

## IPL 150 CLEAR

zIPL v1.8.0-44.45.2 interactive boot menu

0. default (ipl)

1. ipl

Note: VM users please use '#cp vi vmsg <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 - 0x5fffff

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(1311992159.387:1): 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: 0.0.0150: New DASD 3390/0C (CU 3990/01) with 10017 cylinders, 15
heads, 224 sectors
dasd-eckd.412b53: 0.0.0150: DASD with 4 KB/block, 7212240 KB total size, 48
KB/track, compatible disk layout
dasda:VOL1/ 0X0150: dasda1
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 22:15:59 2011
resume device not found (ignoring)
Waiting for device /dev/disk/by-path/ccw-0.0.0160-part1 to
appear: .....
.....
Could not find /dev/disk/by-path/ccw-0.0.0160-part1.
Want me to fall back to /dev/disk/by-path/ccw-0.0.0150-part1? (Y/n)
n
not found -- exiting to /bin/sh
$
lsmod
sh: lsmod: command not found
$
```

```
cat /proc/modules
```

```
dasd_eckd_mod 92849 3 - Live 0x000003c0006a8000
dasd_mod 100893 2 dasd_eckd_mod, Live 0x000003c000654000
ext3 195277 0 - Live 0x000003c0005e8000
mbcache 10482 1 ext3, Live 0x000003c00058b000
jbd 94628 1 ext3, Live 0x000003c00055e000
$
```

```
cat /proc/dasd/devices
```

```
0.0.0150(ECKD) at ( 94:      0) is dasda      : active at blocksize: 4096, 1803060
blocks, 7043 MB
$
```

```
cat /proc/partitions
```

```
major minor #blocks name

 94         0      7212240 dasda
 94         1      409584 dasda1
$
```

```
#CP Q V DASD
```

```
DASD 0120 3390 54LXMT R/O      3338 CYL ON DASD 101A SUBCHANNEL = 001B
DASD 0150 3390 0X2500 R/W      3283 CYL ON DASD 2500 SUBCHANNEL = 000B
DASD 0151 3390 0X2500 R/W      3338 CYL ON DASD 2500 SUBCHANNEL = 000C
DASD 0160 ON DASD 9016 R/W 0X0160 SUBCHANNEL = 0002
DASD 0190 3390 540RES R/O      107 CYL ON DASD 9027 SUBCHANNEL = 0018
DASD 0191 3390 0X2500 R/W       5 CYL ON DASD 2500 SUBCHANNEL = 0009
DASD 0192 3390 0X5013 R/O      10 CYL ON DASD 5013 SUBCHANNEL = 0000
DASD 019D 3390 540RES R/O      146 CYL ON DASD 9027 SUBCHANNEL = 001A
DASD 019E 3390 540RES R/O      250 CYL ON DASD 9027 SUBCHANNEL = 0019
DASD 019F 3390 0X2500 R/W       50 CYL ON DASD 2500 SUBCHANNEL = 000A
DASD F000 3390 0X2500 R/W      3338 CYL ON DASD 2500 SUBCHANNEL = 000D
```

```
dasd_configure 0.0.0160 1
```

```
Configuring device 0.0.0160
```

```
/sbin/dasd_configure: line 137: egrep: command not found
```

```
Setting device online
```

```
dasd-eckd.90fb0d: 0.0.0160: New DASD 3390/0C (CU 3990/01) with
3338 cylinders, 15 heads, 224 sectors
```

```
dasd-eckd.412b53: 0.0.016: DASD with 4 KB/block, 2403360 KB
total size, 48 KB/track, linux disk layout
```

```
dasdb:CMS1/ TMPF00: dasdb1
```

```
$
```

```
cat /proc/dasd/devices
```

```
0.0.0150(ECKD) at ( 94:      0) is dasda      : active at blocksize: 4096, 1803060
blocks, 7043 MB
0.0.0160(ECKD) at ( 94:      4) is dasdb      : active at blocksize: 4096, 600840
blocks, 2347 MB
$
```

```
cat /proc/partitions
```

```
major minor #blocks name

 94         0      7212240 dasda
 94         1      409584 dasda1
 94         4      2403360 dasdb
 94         5      2403348 dasdb1
$
```

```
mount -o ro /dev/dasdb1 /root
```

```
kjournald starting. Commit interval 15 seconds
EXT3-fs: mounted filesystem with ordered data mode.
$
exit
EXT3 FS on dasdb1, internal journal
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 21:51:30 2011
Starting udevd: udevd version 128 started
SCSI subsystem initialized
vmur.c793e5: z/VM virtual unit record device driver loaded.
lcs.4fa72b: Loading LCS driver
qeth.87067b: loading core functions
lcs.0aabaa: LCS device eth0 without IPv6 support
lcs.86dbe7: LCS device eth0 with Multicast support
..done
Loading drivers, configuring devices:
..done
Adding 524872k swap on /dev/dasda2. Priority:-1 extents:1 across:524872k
Activating swap-devices in /etc/fstab...
..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...
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.
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.
fuse init (API version 7.13)
type=1505 audit(1311990693.548:2): operation="profile_load" pid=1034 name=/bin/ping
type=1505 audit(1311990693.598:3): operation="profile_load" pid=1035
name=/sbin/klogd
```

```
type=1505 audit(1311990693.678:4): operation="profile_load" pid=1036
name=/sbin/syslog-ng
type=1505 audit(1311990693.768:5): operation="profile_load" pid=1037
name=/sbin/syslogd
type=1505 audit(1311990693.858:6): operation="profile_load" pid=1038
name=/usr/sbin/avahi-daemon
type=1505 audit(1311990693.938:7): operation="profile_load" pid=1039
name=/usr/sbin/identd
type=1505 audit(1311990694.028:8): operation="profile_load" pid=1040
name=/usr/sbin/mdnsd
type=1505 audit(1311990694.128:9): operation="profile_load" pid=1041
name=/usr/sbin/nscd
type=1505 audit(1311990694.268:10): operation="profile_load" pid=1042
name=/usr/sbin/ntpd
type=1505 audit(1311990694.348:11): operation="profile_load" pid=1043
name=/usr/sbin/traceroute
blogd: no message logging because /var file system is not accessible
  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, 305/76800 files, 13298/76800 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, 79442/103424 blocks
..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)
/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 ..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 ..done
Setting up hostname 's390vm22'..done
Setting up loopback interface    lo
    lo        IP address: 127.0.0.1/8
              IP address: 127.0.0.2/8
..done
System Boot Control: The system has been set up
Skipped features: #[80C#[14Dboot.md
System Boot Control: Running /etc/init.d/boot.local
..done
INIT: Entering runlevel: 5
Boot logging started on /dev/ttyS0(/dev/console) at Fri Jul 29 21:51:47 2011
Master Resource Control: previous runlevel: N, switching to runlevel: 5
Starting Firewall Initialization (phase 1 of 2) NET: Registered protocol family 10
lo: Disabled Privacy Extensions
ip6_tables: (C) 2000-2006 Netfilter Core Team
ip_tables: (C) 2000-2006 Netfilter Core Team
nf_conntrack version 0.5.0 (3953 buckets, 15812 max)
..done
Starting D-Bus daemon
..done
Starting syslog servicetype=1503 audit(1311990708.358:12): operation="file_mmap"
pid=1267 parent=1266 profile="/sbin/syslog-ng" requested_mask="m::" denied_mask="m::" fsuid=0 ouid=0 name="/etc/passwd"
type=1503 audit(1311990708.358:13): operation="file_mmap" pid=1267 parent=1266
profile="/sbin/syslog-ng" requested_mask="m::" denied_mask="m::" fsuid=0 ouid=0 name="/etc/group"
type=1503 audit(1311990708.358:14): operation="file_mmap" pid=1267 parent=1266
profile="/sbin/syslog-ng" requested_mask="m::" denied_mask="m::" fsuid=0 ouid=0 name="/etc/passwd"
type=1503 audit(1311990708.358:15): operation="file_mmap" pid=1267 parent=1266
profile="/sbin/syslog-ng" requested_mask="m::" denied_mask="m::" fsuid=0 ouid=0 name="/etc/group"
type=1503 audit(1311990708.358:16): operation="file_mmap" pid=1267 parent=1266
profile="/sbin/syslog-ng" requested_mask="m::" denied_mask="m::" fsuid=0 ouid=0 name="/etc/passwd"
type=1503 audit(1311990708.358:17): operation="file_mmap" pid=1267 parent=1266
profile="/sbin/syslog-ng" requested_mask="m::" denied_mask="m::" fsuid=0 ouid=0 name="/etc/group"
..done
Initializing random number generator..done
Loading CPUFreq modules (CPUFreq not supported)
Starting HAL daemon..done
Setting up (localfs) network interfaces:
    lo
    lo        IP address: 127.0.0.1/8
              IP address: 127.0.0.2/8
    lo
..done    eth0        name: OSA2 Adapter (0.0.f200)
    eth0        IP address: 10.10.220.118/16
```

```
eth0
..done
Setting up service (localfs) network . . . . .done
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) network . . . . .done
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)
..done
Master Resource Control: runlevel 5 has been reached
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: