

Ready; T=0.01/0.01 21:14:10
ipl 160 clear
zIPL v1.8.0-44.45.2 interactive boot menu

0. default (ipl)

1. ipl

Note: VM users please use '#cp vi vmmsg <number> <kernel-parameters>'

Please choose (default will boot in 10 seconds):

Booting default (ipl)...

Initializing cgroup subsys cpuset

Initializing cgroup subsys cpu

Linux version 2.6.32.36-0.5-default (geeko@buildhost) (gcc version 4.3.4 [gcc-4_3-branch revision 152973] (SUSE Linux)) #1 SMP 2011

-04-14 10:12:31 +0200

setup.1a06a7: Linux is running as a z/VM guest operating system in 64-bit mode

Zone PFN ranges:

DMA 0x000000000 -> 0x000800000

Normal 0x000800000 -> 0x000800000

Movable zone start PFN for each node

early_node_map[1] active PFN ranges

0: 0x000000000 -> 0x000200000

PERCPU: Embedded 11 pages/cpu @0000000000e92000 s12544 r8192 d24320 u65536

pcpu-alloc: s12544 r8192 d24320 u65536 alloc=16*4096

pcpu-alloc: [0] 00 [0] 01 [0] 02 [0] 03 [0] 04 [0] 05 [0] 06 [0] 07

pcpu-alloc: [0] 08 [0] 09 [0] 10 [0] 11 [0] 12 [0] 13 [0] 14 [0] 15

pcpu-alloc: [0] 16 [0] 17 [0] 18 [0] 19 [0] 20 [0] 21 [0] 22 [0] 23

pcpu-alloc: [0] 24 [0] 25 [0] 26 [0] 27 [0] 28 [0] 29 [0] 30 [0] 31

pcpu-alloc: [0] 32 [0] 33 [0] 34 [0] 35 [0] 36 [0] 37 [0] 38 [0] 39

pcpu-alloc: [0] 40 [0] 41 [0] 42 [0] 43 [0] 44 [0] 45 [0] 46 [0] 47

pcpu-alloc: [0] 48 [0] 49 [0] 50 [0] 51 [0] 52 [0] 53 [0] 54 [0] 55

pcpu-alloc: [0] 56 [0] 57 [0] 58 [0] 59 [0] 60 [0] 61 [0] 62 [0] 63

Built 1 zonelists in Zone order, mobility grouping on. Total pages: 129280

Kernel command line: root=/dev/disk/by-path/ccw-0.0.0160-part1 TERM=dumb

BOOT_IMAGE=0

PID hash table entries: 2048 (order: 2, 16384 bytes)

Dentry cache hash table entries: 65536 (order: 7, 524288 bytes)

Inode-cache hash table entries: 32768 (order: 6, 262144 bytes)

Memory: 499540k/524288k available (4393k kernel code, 0k reserved, 2104k data, 228k init)

Write protected kernel read-only data: 0x100000 - 0x5ffffff

Hierarchical RCU implementation.

console [ttyS0] enabled

allocated 5242880 bytes of page_cgroup

please try 'cgroup_disable=memory' option if you don't want memory cgroups

pid_max: default: 65536 minimum: 512

Security Framework initialized

AppArmor: AppArmor initialized

Mount-cache hash table entries: 256

Initializing cgroup subsys ns

Initializing cgroup subsys cpuacct

Initializing cgroup subsys memory

Initializing cgroup subsys devices

Initializing cgroup subsys freezer

Initializing cgroup subsys net_cls

cpu.33a262: 1 configured CPUs, 0 standby CPUs

cpu.17772b: Processor 0 started, address 0, identification 018942

Brought up 1 CPUs
devtmpfs: initialized
NET: Registered protocol family 16
bio: create slab <bio-0> at 0
NetLabel: Initializing
NetLabel: domain hash size = 128
NetLabel: protocols = UNLABELED CIPSOv4
NetLabel: unlabeled traffic allowed by default
AppArmor: AppArmor Filesystem Enabled
NET: Registered protocol family 2
IP route cache hash table entries: 4096 (order: 3, 32768 bytes)
TCP established hash table entries: 16384 (order: 6, 262144 bytes)
TCP bind hash table entries: 16384 (order: 6, 262144 bytes)
TCP: Hash tables configured (established 16384 bind 16384)
TCP reno registered
NET: Registered protocol family 1
Unpacking initramfs...
Freeing initrd memory: 5647k freed
audit: initializing netlink socket (disabled)
type=2000 audit(1311988470.532:1): initialized
HugeTLB registered 1 MB page size, pre-allocated 0 pages
VFS: Disk quotas dquot_6.5.2
Dquot-cache hash table entries: 512 (order 0, 4096 bytes)
msgmni has been set to 246
alg: No test for stdrng (krng)
Block layer SCSI generic (bsg) driver version 0.4 loaded (major 254)
io scheduler noop registered
io scheduler anticipatory registered
io scheduler deadline registered (default)
io scheduler cfq registered
cio.b5d5f6: Channel measurement facility initialized using format extended (mode autodetected)
TCP cubic registered
registered taskstats version 1
Freeing unused kernel memory: 228k freed
doing fast boot
Creating device nodes with udev
udev version 128 started
dasd-eckd.90fb0d: 0.0.0160: New DASD 3390/0C (CU 3990/01) with 10017 cylinders, 15 heads, 224 sectors
dasd-eckd.412b53: 0.0.0160: DASD with 4 KB/block, 7212240 KB total size, 48 KB/track, compatible disk layout
dasda:VOL1/ 0X0160: dasda1 dasda2 dasda3
mount: devpts already mounted or /dev/pts busy
mount: according to mtab, devpts is already mounted on /dev/pts
Boot logging started on /dev/ttyS0(/dev/console) at Fri Jul 29 21:14:32 2011
kjournald starting. Commit interval 15 seconds
EXT3 FS on dasda1, internal journal
EXT3-fs: mounted filesystem with ordered data mode.
resume device not found (ignoring)
Waiting for device /dev/disk/by-path/ccw-0.0.0160-part1 to appear: ok
fsck from util-linux-ng 2.16
[/sbin/fsck.ext3 (1) -- /] fsck.ext3 -a /dev/dasda1
/dev/dasda1: clean, 4185/102400 files, 65982/102396 blocks
fsck succeeded. Mounting root device read-write.
Mounting root /dev/disk/by-path/ccw-0.0.0160-part1
mount -o rw,acl,user_xattr -t ext3 /dev/disk/by-path/ccw-0.0.0160-part1 /root
INIT: version 2.86 booting
System Boot Control: Running /etc/init.d/boot

```
Mounting sysfs at /sys
..done
Mounting debugfs at /sys/kernel/debug..done
Copying static /dev content
..done
Mounting devpts at /dev/pts..done
Boot logging started on /dev/ttyS0(/dev/console) at Fri Jul 29 21:14:50 2011
Starting udevd:
udev version 128 started
..done
Loading drivers, configuring devices:
SCSI subsystem initialized
vmur.c793e5: z/VM virtual unit record device driver loaded.
qeth.87067b: loading core functions
..done
Activating swap-devices in /etc/fstab...
Adding 524872k swap on /dev/dasda2. Priority:-1 extents:1 across:524872k
..done
Setting up the System Clock..done
..done
Activating device mapper...
device-mapper: uevent: version 1.0.3
device-mapper: ioctl: 4.15.0-ioctl (2009-04-01) initialised: dm-devel@redhat.com
..done
Loading required kernel modules
..done
Starting MD Raid
ln: creating symbolic link `/var/run/mdadm': No such file or directory
..unused
Waiting for udev to settle...
Scanning for LVM volume groups...
  Reading all physical volumes. This may take a while...
  Found volume group "vg1" using metadata type lvm2
Activating LVM volume groups...
  6 logical volume(s) in volume group "vg1" now active
..done
Checking file systems...
fsck from util-linux-ng 2.16
Checking all file systems.
[/sbin/fsck.ext3 (1) -- /home] fsck.ext3 -a /dev/mapper/vg1-home
/dev/mapper/vg1-home: clean, 30/25600 files, 1863/25600 blocks
[/sbin/fsck.ext3 (1) -- /opt] fsck.ext3 -a /dev/mapper/vg1-opt
/dev/mapper/vg1-opt: clean, 11/19456 files, 1647/19456 blocks
[/sbin/fsck.ext2 (1) -- /repository] fsck.ext2 -a /dev/mapper/vg1-vmarc
/dev/mapper/vg1-vmarc: clean, 3477/131072 files, 14677/524288 blocks
[/sbin/fsck.ext3 (1) -- /tmp] fsck.ext3 -a /dev/mapper/vg1-tmp
/dev/mapper/vg1-tmp: clean, 304/76800 files, 13293/76800 blocks
[/sbin/fsck.ext3 (1) -- /usr] fsck.ext3 -a /dev/mapper/vg1-usr
/dev/mapper/vg1-usr: clean, 91014/170352 files, 460261/666624 blocks
[/sbin/fsck.ext3 (1) -- /var] fsck.ext3 -a /dev/mapper/vg1-var
/dev/mapper/vg1-var: clean, 1887/103808 files, 79410/103424 blocks
loop: module loaded
kjournald starting. Commit interval 15 seconds
EXT3 FS on dm-0, internal journal
EXT3-fs: mounted filesystem with ordered data mode.
kjournald starting. Commit interval 15 seconds
EXT3 FS on dm-1, internal journal
EXT3-fs: mounted filesystem with ordered data mode.
..done
```

```
Mounting local file systems...
proc on /proc type proc (rw)
sysfs on /sys type sysfs (rw)
debugfs on /sys/kernel/debug type debugfs (rw)
devtmpfs on /dev type devtmpfs (rw,mode=0755)
tmpfs on /dev/shm type tmpfs (rw,mode=1777)
devpts on /dev/pts type devpts (rw,mode=0620,gid=5)
/dev/mapper/vg1-home on /home type ext3 (rw,acl,user_xattr)
/dev/mapper/vg1-opt on /opt type ext3 (rw,acl,user_xattr)
kjournald starting. Commit interval 15 seconds
EXT3 FS on dm-2, internal journal
EXT3-fs: mounted filesystem with ordered data mode.
kjournald starting. Commit interval 15 seconds
EXT3 FS on dm-3, internal journal
EXT3-fs: mounted filesystem with ordered data mode.
kjournald starting. Commit interval 15 seconds
EXT3 FS on dm-4, internal journal
EXT3-fs: mounted filesystem with ordered data mode.
/dev/mapper/vg1-vmarc on /repository type ext2 (rw,acl,user_xattr)
/dev/mapper/vg1-tmp on /tmp type ext3 (rw,acl,user_xattr)
/dev/mapper/vg1-usr on /usr type ext3 (rw,acl,user_xattr)
/dev/mapper/vg1-var on /var type ext3 (rw,acl,user_xattr)
..done
Loading fuse module
fuse init (API version 7.13)
..done
Mounting fuse control filesystem..done
Creating /var/log/boot.msg
..done
Activating remaining swap-devices in /etc/fstab...
..done
Setting current sysctl status from /etc/sysctl.conf..done
Enabling syn flood protection..done
Disabling IP forwarding..done
..done
Turning quota on
Checking quotas. This may take some time.
..done
Mounting securityfs on /sys/kernel/security ..done
Loading AppArmor profiles
type=1505 audit(1311988522.802:2): operation="profile_load" pid=963 name=/bin/ping
type=1505 audit(1311988522.842:3): operation="profile_load" pid=964
name=/sbin/klogd
type=1505 audit(1311988522.922:4): operation="profile_load" pid=965
name=/sbin/syslog-ng
type=1505 audit(1311988523.012:5): operation="profile_load" pid=966
name=/sbin/syslogd
type=1505 audit(1311988523.102:6): operation="profile_load" pid=967
name=/usr/sbin/avahi-daemon
type=1505 audit(1311988523.182:7): operation="profile_load" pid=968
name=/usr/sbin/identd
type=1505 audit(1311988523.272:8): operation="profile_load" pid=969
name=/usr/sbin/mdnsd
type=1505 audit(1311988523.402:9): operation="profile_load" pid=970
name=/usr/sbin/nscd
type=1505 audit(1311988523.542:10): operation="profile_load" pid=971
name=/usr/sbin/ntpd
type=1505 audit(1311988523.622:11): operation="profile_load" pid=972
name=/usr/sbin/traceroute
```


..failed

Setting up service (localfs) network

...failed

Jul 29 21:15:39 s390vm22 kernel: nf_conntrack version 0.5.0 (3953 buckets, 15812 max)

Starting auditd

..done

Starting rpcbind

..done

Not starting NFS client services - no NFS found in /etc/fstab:..unused

Starting irqbalance ..unused

Setting up (remotefs) network interfaces:

Setting up service (remotefs) networkdone

Starting SSH daemon

..done

Starting Name Service Cache Daemon

..done

Starting mail service (Postfix)

..done

Starting service xdm

..done

Starting CRON daemon

..done

Starting smartd

..unused

Starting INET services. (xinetd)

..done

Starting Firewall Initialization (phase 2 of 2) SuSEfirewall2: Warning: no interface active

..done

Master Resource Control: runlevel 5 has been reached

Failed services in runlevel 5: #[80C#[14Dnetwork

Skipped services in runlevel 5: #[80C#[37Dnfs irq_balancer splash smartd

Welcome to SUSE Linux Enterprise Server 11 SP1 (s390x) - Kernel 2.6.32.36-0.5-default (ttyS0).

s390vm22 login:

root

Password:

passwordforroot

Last login: Fri Jul 29 20:52:14 EDT 2011 from 164.99.195.3 on pts/0

You have mail.

s390vm22:~ #

cd /sys/bus/ccwgroup/drivers/qeth

s390vm22:/sys/bus/ccwgroup/drivers/qeth #

ls

bind group module uevent unbind

s390vm22:/sys/bus/ccwgroup/drivers/qeth #

#CP Q V OSA

OSA 0340 ON NIC 0340 UNIT 000 SUBCHANNEL = 0006

0340 DEVTYPE OSA CHPID 00 OSD

0340 MAC 02-00-00-00-00-2B CURRENT

0340 QDIO-ELIGIBLE QIOASSIST-ELIGIBLE

```

OSA 0341 ON NIC 0340 UNIT 001 SUBCHANNEL = 0007
0341 DEVTYPE OSA CHPID 00 OSD
0341 QDIO-ELIGIBLE QIOASSIST-ELIGIBLE
OSA 0342 ON NIC 0340 UNIT 002 SUBCHANNEL = 0008
0342 DEVTYPE OSA CHPID 00 OSD
0342 QDIO-ELIGIBLE QIOASSIST-ELIGIBLE
s390vm22:/sys/bus/ccwgroup/drivers/qeth #
echo 0.0.0340,0.0.0341,0.0.0342 > group
s390vm22:/sys/bus/ccwgroup/drivers/qeth #
ls
0.0.0340 bind group module uevent unbind
s390vm22:/sys/bus/ccwgroup/drivers/qeth #
cd 0.0.0340
s390vm22:/sys/bus/ccwgroup/drivers/qeth/0.0.0340 #
ls
blkt          cdev2          isolation          portno          subsystem
buffer_count  chpid          layer2          power          uevent
card_type     driver         online          priority_queueing ungroup
cdev0         if_name       performance_stats recover
cdev1         inbuf_size   portname        state
s390vm22:/sys/bus/ccwgroup/drivers/qeth/0.0.0340 #
echo 1 > online
qeth.933eb7: register layer 2 discipline
qeth.5cb8a3: 0.0.0340: The qeth device is not configured for
the OSI layer required by z/VM
qeth.3acf0c: 0.0.0340: The qeth device driver failed to recover
an error on the device
qeth: irb 00000000: 00 c2 60 17 1e cb 70 38 0e 00 10 00 00 80 00 00
..`...p8.....
qeth: irb 00000010: 01 02 00 00 00 00 00 00 00 00 00 00 00 00 00
00 .....
qeth: sense data 00000000: 02 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 .....
qeth: sense data 00000010: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 .....
qeth.3acf0c: 0.0.0340: The qeth device driver failed to recover an error on the
device
-bash: echo: write error: No such device
Jul 29 21:17:25 s390vm22 kernel: qeth.5cb8a3: 0.0.0340: The qeth device is not
configured for the OSI layer required by z/VM
Jul 29 21:17:25 s390vm22 kernel: qeth.3acf0c: 0.0.0340: The qeth device driver
failed to recover an error on the device
Jul 29 21:17:25 s390vm22 kernel: qeth: irb 00000000: 00 c2 60 17 1e cb 70 38 0e 00
10 00 00 80 00 00 ..`...p8.....
Jul 29 21:17:25 s390vm22 kernel: qeth: irb 00000010: 01 02 00 00 00 00 00 00 00 00
00 00 00 00 00 00 .....
Jul 29 21:17:25 s390vm22 kernel: qeth: sense data 00000000: 02 00 00 00 00 00 00 00
00 00 00 00 00 00 00 .....
Jul 29 21:17:25 s390vm22 kernel: qeth: sense data 00000010: 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 .....
Jul 29 21:17:25 s390vm22 kernel: qeth.3acf0c: 0.0.0340: The qeth device driver
failed to recover an error on the device
s390vm22:/sys/bus/ccwgroup/drivers/qeth/0.0.0340 #
echo 0 > layer2
qeth.2c6def: register layer 3 discipline

```

```

s390vm22:/sys/bus/ccwgroup/drivers/qeth/0.0.0340 #
echo 1 > online
qdio: 0.0.0342 OSA on SC 8 using AI:1 QEBSM:0 PCI:1 TDD:1 SIGA:RW AO
qeth.736dae: 0.0.0340: Device is a Guest LAN QDIO card (level: V540)
with link type GuestLAN QDIO (portname: )
qeth.47953b: 0.0.0340: Hardware IP fragmentation not supported on eth0
qeth.066069: 0.0.0340: Inbound source MAC-address not supported on eth0
qeth.d7fdb4: 0.0.0340: VLAN enabled
qeth.e90c78: 0.0.0340: Multicast enabled
qeth.5a9d02: 0.0.0340: IPV6 enabled
qeth.184d8a: 0.0.0340: Broadcast enabled
qeth.dac2aa: 0.0.0340: Using SW checksumming on eth0.
qeth.9c4c89: 0.0.0340: Outbound TSO not supported on eth0
eth0 renamed to eth1 by udevd [2292]
udev: renamed network interface eth0 to eth1
Jul 29 21:17:38 s390vm22 kernel: with link type GuestLAN QDIO (portname: )
Jul 29 21:17:38 s390vm22 ifup: No configuration found for
eth1
s390vm22:/sys/bus/ccwgroup/drivers/qeth/0.0.0340 #
ifconfig -a
eth1      Link encap:Ethernet  HWaddr 02:00:00:00:00:2B
          BROADCAST MULTICAST  MTU:1492  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 b)  TX bytes:0 (0.0 b)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:2 errors:0 dropped:0 overruns:0 frame:0
          TX packets:2 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:100 (100.0 b)  TX bytes:100 (100.0 b)

s390vm22:/sys/bus/ccwgroup/drivers/qeth/0.0.0340 #
ifconfig eth1 10.10.220.118/16

s390vm22:/sys/bus/ccwgroup/drivers/qeth/0.0.0340 #
route add default gw 10.10.0.8

s390vm22:/sys/bus/ccwgroup/drivers/qeth/0.0.0340 #
SFW2-INext-ACC-TCP IN=eth1 OUT=
MAC=02:00:00:00:00:2b:46:41:4b:45:4c:4c:08:00 SRC=164.99.195.3
DST=10.10.220.118 LEN=60 TOS=0x00 PRE C=0x00 TTL=60 ID=37317 DF
PROTO=TCP SPT=49425 DPT=22 WINDOW=5584 RES=0x00 SYN URGP=0 OPT
(020405740402080A0017540A0000000001030307)

cd /etc/udev/rules.d/
s390vm22:/etc/udev/rules.d #
ls
51-dasd-0.0.0160.rules  70-persistent-net.rules  81-mount.rules
59-dasd.rules           71-multipath.rules       99-iwlwifi-led.rules
60-readahead.rules     77-network.rules        99-pcsc_lite.rules

```



```
70-kpartx.rules          79-yast2-drivers.rules
s390vm22:/etc/udev/rules.d #
```

```
No 51-qeth-0.0.0340.rules file here!
```