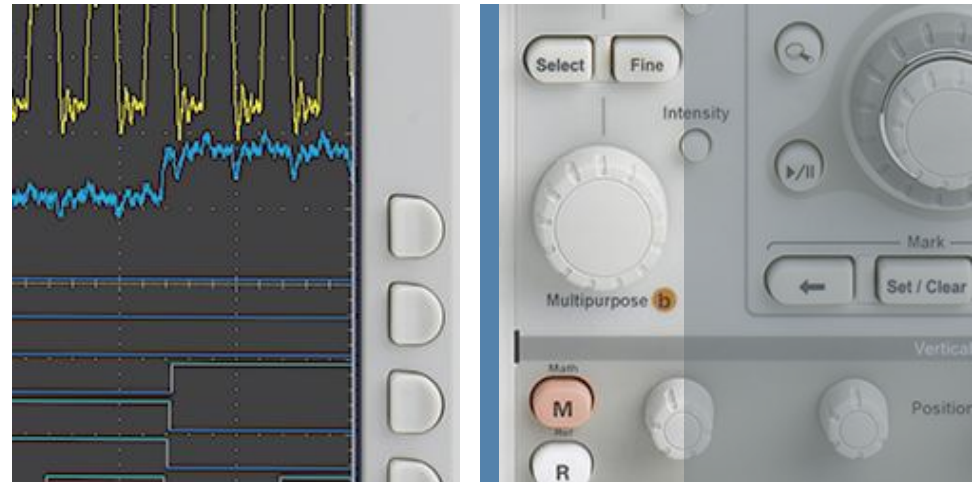


How to recover your VMFS partition



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Tektronix[®]

Signs of a bad day.

All or a portion of your VM's are missing

One or more of your VMFS volumes returns:

```
[root@tekitd01 vmhba2]# fdisk -lu /dev/sda
```

```
Disk /dev/sda: 322.1 GB, 322122547200 bytes
```

```
255 heads, 63 sectors/track, 39162 cylinders, total 629145600 sectors
```

```
Units = sectors of 1 * 512 = 512 bytes
```

```
Disk /dev/sda doesn't contain a valid partition table
```

- You can list your SAN devices with the following command:

```
[root@tekitd01 vmhba2]# esxcfg-vmhbadevs
```

```
vmhba0:0:0      /dev/cciss/c0d0
```

```
vmhba1:0:1      /dev/sda
```

```
vmhba1:0:2      /dev/sdb
```

```
vmhba1:4:2      /dev/sdc
```

- Normal output from fdisk:

```
[root@tekitd01 vmhba2]# fdisk -lu /dev/sdb
```

```
Disk /dev/sdb: 16.1 GB, 16106127360 bytes
```

```
255 heads, 63 sectors/track, 1958 cylinders, total 31457280 sectors
```

```
Units = sectors of 1 * 512 = 512 bytes
```

```
Device Boot Start End Blocks Id System
```

```
/dev/sdb1 128 31455269 15727571 fb Unknown
```

Recovery Steps

```
[root@tekitd01 vmhba2]# fdisk /dev/sda
```

Device contains neither a valid DOS partition table, nor Sun, SGI or OSF disklabel
Building a new DOS disklabel. Changes will remain in memory only,
until you decide to write them. After that, of course, the previous
content won't be recoverable.

The number of cylinders for this disk is set to 39162.

There is nothing wrong with that, but this is larger than 1024,
and could in certain setups cause problems with:

- 1) software that runs at boot time (e.g., old versions of LILO)
- 2) booting and partitioning software from other OSs
(e.g., DOS FDISK, OS/2 FDISK)

Warning: invalid flag 0x0000 of partition table 4 will be corrected by w(rite)

Command (m for help): **n ←add a new partition**

Recovery Steps - Continued

Command action

e extended

p primary partition (1-4)

p

Partition number (1-4): **1**

First cylinder (1-39162, default 1): **←Take default**

Using default value 1

Last cylinder or +size or +sizeM or +sizeK (1-39162, default 39162):**← Take default**

Using default value 39162

Command (m for help): **t← Change a partition's system id**

Selected partition 1

Hex code (type L to list codes): **fb← VMFS partiton id**

Changed system type of partition 1 to fb (Unknown)

Recovery Steps - Continued

Command (m for help): **x** ← **Extra functionality**

Expert command (m for help): **b** ← **Move beginning of data in a partition**

Partition number (1-4): 1

New beginning of data (63-629137529, default 63): **128** ← **The partition offset used for VMFS**

Expert command (m for help): **w** ← **Write table to disk and exit**

The partition table has been altered!

After doing this, go to:

Configuration -> Storage (SCSI, SAN and NFS) and hit refresh

- If all went well, the storage volume should reappear and the data should be accessible.