      default      6 Apr  9  2008 hostname
1 -rw-r--r--    1 500      default     20 Apr  9  2008 hosts
1 -rw-r--r--    1 500      default     385 Apr  9  2008 httpd.conf
1 -rw-r--r--    1 500      default     460 Apr  9  2008 inetd.conf
1 drwxr-xr-x    3 500      default    1024 Feb 11 17:38 init.d
4 -rw-r--r--    1 500      default    3349 Apr  9  2008 inittab.old
1 -rw-r--r--    1 500      default      5 Apr  9  2008 ld.so.conf
0 lrwxrwxrwx    1 500      default     14 Feb 11 17:38 mtab -> ../proc/mounts
1 -rw-r--r--    1 500      default     463 Apr  9  2008 passwd
```

```
0 lrwxrwxrwx    1 500      default      24 Feb 11 17:38 profile -> ../usr/local/etc/profile
2 -rw-r--r--    1 500      default     1191 Apr  9 2008 protocols.old
0 lrwxrwxrwx    1 500      default      36 Feb 11 17:38 resolv.conf -> /usr/local/etc/dvdplayer/resolv.conf
21 -rw-r--r--    1 500      default    20373 Apr  9 2008 services
1 -rw-r--r--    1 500      default       7 Apr  9 2008 system_svn_version
1 -rwxr-xr-x    1 500      default     950 Apr  9 2008 udhcpc.script
/etc #
```

```
/etc # cat /etc/passwd
```

```
root::0:0:root::/bin/sh
daemon:x:1:1:daemon:/usr/sbin:/bin/sh
bin:x:2:2:bin:/bin:/bin/sh
sys:x:3:3:sys:/dev:/bin/sh
sync:x:4:100:sync:/bin:/bin/sync
mail:x:8:8:mail:/var/spool/mail:/bin/sh
proxy:x:13:13:proxy:/bin:/bin/sh
www-data:x:0:0:www-data:/var/www:/bin/sh
backup:x:34:34:backup:/var/backups:/bin/sh
operator:x:37:37:Operator:/var:/bin/sh
sshd:x:103:99:Operator:/var:/bin/sh
nobody::99:99:nobody:/:/bin/sh
default::1000:1000:Default non-root user:/:/bin/sh
/etc # /etc #
```

```
/proc # cd /dev
```

```
/dev # ls
```

auth	hda1	i2c	mtdblock	root	vc
cdrom0	hda2	ide	null	rpc	vcc
console	hda3	input	port	scsi	venus_irrp
discs	hda4	kmem	ptmx	se0	venus_vfd_keypad
dvd	hda5	kmsg	pts	tts	venus_vfd_wrctl
dvdvdr	hda6	loop	pty	tty	venus_vfdo
full	hda7	mem	random	urandom	watch
hda	hda8	misc	rd	usb	zero

```
/dev #
```

/proc # cat cpuinfo

system type : Realtek Venus
processor : 0
cpu model : MIPS 4KEc V6.12
BogoMIPS : 202.34
wait instruction : yes
microsecond timers : yes
tlb_entries : 32
extra interrupt vector : yes
hardware watchpoint : yes
ASEs implemented :
VCED exceptions : not available
VCEI exceptions : not available

/proc # cat partitions

major	minor	#blocks	name
3	0	732574584	hda
3	1	8032	hda1
3	2	514080	hda2
3	3	1	hda3
3	4	128520	hda4
3	5	257040	hda5
3	6	8032	hda6
3	7	438574500	hda7
3	8	293025600	hda8
31	0	2048	mtdblock0

/proc # cat version

Linux version 2.6.12.6-VENUS (parden@realtek) (gcc version 3.4.4 mipssde-6.02.03-20050629) #2 Sat Apr 12 12:50:32 CST 2008

/proc #

/proc #

/proc # cat meminfo

MemTotal: 57664 kB
MemFree: 2408 kB
Buffers: 1024 kB

```
Cached:          15728 kB
SwapCached:      220 kB
Active:          10976 kB
Inactive:        8476 kB
HighTotal:       0 kB
HighFree:        0 kB
LowTotal:        57664 kB
LowFree:         2408 kB
SwapTotal:       257064 kB
SwapFree:        255444 kB
Dirty:           0 kB
Writeback:       0 kB
Mapped:          5908 kB
Slab:            5660 kB
CommitLimit:    285896 kB
Committed_AS:   11568 kB
PageTables:      560 kB
VmallocTotal:   1048560 kB
VmallocUsed:     872 kB
VmallocChunk:   1047628 kB
/proc #
```

```
/ # hdparm
-sh: hdparm: not found
/ #
```

```
/ # dmesg | grep "hd[a-z]"
hda: generic_ide_resume for JM-SATA long delay
ide_dma_speed: hda: mode 0x04, speed 0x44
/ #
```

```
/ # fdisk -l
Disk /dev/hda: 750.1 GB, 750156374016 bytes
255 heads, 63 sectors/track, 91201 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
```

Device	Boot	Start	End	Blocks	Id	System
--------	------	-------	-----	--------	----	--------

```

/dev/hda1          2          2          8032+  83  Linux
/dev/hda2          3          66          514080  83  Linux
/dev/hda3          67          91183  731897302+  5  Extended
/dev/hda4          91184          91199          128520  83  Linux
/dev/hda5          68          99          257040  82  Linux swap
/dev/hda6          101          101          8032+  83  Linux
/dev/hda7          103          54702  438574500  b  Win95 FAT32
/dev/hda8          54704          91183  293025600  7  HPFS/NTFS
/ #

```

```

/ # cat /proc/mounts | grep /dev/hd

```

```

/ # cat /proc/mounts

```

```

rootfs / rootfs rw 0 0
/dev/root / ext3 ro 0 0
none /dev devfs rw 0 0
none /proc proc rw,nodiratime 0 0
devpts /dev/pts devpts rw 0 0
none /sys sysfs rw 0 0
none /tmp ramfs rw 0 0
/dev/ide/host0/bus0/target0/lun0/part4 /usr/local/etc/dvdplayer ext3 rw 0 0
/dev/ide/host0/bus0/target0/lun0/part7 /usr/local/etc/dvdplayer/hdd/volumes/HDD1
vfat rw,nodiratime,fmask=0000,dmask=0000,codepage=cp437,iocharset=iso8859-1,sho
rtname=winnt,utf8 0 0
/dev/ide/host0/bus0/target0/lun0/part8 /usr/local/etc/dvdplayer/hdd/volumes/HDD2
ntfs ro,uid=0,gid=0,umask=00,nls=utf8,errors=continue,mft_zone_multiplier=1 0 0
/dev/ide/host0/bus0/target0/lun0/part1 /usr/local/etc/hdd/dvdvr udf rw,recovery
0 0
/dev/rd/0 /mnt/rd vfat rw,nodiratime,fmask=0022,dmask=0022,codepage=cp437,iochar
set=iso8859-1 0 0
/dev/ide/host0/bus0/target0/lun0/part6 /usr/local/etc/hdd/livepause udf rw 0 0
/ #

```

```

/ # df -h

```

Filesystem	Size	Used	Available	Use%	Mounted on
/dev/hda2	486.2M	87.9M	373.2M	19%	/
/dev/ide/host0/bus0/target0/lun0/part4	121.5M	65.1M	50.1M	57%	/usr/local/etc/dvdplayer
/dev/ide/host0/bus0/target0/lun0/part7	418.2G	65.5G	352.6G	16%	/usr/local/etc/dvdplayer/hdd/volumes/HDD1

```

/dev/ide/host0/bus0/target0/lun0/part8 279.5G 5.2G 274.2G 2% /usr/local/etc/dvdplayer/hdd/volumes/HDD2
/dev/ide/host0/bus0/target0/lun0/part1 6.8M 12.0k 6.8M 0% /usr/local/etc/hdd/dvdvr
/dev/rd/0 40.0k 40.0k 0 100% /mnt/rd
/dev/ide/host0/bus0/target0/lun0/part6 6.8M 10.0k 6.8M 0% /usr/local/etc/hdd/livepause
/ #
/ #

```

```

/ # cat /etc/fstab

```

```

# /etc/fstab: static file system information.

```

```

#
# <file system> <mount pt> <type> <options> <dump> <pass>
#/dev/root / ext3 rw,noauto 0 1
none /proc proc defaults 0 0
devpts /dev/pts devpts defaults,gid=5,mode=620 0 0
none /sys sysfs defaults 0 0
none /tmp ramfs defaults 0 0
#192.168.0.1:/nfs/rootfs /mnt nfs nolock 0 0
/ #

```

```

/ # cd /dev

```

```

/dev # ls -als hd*

```

```

0 lr-xr-xr-x 1 root root 32 Jan 1 1970 hda -> ide/host0/bus0/target0/lun0/disc
0 lr-xr-xr-x 1 root root 33 Jan 1 1970 hda1 -> ide/host0/bus0/target0/lun0/part1
0 lr-xr-xr-x 1 root root 33 Jan 1 1970 hda2 -> ide/host0/bus0/target0/lun0/part2
0 lr-xr-xr-x 1 root root 33 Jan 1 1970 hda3 -> ide/host0/bus0/target0/lun0/part3
0 lr-xr-xr-x 1 root root 33 Jan 1 1970 hda4 -> ide/host0/bus0/target0/lun0/part4
0 lr-xr-xr-x 1 root root 33 Jan 1 1970 hda5 -> ide/host0/bus0/target0/lun0/part5
0 lr-xr-xr-x 1 root root 33 Jan 1 1970 hda6 -> ide/host0/bus0/target0/lun0/part6
0 lr-xr-xr-x 1 root root 33 Jan 1 1970 hda7 -> ide/host0/bus0/target0/lun0/part7
0 lr-xr-xr-x 1 root root 33 Jan 1 1970 hda8 -> ide/host0/bus0/target0/lun0/part8
/dev #

```

```

/ # cd /dev/ide/host0/bus0/target0/lun0/

```

```

/dev/ide/host0/bus0/target0/lun0 # ls -als

```

```

0 drwxr-xr-x 1 root root 0 Jan 1 1970 .
0 drwxr-xr-x 1 root root 0 Jan 1 1970 ..
0 brw----- 1 root root 3, 0 Jan 1 1970 disc
0 brw----- 1 root root 3, 1 Jan 1 1970 part1

```



```
0 brw----- 1 root    root    3,  2 Jan  1 1970 part2
0 brw----- 1 root    root    3,  3 Jan  1 1970 part3
0 brw----- 1 root    root    3,  4 Jan  1 1970 part4
0 brw----- 1 root    root    3,  5 Jan  1 1970 part5
0 brw----- 1 root    root    3,  6 Jan  1 1970 part6
0 brw----- 1 root    root    3,  7 Jan  1 1970 part7
0 brw----- 1 root    root    3,  8 Jan  1 1970 part8
/dev/ide/host0/bus0/target0/lun0 #
```

```
/usr/local/etc/dvdplayer/hdd/volumes # ls
```

```
HDD1  HDD2
```

```
/usr/local/etc/dvdplayer/hdd/volumes # ls -als
```

```
  1 drwxr-xr-x   4 root    root    1024 Feb 11 17:43 .
  1 drwxr-xr-x   4 root    root    1024 Feb 11 17:41 ..
 32 drwxrwxrwx  11 root    root   32768 Jan  1 1970 HDD1
  4 dr-xr-xr-x   1 root    root    4096 Jan  7 2009 HDD2
/usr/local/etc/dvdplayer/hdd/volumes #
```