

IT Sysinfo : ESX Troubles FDISK

This page last changed on Jul 23, 2008 by [js.opdebeek](#).

Intro

Read this .ppt document ... really helpful.

- http://www.vmware-tsx.com/download.php?asset_id=50

Picture ...

I lost the DataStores on my iSCSI storage .
The VM Machines continue to run ... but VMFS was no more available .

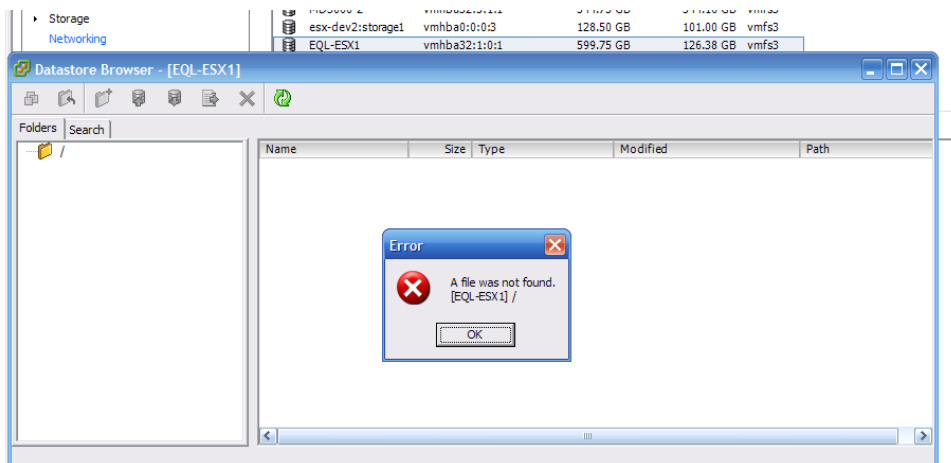
Architecture

ESX(s)	-	MD3000	LUN1	VMFS (MD3000-1)
			LUN2	VMFS (MD3000-2)
	-	EQL	LUN + Extent	VMFS

Errors (some of them)

```
[root@esx-6950-0308 root]# esxcfg-vmhbadevs -m
[2008-07-22 10:43:46 'StorageInfo' warning] Skipping dir: /vmfs/volumes/47431c96-40f78f84-4cd5-001aa0310b46. Cannot open
volume: /vmfs/volumes/47431c96-40f78f84-4cd5-001aa0310b46
vmhba32:2:1:1 /dev/sdd1 4866286a-b4fc7c40-e0d6-001517730158
vmhba32:2:0:1 /dev/sdcl 47b9a096-45e058bc-c9b3-001aa0310b48
[root@esx-6950-0308 root]#
```

```
root@esx-6950-0308:/vmfs/volumes
[root@esx-6950-0308 volumes]# ls -lsah
ls: 47431c96-40f78f84-4cd5-001aa0310b46: No such file or directory
total 16M
0 drwxr-xr-x 1 root root 512 Jul 22 10:11 .
0 drwxr-xr-x 1 root root 512 Jun 28 12:22 ..
8.0M drwxr-xr-t 1 root root 4.9K Jul 18 09:23 47b9a096-45e058bc-c9b3-001aa0310b48
8.0M drwxr-xr-t 1 root root 1.2K Jul 18 10:44 4866286a-b4fc7c40-e0d6-001517730158
0 lrwxr-xr-x 1 root root 35 Jul 22 10:11 EQL-ESX1 -> 47431c96-40f78f84-4cd5-001aa0310b46
0 lrwxr-xr-x 1 root root 35 Jul 22 10:11 MD3000-1 -> 47b9a096-45e058bc-c9b3-001aa0310b48
0 lrwxr-xr-x 1 root root 35 Jul 22 10:11 MD3000-2 -> 4866286a-b4fc7c40-e0d6-001517730158
[root@esx-6950-0308 volumes]#
```



```
Jul 18 16:28:01 esx-6950-0308 vmkernel: 20:04:11:28.084 cpu0:1035)FSS: 390: Failed with status Invalid handle for f530 28 2 47431c96 40f78f84 1a004cd5 460b31a0 4 1 0 0 0 0
Jul 18 16:28:25 esx-6950-0308 vmkernel: 20:04:11:52.418 cpu1:1036)LVM: 2375: Could not open device vml.0 2000000006090a0285004fe691674342e00001055313030452d30:1, vol [47431c7e-7024e0dc-fee7-001aa0310b46, 1]: Failure
Jul 18 16:28:25 esx-6950-0308 vmkernel: 20:04:11:52.419 cpu2:1036)FSS: 390: Failed with status Invalid handle for f530 28 1 47431c96 40f78f84 1a004cd5 460b31a0 0 0 0 0 0 0
Jul 18 16:28:25 esx-6950-0308 vmkernel: 20:04:11:52.419 cpu2:1036)WARNING: Fil3: 1779: Failed to reserve volume f530 28 1 47431c96 40f78f84 1a004cd5 460b31a0 0 0 0 0 0 0
```

```
Jul 22 14:00:20 esx-6950-0308 vmkernel: 24:01:43:54.169 cpu3:1072)StorageMonitor: 196: vmhba32:2:0:0 status = 2/0 0x7 0x27 0x0
Jul 22 14:00:20 esx-6950-0308 vmkernel: 24:01:43:54.169 cpu1:1039)WARNING: FS3: 4784: Reservation error: I/O error
```

Start

Check if you have the good connectivity to the storage

Ping it

```
vmkping 192.168.133.6
vmkping 192.168.133.120
```

```
telnet 192.168.133.6 3260
telnet 192.168.133.120 3260
```

Check if you see the storage definition and path.

```
[root@esx-it2 volumes]# esxcfg-mpath -l
Disk vmhba0:2:0 /dev/sdc (69376MB) has 1 paths and policy of Fixed
Local 2:14.0 vmhba0:2:0 On active preferred

Disk vmhba32:2:0 /dev/sde (1429284MB) has 4 paths and policy of Most Recently Used
iScsi sw iqn.1998-01.com.vmware:esx-it2-5412714e<-
>iqn.1984-05.com.dell:powervault.6001e4f0001b46c00000000047901811 vmhba32:2:0 On active preferred
iScsi sw iqn.1998-01.com.vmware:esx-it2-5412714e<-
>iqn.1984-05.com.dell:powervault.6001e4f0001b46c00000000047901811 vmhba32:3:0 On
iScsi sw iqn.1998-01.com.vmware:esx-it2-5412714e<-
>iqn.1984-05.com.dell:powervault.6001e4f0001b46c00000000047901811 vmhba32:4:0 Standby
iScsi sw iqn.1998-01.com.vmware:esx-it2-5412714e<-
>iqn.1984-05.com.dell:powervault.6001e4f0001b46c00000000047901811 vmhba32:5:0 Standby

Disk vmhba32:1:0 /dev/sdd (819210MB) has 1 paths and policy of Fixed
iScsi sw iqn.1998-01.com.vmware:esx-it2-5412714e<-
>iqn.2001-05.com.equallogic:0-8a0906-69fe04502-551000002e347416-esx1 vmhba32:1:0 On active preferred

Disk vmhba32:2:1 /dev/sdf (558008MB) has 4 paths and policy of Most Recently Used
iScsi sw iqn.1998-01.com.vmware:esx-it2-5412714e<-
>iqn.1984-05.com.dell:powervault.6001e4f0001b46c00000000047901811 vmhba32:2:1 On active preferred
iScsi sw iqn.1998-01.com.vmware:esx-it2-5412714e<-
>iqn.1984-05.com.dell:powervault.6001e4f0001b46c00000000047901811 vmhba32:3:1 On
iScsi sw iqn.1998-01.com.vmware:esx-it2-5412714e<-
>iqn.1984-05.com.dell:powervault.6001e4f0001b46c00000000047901811 vmhba32:4:1 Standby
iScsi sw iqn.1998-01.com.vmware:esx-it2-5412714e<-
>iqn.1984-05.com.dell:powervault.6001e4f0001b46c00000000047901811 vmhba32:5:1 Standby

Disk vmhba0:1:0 /dev/sdb (69376MB) has 1 paths and policy of Fixed
Local 2:14.0 vmhba0:1:0 On active preferred
```

```
Disk vmhba0:0:0 /dev/sda (69376MB) has 1 paths and policy of Fixed
Local 2:14.0 vmhba0:0:0 On active preferred
```

Here we can see 3 iscsi connection

- Multipath to MD3000i LUN
- Direct access to EQUALLOGIC LUN
- Multipath to MD3000i LUN

Original and BAD partition table

```
[root@esx-it2 root]# fdisk -l

Disk /dev/sda: 72.7 GB, 72746008576 bytes
255 heads, 63 sectors/track, 8844 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

   Device Boot      Start         End      Blocks   Id  System
/dev/sda1    *           1           13     104391   83  Linux
/dev/sda2                14           650     5116702+  83  Linux
/dev/sda4          8509         8844     2698920    f  Win95 Ext'd (LBA)
/dev/sda5          8509         8577     554211   82  Linux swap
/dev/sda6          8578         8831     2040223+  83  Linux
/dev/sda7          8832         8844     104391   fc  Unknown

Disk /dev/sdb: 72.7 GB, 72746008576 bytes
255 heads, 63 sectors/track, 8844 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

   Device Boot      Start         End      Blocks   Id  System

Disk /dev/sdc: 72.7 GB, 72746008576 bytes
255 heads, 63 sectors/track, 8844 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

   Device Boot      Start         End      Blocks   Id  System

Disk /dev/sdd: 859.0 GB, 859003944960 bytes
255 heads, 63 sectors/track, 104434 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

   Device Boot      Start         End      Blocks   Id  System

Disk /dev/sde: 1498.7 GB, 1498712899584 bytes
255 heads, 63 sectors/track, 182208 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

   Device Boot      Start         End      Blocks   Id  System

Disk /dev/sdf: 585.1 GB, 585113796608 bytes
255 heads, 63 sectors/track, 71136 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes

   Device Boot      Start         End      Blocks   Id  System
/dev/sdf1                1         71137     571400128   fb  Unknown
```

Check if you have all your disks

```
[root@esx-it2 tmp]# ls -li /vmfs/volumes/
total 16384
  268 drwxr-xr-t   1 root   root           5040 Jul 18 09:23 47b9a096-45e058bc-c9b3-001aa0310b48
  272 drwxr-xr-t   1 root   root           1400 Jul 22 17:01 4866286a-b4fc7c40-e0d6-001517730158
  350 lrwxr-xr-x   1 root   root              35 Jul 22 18:12 MD3000-1 -> 47b9a096-45e058bc-
c9b3-001aa0310b48
  351 lrwxr-xr-x   1 root   root              35 Jul 22 18:12 MD3000-2 -> 4866286a-b4fc7c40-
e0d6-001517730158
```

One is missing, the Equallogic

Discover the VMFS

```
vmkfstools -V
```

See the relationship between vmhba and devnames

```
[root@esx-it2 tmp]# esxcfg-vmhbadevs -m
vmhba32:2:0:1    /dev/sde1          47b9a096-45e058bc-c9b3-001aa0310b48
vmhba32:2:1:1    /dev/sdf1          4866286a-b4fc7c40-e0d6-001517730158
```

One is missing - sdd.

As you can see , sdd is present but doesn't have a normal 'structure'

```
Device Boot      Start          End      Blocks   Id  System
/dev/sdd1                128 1677732209  838866041   fb  Unknown
```

Into /var/log/vmkernel , there is a information that explain the blocks are not well.

```
Jul 22 19:33:30 esx-it2 vmkernel: 0:08:09:20.209 cpu3:1037)WARNING: LVM: 1625:
[vm1.02000300006001e4f0001b65000000189d48858da64d4433303030:1] Device size mismatch (actual
1142800256 blocks, stored 1142799712 blocks)
```

The full FDISK output ...

```
[root@esx-it2 tmp]# fdisk -lu

Disk /dev/sda: 72.7 GB, 72746008576 bytes
255 heads, 63 sectors/track, 8844 cylinders, total 142082048 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start         End      Blocks   Id  System
/dev/sda1  *            63      208844      104391   83  Linux
/dev/sda2                208845  10442249   5116702+   83  Linux
```

```

/dev/sda4    136681020 142078859 2698920    f  Win95 Ext'd (LBA)
/dev/sda5    136681083 137789504  554211    82  Linux swap
/dev/sda6    137789568 141870014 2040223+  83  Linux
/dev/sda7    141870078 142078859  104391    fc  Unknown

Disk /dev/sdb: 72.7 GB, 72746008576 bytes
255 heads, 63 sectors/track, 8844 cylinders, total 142082048 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start          End      Blocks   Id  System

```

```

Disk /dev/sdc: 72.7 GB, 72746008576 bytes
255 heads, 63 sectors/track, 8844 cylinders, total 142082048 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start          End      Blocks   Id  System

```

```

Disk /dev/sdd: 859.0 GB, 859003944960 bytes
255 heads, 63 sectors/track, 104434 cylinders, total 1677742080 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start          End      Blocks   Id  System
/dev/sdd1             128 1677732209 838866041    fb  Unknown

```

```

Disk /dev/sde: 1498.7 GB, 1498712899584 bytes
255 heads, 63 sectors/track, 182208 cylinders, total 2927173632 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start          End      Blocks   Id  System
/dev/sde1             128 -1367795777 1463585696    fb  Unknown

```

```

Disk /dev/sdf: 585.1 GB, 585113796608 bytes
255 heads, 63 sectors/track, 71136 cylinders, total 1142800384 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start          End      Blocks   Id  System
/dev/sdf1             128 1142799839 571399856    fb  Unknown

```

```

Disk /dev/sdg: 1498.7 GB, 1498712899584 bytes
255 heads, 63 sectors/track, 182208 cylinders, total 2927173632 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start          End      Blocks   Id  System

```

```

Disk /dev/sdh: 585.1 GB, 585113796608 bytes
255 heads, 63 sectors/track, 71136 cylinders, total 1142800384 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start          End      Blocks   Id  System
/dev/sdh1             128 1142800383 571400128    fb  Unknown

```

Restore the correct partition table

Here is a sample to rebuild a (simple) partition table (Related to MD3000i, simple volume).

I didn't save the output for an Extended LUN ... coming soon.

Delete it

```
[root@esx-it2 tmp]# fdisk /dev/sdf
```

```
The number of cylinders for this disk is set to 71136.
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)
```

```
Command (m for help): p
```

```
Disk /dev/sdf: 585.1 GB, 585113796608 bytes
255 heads, 63 sectors/track, 71136 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
```

Device	Boot	Start	End	Blocks	Id	System
/dev/sdf1		1	71137	571400128	fb	Unknown

```
Command (m for help): d
```

```
Selected partition 1
```

```
Command (m for help): w
```

```
The partition table has been altered!
```

```
Calling ioctl() to re-read partition table.
```

```
Syncing disks.
```

(Re)Create it

```
[root@esx-it2 tmp]# fdisk /dev/sdf
```

```
The number of cylinders for this disk is set to 71136.
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)
```

```
Command (m for help): n
```

```
Command action
```

```
  e   extended
```

```
  p   primary partition (1-4)
```

```
p
```

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

```
First cylinder (1-71136, default 1):
```

```
Using default value 1
```

```
Last cylinder or +size or +sizeM or +sizeK (1-71136, default 71136):
```

```
Using default value 71136
```

```
Command (m for help): t
```

```
Selected partition 1
```

```
Hex code (type L to list codes): fb
```

```
Changed system type of partition 1 to fb (Unknown)
```

```
Command (m for help): p
```

```
Disk /dev/sdf: 585.1 GB, 585113796608 bytes
255 heads, 63 sectors/track, 71136 cylinders
Units = cylinders of 16065 * 512 = 8225280 bytes
```

Device	Boot	Start	End	Blocks	Id	System
/dev/sdf1		1	71136	571399888+	fb	Unknown

```

Command (m for help): x

Expert command (m for help): b
Partition number (1-4): 1
New beginning of data (63-1142799839, default 63): 128

Expert command (m for help): w
The partition table has been altered!

Calling ioctl() to re-read partition table.
Syncing disks.

```

End

Force a rescan of the remote storage

```

[root@esx-it2 tmp]# esxcfg-rescan vmhba32
Doing iSCSI discovery. This can take a few seconds ...
Rescanning vmhba32...done.
On scsi2, removing: 1:0 2:0 2:1 2:2 2:3.
On scsi2, adding: 1:0 2:0 2:1 2:2 2:3.

```

Here is the correct partition table.

Note the /dev/sdd , it's a LUN with its extend , so you need to know what is exactly the size of each volume and extends.

```

[root@esx-it2 root]# fdisk -lu

Disk /dev/sda: 72.7 GB, 72746008576 bytes
255 heads, 63 sectors/track, 8844 cylinders, total 142082048 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start         End      Blocks   Id  System
/dev/sda1    *           63      208844     104391   83  Linux
/dev/sda2                208845  10442249     5116702+   83  Linux
/dev/sda4    136681020  142078859     2698920    f  Win95 Ext'd (LBA)
/dev/sda5    136681083  137789504     554211    82  Linux swap
/dev/sda6    137789568  141870014     2040223+   83  Linux
/dev/sda7    141870078  142078859     104391    fc  Unknown

Disk /dev/sdb: 72.7 GB, 72746008576 bytes
255 heads, 63 sectors/track, 8844 cylinders, total 142082048 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start         End      Blocks   Id  System

Disk /dev/sdc: 72.7 GB, 72746008576 bytes
255 heads, 63 sectors/track, 8844 cylinders, total 142082048 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start         End      Blocks   Id  System

Disk /dev/sdd: 859.0 GB, 859003944960 bytes
255 heads, 63 sectors/track, 104434 cylinders, total 1677742080 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start         End      Blocks   Id  System

```

```

/dev/sdd1      128 1258291124 629145498+ fb Unknown
/dev/sdd2      1258291125 1677742079 209725477+ fb Unknown

Disk /dev/sde: 1498.7 GB, 1498712899584 bytes
255 heads, 63 sectors/track, 182208 cylinders, total 2927173632 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start         End      Blocks   Id  System
/dev/sde1          128 -1367795777 1463585696    fb  Unknown

Disk /dev/sdf: 585.1 GB, 585113796608 bytes
255 heads, 63 sectors/track, 71136 cylinders, total 1142800384 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start         End      Blocks   Id  System
/dev/sdf1          128 1142799839 571399856    fb  Unknown

Disk /dev/sdg: 1498.7 GB, 1498712899584 bytes
255 heads, 63 sectors/track, 182208 cylinders, total 2927173632 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start         End      Blocks   Id  System

Disk /dev/sdh: 585.1 GB, 585113796608 bytes
255 heads, 63 sectors/track, 71136 cylinders, total 1142800384 sectors
Units = sectors of 1 * 512 = 512 bytes

   Device Boot      Start         End      Blocks   Id  System
/dev/sdh1          128 1142800383 571400128    fb  Unknown

```

Then

```
vmkfstools -V
```

Bingo !

```




[root@esx-it2 root]# esxcfg-vmhbadevs -m
vmhba32:2:0:1    /dev/sde1          47b9a096-45e058bc-c9b3-001aa0310b48
vmhba32:1:0:1    /dev/sdd1          47431c96-40f78f84-4cd5-001aa0310b46
vmhba32:2:1:1    /dev/sdf1          4866286a-b4fc7c40-e0d6-001517730158

```

```

[root@esx-it2 tmp]# ls -lsah /vmfs/volumes/
total 17M
  0 drwxr-xr-x   1 root    root          512 Jul 23 09:35 .
  0 drwxrwxrwt   1 root    root          512 Jul 22 11:24 ..
1.0M drwxrwxrwt   1 root    root         3.1K Jul 22 09:29 47431c96-40f78f84-4cd5-001aa0310b46
8.0M drwxr-xr-t   1 root    root         4.9K Jul 18 09:23 47b9a096-45e058bc-c9b3-001aa0310b48
8.0M drwxr-xr-t   1 root    root         1.2K Jul 22 19:41 4866286a-b4fc7c40-e0d6-001517730158
  0 lrwxr-xr-x   1 root    root           35 Jul 23 09:35 EQL-ESX1 ->
47431c96-40f78f84-4cd5-001aa0310b46
  0 lrwxr-xr-x   1 root    root           35 Jul 23 09:35 MD3000-1 -> 47b9a096-45e058bc-
c9b3-001aa0310b48
  0 lrwxr-xr-x   1 root    root           35 Jul 23 09:35 MD3000-2 -> 4866286a-b4fc7c40-
e0d6-001517730158

```


Datastore	Capacity	Free
 EQL-ESX1	599.75 GB	92.06 GB
 MD3000-1	1.36 TB	468.56 GB
 MD3000-2	544.75 GB	332.16 GB

More commands

OD

The whole idea of running this command: "od -t x -N 33000000 /dev/sdd | grep 2fabf15e" is to look for the magic number "2fabf15e" in the first 33Mb of the partition, the magic number is some sort of signature for the VMFS3 file systems, if it present then there's a chance of recovering the datastore, if not then for sure the data is missing.

```
[root@esx-it2 volumes]# od -t x -N 33000000 /dev/sdd | grep 2fabf15e
114200000 2fabf15e 00000004 431c9615 f78f8447
[root@esx-it2 volumes]# od -t x -N 33000000 /dev/sde | grep 2fabf15e
114200000 2fabf15e 00000004 b9a0961f e058bc47
[root@esx-it2 volumes]# od -t x -N 33000000 /dev/sdf | grep 2fabf15e
114200000 2fabf15e 00000004 66286a1f fc7c4048
```

Dump the LUN to know if there is data into it.

If your LUN has been formatted ... no way ... check before going farther.

Dump Device /DEV/SDE to a file , use only the 300Mb

```
dd if=/dev/sde of=/tmp/sde.dump bs=1M count=300
```

Check the content :

```
hexdump -C sdd.dump |more
```

Sample output ... got header and some data ...

```
[root@esx-it2 tmp]# hexdump -C sdd.dump |more
00000000 fa b8 00 10 8e d0 bc 00 b0 b8 00 00 8e d8 8e c0 |.....|
00000010 fb be 00 7c bf 00 06 b9 00 02 f3 a4 ea 21 06 00 |...|.....!..|
00000020 00 be be 07 38 04 75 0b 83 c6 10 81 fe fe 07 75 |...8.u.....u|
00000030 f3 eb 16 b4 02 b0 01 bb 00 7c b2 80 8a 74 01 8b |.....|...t..|
00000040 4c 02 cd 13 ea 00 7c 00 00 eb fe 00 00 00 00 00 |L....|.....|
00000050 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 |.....|
*
000001f0 00 00 00 00 00 00 00 00 00 00 00 00 00 55 aa |.....U..|
00000200 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 |.....|
*
00110000 0d d0 01 c0 03 00 00 00 10 00 00 00 02 16 00 00 |.....|
00110010 00 06 45 51 4c 4f 47 49 43 20 31 30 30 45 2d 30 |..EQLOGIC 100E-0|
00110020 30 20 20 20 20 20 20 20 20 20 33 2e 32 20 60 90 |0          3.2 `.|
00110030 a0 28 50 04 fe 69 16 74 34 2e 00 00 10 55 31 30 |.(P..i.t4....U10|
00110040 30 45 2d 30 00 00 00 00 00 00 00 00 00 00 00 |0E-0.....|
```

```
00110050 00 00 00 00 00 00 00 00 00 00 00 02 00 00 00 6a |.....j|
00110060 fe ff 95 00 00 00 01 00 00 00 5f 09 00 00 5e 09 |....._...^|
00110070 00 00 61 09 00 00 00 00 00 00 00 00 10 01 00 00 |..a.....|
00110080 00 00 89 1c 43 47 00 40 f2 35 8d 2e 00 1a a0 31 |....CG.@.5....1|
00110090 0b 46 b3 67 2b ca 5f 3f 04 00 3f 02 58 ca 5f 3f |.F.g+._?...?..X._?|
001100a0 04 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 |.....|
001100b0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 |.....|
```