

CLI interface illustration:

```
$ ec2-run-instances ami-b232d0db
RESERVATION    r-f071fe9b      393287865111    default
INSTANCE      i-93b17ef9      ami-b232d0db    pending default 0
m1.small      2010-07-11T21:10:12+0000 us-east-1d      aki-94c527fd    ari-
96c527ff      monitoring-disabled    ebs
$ ec2-describe-instances i-93b17ef9
RESERVATION    r-f071fe9b      393287865111    default
INSTANCE      i-93b17ef9      ami-b232d0db    ec2-184-73-0-58.compute-
1.amazonaws.com domU-12-31-39-0B-16-42.compute-1.internal    running default 0
m1.small      2010-07-11T21:10:12+0000    us-east-1d      aki-94c527fd
ari-96c527ff      monitoring-disabled    184.73.0.58    10.214.25.172
ebs
BLOCKDEVICE    /dev/sda1      vol-58f39031    2010-07-11T21:10:24.000Z
$ ec2-get-console-output i-93b17ef9
i-93b17ef9
2010-07-11T21:13:35+0000
Linux version 2.6.21.7-2.ec2.v1.2.fc8xen (root@domU-12-31-39-0A-38-01)
(gcc version 4.1.2 20070925 (Red Hat 4.1.2-33)) #1 SMP Fri Nov 20 19:22:36 EST 2009
BIOS-provided physical RAM map:
sanitize start
sanitize bail 0
copy_e820_map() start: 0000000000000000 size: 000000006ac00000 end:
000000006ac00000 type: 1
  Xen: 0000000000000000 - 000000006ac00000 (usable)
980MB HIGHMEM available.
727MB LOWMEM available.
NX (Execute Disable) protection: active
Zone PFN ranges:
  DMA      0 -> 186366
  Normal   186366 -> 186366
  HighMem  186366 -> 437248
early_node_map[1] active PFN ranges
  0:      0 -> 437248
ACPI in unprivileged domain disabled
Detected 2666.783 MHz processor.
Built 1 zonelists. Total pages: 433833
Kernel command line: root=/dev/sda1 ro 4
Enabling fast FPU save and restore... done.
Enabling unmasked SIMD FPU exception support... done.
Initializing CPU#0
CPU 0 irqstacks, hard=c136c000 soft=c134c000
PID hash table entries: 4096 (order: 12, 16384 bytes)
Xen reported: 2666.760 MHz processor.
Console: colour dummy device 80x25
Dentry cache hash table entries: 131072 (order: 7, 524288 bytes)
Inode-cache hash table entries: 65536 (order: 6, 262144 bytes)
Software IO TLB disabled
vmalloc area: ee000000-f4ffe000, maxmem 2d7fe000
Memory: 1710764k/1748992k available (2072k kernel code, 28936k reserved,
1079k data, 188k init, 1003528k highmem)
virtual kernel memory layout:
  fixmap : 0xf5315000 - 0xf57fe000 (5028 kB)
  pkmap  : 0xf5000000 - 0xf5200000 (2048 kB)
  vmalloc : 0xee000000 - 0xf4ffe000 ( 111 MB)
  lowmem : 0xc0000000 - 0xed7fe000 ( 727 MB)
  .init  : 0xc1319000 - 0xc1348000 ( 188 kB)
  .data  : 0xc120608e - 0xc1313fd4 (1079 kB)
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.text : 0xc1000000 - 0xc120608e (2072 kB)
Checking if this processor honours the WP bit even in supervisor mode... Ok.
Calibrating delay using timer specific routine.. 6669.24 BogoMIPS (lpj=13338490)
Security Framework v1.0.0 initialized
SELinux: Initializing.
selinux_register_security: Registering secondary module capability
Capability LSM initialized as secondary
Mount-cache hash table entries: 512
CPU: L1 I cache: 32K, L1 D cache: 32K
CPU: L2 cache: 6144K
Checking 'hlt' instruction... OK.
SMP alternatives: switching to UP code
Freeing SMP alternatives: 13k freed
Brought up 1 CPUs
NET: Registered protocol family 16
Brought up 1 CPUs
PCI: Fatal: No config space access function found
PCI: setting up Xen PCI frontend stub
Setting up standard PCI resources
ACPI: Interpreter disabled.
Linux Plug and Play Support v0.97 (c) Adam Belay
pnp: PnP ACPI: disabled
xen_mem: Initialising balloon driver.
usbcore: registered new interface driver usbfs
usbcore: registered new interface driver hub
usbcore: registered new device driver usb
PCI: System does not support PCI
PCI: System does not support PCI
NetLabel: Initializing
NetLabel: domain hash size = 128
NetLabel: protocols = UNLABELED CIPSOv4
NetLabel: unlabeled traffic allowed by default
NET: Registered protocol family 2
IP route cache hash table entries: 32768 (order: 5, 131072 bytes)
TCP established hash table entries: 131072 (order: 8, 1572864 bytes)
TCP bind hash table entries: 65536 (order: 7, 524288 bytes)
TCP: Hash tables configured (established 131072 bind 65536)
TCP reno registered
checking if image is initramfs... it is
Freeing initrd memory: 7075k freed
audit: initializing netlink socket (disabled)
audit(1278882632.665:1): initialized
highmem bounce pool size: 64 pages
VFS: Disk quotas dquot_6.5.1
Dquot-cache hash table entries: 1024 (order 0, 4096 bytes)
ksign: Installing public key data
Loading keyring
io scheduler noop registered
io scheduler anticipatory registered
io scheduler deadline registered
io scheduler cfq registered (default)
pci_hotplug: PCI Hot Plug PCI Core version: 0.5
rtc: IRQ 8 is not free.
Non-volatile memory driver v1.2
Linux agpgart interface v0.102 (c) Dave Jones
RAMDISK driver initialized: 16 RAM disks of 16384K size 4096 blocksize
input: Macintosh mouse button emulation as /class/input/input0
Xen virtual console successfully installed as xvc0
Event-channel device installed.
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usbcore: registered new interface driver hiddev
usbcore: registered new interface driver usbhid
drivers/usb/input/hid-core.c: v2.6:USB HID core driver
PNP: No PS/2 controller found. Probing ports directly.
i8042.c: No controller found.
mice: PS/2 mouse device common for all mice
TCP bic registered
Initializing XFRM netlink socket
NET: Registered protocol family 1
NET: Registered protocol family 17
Using IPI No-Shortcut mode
XENBUS: Device with no driver: device/vif/0
XENBUS: Device with no driver: device/vbd/2049
XENBUS: Device with no driver: device/vbd/2051
drivers/rtc/hctosys.c: unable to open rtc device (rtc0)
Freeing unused kernel memory: 188k freed
Write protecting the kernel read-only data: 795k
Red Hat nash version 6.0.19 starting
Mounting proc filesystem
Mounting sysfs filesystem
Creating /dev
Creating initial device nodes
Setting up hotplug.
Creating block device nodes.
Loading xennet.ko module
netfront: Initialising virtual ethernet driver.
netfront: device eth0 has flipping receive path.
Loading xenblk.ko module
xen-vbd: registered block device major 8
Loading dm-mod.ko module
device-mapper: ioctl: 4.11.0-ioctl (2006-10-12) initialised:
dm-devel@redhat.com
Loading dm-mirror.ko module
Loading dm-crypt.ko module
Loading linear.ko module
md: linear personality registered for level -1
Loading dm-snapshot.ko module
Loading raid1.ko module
md: raid1 personality registered for level 1
Loading raid0.ko module
md: raid0 personality registered for level 0
Loading raid10.ko module
md: raid10 personality registered for level 10
Loading xor.ko module
raid5: automatically using best checksumming function: pIII_sse
    pIII_sse  : 8345.000 MB/sec
raid5: using function: pIII_sse (8345.000 MB/sec)
Loading raid456.ko module
raid6: int32x1    1019 MB/s
raid6: int32x2    778 MB/s
raid6: int32x4    329 MB/s
raid6: int32x8    356 MB/s
raid6: mmxx1     938 MB/s
raid6: mmxx2    1404 MB/s
raid6: sse1x1    768 MB/s
raid6: sse1x2    1589 MB/s
raid6: sse2x1    1311 MB/s
raid6: sse2x2    2919 MB/s
raid6: using algorithm sse2x2 (2919 MB/s)
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md: raid6 personality registered for level 6
md: raid5 personality registered for level 5
md: raid4 personality registered for level 4
Loading mbcache.ko module
Loading jbd.ko module
Loading ext3.ko module
Creating root device.
Mounting root filesystem.
kjournald starting. Commit interval 5 seconds
EXT3-fs: mounted filesystem with ordered data mode.
Setting up other filesystems.
Setting up new root fs
no fstab.sys, mounting internal defaults
Switching to new root and running init.
unmounting old /dev
unmounting old /proc
unmounting old /sys
INIT: version 2.86 booting
        Welcome to Fedora
        Press 'I' to enter interactive startup.
Setting clock : Sun Jul 11 17:10:52 EDT 2010 [ OK ]
Starting udev: [ OK ]
Setting hostname localhost: [ OK ]
No devices found
Setting up Logical Volume Management: File descriptor 7 left open
    No volume groups found
[ OK ]
Checking filesystems
Checking all file systems.
[/sbin/fsck.ext3 (1) -- /] fsck.ext3 -a /dev/sda1
myroot: clean, 51198/1966080 files, 470903/3932160 blocks
[ OK ]
Remounting root filesystem in read-write mode: [ OK ]
Mounting local filesystems: mount: special device
/dev/mapper/storageVG-storageFS does not exist
[FAILED]
Enabling local filesystem quotas: [ OK ]
Enabling /etc/fstab swaps: swapon: cannot canonicalize
/dev/mapper/swapVG-swapFS: No such file or directory
[ OK ]
INIT: Entering runlevel: 4
Entering non-interactive startup
Starting sysstat: Calling the system activity data collector (sadc):
[ OK ]
Bringing up loopback interface: [ OK ]
Bringing up interface eth0:
Determining IP information for eth0... done.
[ OK ]
Starting fuse: Loading fuse module.
Mounting fuse control filesystem.
[ OK ]
Starting system logger: [ OK ]
Starting kernel logger: [ OK ]
Starting system message bus: [ OK ]
Starting ConsoleKit: [ OK ]
[ OK ] crond: [ OK ]
Starting anacron: Could not initialise connection to hald.
Normally this means the HAL daemon (hald) is not running or not ready.
[ OK ]
```

```
-----VERSION : $Rev: 45452 $-----
ec2: -----FIRST RUN-----
ec2: -----GET LATEST AMI TOOLS-----
ec2: Attempting ami-utils update from S3
ec2: Updated ec2-ami-tools from S3
ec2: -----FIND MATCHING MODULES-----
ec2: Kernel modules already appear up to date - directory already exists
ec2: -----RANDOMISING ROOT PASSWORD-----
ec2: -----TRIGGERING HOST KEYS REGENERATION-----
ec2: Removing existing keys
ec2: Bouncing sshd to force regeneration
Stopping sshd: [FAILED]
Generating SSH1 RSA host key: [ OK ]
Generating SSH2 RSA host key: [ OK ]
Generating SSH2 DSA host key: [ OK ]
Starting sshd: [ OK ]
ec2: Setting sshd to start as a service
ec2: -----CREDENTIALS RETRIEVAL-----
ec2: Attempting to retrieve public key from
[http://169.254.169.254/1.0/meta-data/public-keys/0/openssh-key]
grep: /root/.ssh/authorized_keys: No such file or directory
ec2: New key added to authroized keys file from parameters
ec2: Setting permissions on /root/.ssh/authorized_keys to 0600
ec2: -----BEGIN SSH HOST KEY FINGERPRINTS-----
ec2: 2048 72:dd:fe:4d:99:29:1b:c9:1d:33:68:88:ac:0a:cc:c0 /etc/ssh/ssh_host_key.pub
ec2: 2048 80:b0:f5:cd:03:50:cd:ac:e9:44:1c:44:6d:c3:c6:36
/etc/ssh/ssh_host_rsa_key.pub
ec2: 1024 0e:15:5d:e7:0e:73:1a:93:ee:46:3a:d0:c6:32:49:a4
/etc/ssh/ssh_host_dsa_key.pub
ec2: -----END SSH HOST KEY FINGERPRINTS-----
```

Fedora release 8 (Werewolf)
Kernel 2.6.21.7-2.ec2.v1.2.fc8xen on an i686

```
domU-12-31-39-0B-16-42 login:
$ ssh -i ~/.ec2/stevens.pem root@ec2-184-73-0-58.compute-1.amazonaws.com
The authenticity of host 'ec2-184-73-0-58.compute-1.amazonaws.com (184.73.0.58)'
can't be established.
RSA key fingerprint is 80:b0:f5:cd:03:50:cd:ac:e9:44:1c:44:6d:c3:c6:36.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added
'ec2-184-73-0-58.compute-1.amazonaws.com,184.73.0.58' (RSA) to the list of known
hosts.
```

```
__|  __|_ ) Fedora 8
_| ( / 32-bit
__|\__|__|
```

Welcome to an EC2 Public Image
:-)

Getting Started
with EBS Boot

--[see /etc/ec2/release-notes]--

```
[root@domU-12-31-39-0B-16-42 ~]# df
Filesystem      1K-blocks      Used Available Use% Mounted on
/dev/sda1       15481840    1636904  13058504  12% /
```

```
none          874032          0      874032    0% /dev/shm
[root@domU-12-31-39-0B-16-42 ~]# ifconfig eth0
eth0          Link encap:Ethernet  HWaddr 12:31:39:0B:16:42
              inet addr:10.214.25.172  Bcast:10.214.25.255  Mask:255.255.255.0
              inet6 addr: fe80::1031:39ff:fe0b:1642/64  Scope:Link
              UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
              RX packets:390 errors:0 dropped:0 overruns:0 frame:0
              TX packets:253 errors:0 dropped:0 overruns:0 carrier:0
              collisions:0 txqueuelen:1000
              RX bytes:200709 (196.0 KiB)  TX bytes:33674 (32.8 KiB)

[root@domU-12-31-39-0B-16-42 ~]# uname -a
Linux domU-12-31-39-0B-16-42 2.6.21.7-2.ec2.v1.2.fc8xen #1 SMP Fri Nov 20 19:22:36
EST 2009 i686 i686 i386 GNU/Linux

[root@domU-12-31-39-0B-16-42 ~]# exit
$ ec2-terminate-instances i-93b17ef9
INSTANCE          i-93b17ef9          running shutting-down
$ ec2-get-console-output i-93b17ef9
INIT: Switching to runlevel: 0
INIT: Sending processes the TERM signal
Stopping ConsoleKit: [ OK ]
Stopping sshd: [ OK ]
Stopping crond: [ OK ]
Stopping system message bus: [ OK ]
Shutting down kernel logger: [ OK ]
Shutting down system logger: [ OK ]
Shutting down interface eth0: [ OK ]
Shutting down loopback interface: [ OK ]
Starting killall: [ OK ]
Sending all processes the TERM signal...
Sending all processes the KILL signal...
Saving random seed:
Syncing hardware clock to system time
Turning off quotas:
Unmounting file systems:
mount: /proc is busy
Halting system...
System halted.

$
```