

Partitioning DASD for Linux Guests Running under z/VM, TIPS0277

Abstract

Before DASD may be used by Linux on zSeries, the DASD volume must first be partitioned and formatted by Linux. This tip describes the necessary commands to partition and format DASD.

Contents

Before a DASD volume may be accessed from Linux on zSeries, the volume must be formatted and partitioned by Linux. Use the dasdfmt command to format the DASD; use the fasd command to partition the DASD device.

In the following example, we first format DASD device /dev/dasda:

```
# dasdfmt -f /dev/dasda -b 4096 -p
Drive Geometry: 3338 Cylinders * 15 Heads = 50070 Tracks
I am going to format the device /dev/dasda in the following way:
Device number of device : 0x201
Labelling device : yes
Disk label : VOL1
Disk identifier : 0X0201
Extent start (trk no) : 0
Extent end (trk no) : 48419
Compatible Disk Layout : yes
Blocksize : 4096
--->> ATTENTION! <<----
All data of that device will be lost.
Type "yes" to continue, no will leave the disk untouched: yes
Formatting the device. This may take a while (get yourself a coffee).
Finished formatting the device.
Rereading the partition table... ok
```

The -f /dev/dasda parameter specifies that the /dev/dasda device is to be formatted. A block size of 4096 bytes is used when formatting with the -b 4096 parameter. The -p specifies that a progress bar is to be displayed.

Once formatted, the DASD device can be partitioned using the fasd command, as shown:

```
# fdasd -a /dev/dasda
auto-creating one partition for the whole disk...
writing volume label...
writing VTOC...
rereading partition table...
```

The causes the command to operate non-interactively; a single partition will be created for the entire device.

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