

1 Recuperar Particións

1.1 Recuperar Particións

É posible que por distintas causas se perda a información da táboa de particións dun disco duro. Pero non todo está perdido, a información posiblemente poida ser recuperada.

Neste caso vaise simular un exemplo no que se perdeu a información da táboa de particións dun disco. Para iso, borrarase a partición dun disco e posteriormente mostrarase como recuperala.

Para ver a táboa de particións dun disco duro pode utilizarse calquera programa de particionamento, como por exemplo **parted** e **ranish partition manager**:

- Táboa de particións vista dende o programa de particionamento **Parted**.

```
root@sysresccd /root % parted /dev/sda
GNU Parted 1.8.8
Using /dev/sda
Welcome to GNU Parted! Type 'help' to view a list of commands.
(parted) print
Model: ATA VBOX HARDDISK (scsi)
Disk /dev/sda: 12.9GB
Sector size (logical/physical): 512B/512B
Partition Table: msdos

Number  Start   End     Size    Type    File system  Flags
  1      32.3kB  12.9GB  12.9GB  primary ntfs         boot

(parted) zsh: quit          parted /dev/sda
root@sysresccd /root % _
```

- Táboa de particións vista dende o programa de particionamento **Ranish Partition Manager**:

```

Ranish Partition Manager          Version 2.44 (beta) by Muthu   June 09, 2002
-----
Hard Disk 1  12,288 Mbytes [ 1,566 cylinders x 255 heads x 63 sectors ]
Using LBA

#  Type Row   File System Type      Starting      Ending      Partition
#  Type Row   System Type           Cyl Head Sect  Cyl Head Sect  Size [KB]

0  MBR      Master Boot Record      0   0   1   0   0   1   0
1  Pri      Unused                  0   0   2   0   0   63  31
2  *Pri 1  Windows NT NTFS        0   1   1  1,565 254 63 12,578,863
3  Pri      Unused                 1,566 0   1  1,566 127 33  4,017
4          Unused                  0   0   0   0   0   0   0
5          Unused                  0   0   0   0   0   0   0
6          Unused                  0   0   0   0   0   0   0
7          Unused                  0   0   0   0   0   0   0

      B - Boot flag on/off      INS - select file system      DEL - clear record

- MBR
# Partition  Size
1*NTFS      12,284
2 Unused    0
3 Unused    0
4 Unused    0

This is unsupported file system.
No additional details are available.

- F1 Help - F2 Save = F3 Undo = F4 Mode = F5 Disk - ESC Quit -

```

Segundo traballando co Ranish Partition Manager, selecciónase a partición existente e púlsase a tecla **Supr (Del)**.

```

Ranish Partition Manager          Version 2.44 (beta) by Muthu   June 09, 2002
-----
Hard Disk 1  12,288 Mbytes [ 1,566 cylinders x 255 heads x 63 sectors ]
Using LBA

#  Type Row   File System Type      Starting      Ending      Partition
#  Type Row   System Type           Cyl Head Sect  Cyl Head Sect  Size [KB]

0  MBR      Master Boot Record      0   0   1   0   0   1   0
1  Pri      Unused                  0   0   2  1,566 127 33 12,582,911
2          Unused                  0   0   0   0   0   0   0
3          Unused                  0   0   0   0   0   0   0
4          Unused                  0   0   0   0   0   0   0
5          Unused                  0   0   0   0   0   0   0
6          Unused                  0   0   0   0   0   0   0
7          Unused                  0   0   0   0   0   0   0

      ENTER - Start wizard      INS - select file system      DEL - clear record

- MBR
# Partition  Size
1 Unused    0
2 Unused    0
3 Unused    0
4 Unused    0

Press ENTER to start Partitioning Wizard,
which will guide you through the creation
of new partitions.

- F1 Help - F2 Save = F3 Undo = F4 Mode = F5 Disk - ESC Quit -

```

A continuación hai que pulsar a tecla **F2 (Save)** para gardar os cambios no MBR e pulsar a tecla **Esc** para saír do programa.

```

Ranish Partition Manager          Version 2.44 (beta) by Muthu   June 09, 2002
-----
Hard Disk 1  12,288 Mbytes [ 1,566 cylinders x 255 heads x 63 sectors ]
Using LBA

#  Type Row      File System Type      Starting      Ending      Partition
Cyl Head Sect    Cyl Head Sect    Size [KB]

0  MBR  Master Boot Record    0    0    1    0    0    1    0
1  Pri  Unused                0    0    2  1,566  127  33  12,582,911
2                Unused                0    0    0    0    0    0    0
3                Unused                0    0    0    0    0    0    0
4                Unused                0    0    0    0    0    0    0
5                Unused                0    0    0    0    0    0    0
6                Unused                0    0    0    0    0    0    0
7                Unused                0    0    0    0    0    0    0

Partition table was saved to hard disk.

MBR
# Partition  Size
1 Unused    0
2 Unused    0
3 Unused    0
4 Unused    0

Press ENTER to start Partitioning Wizard,
which will guide you through the creation
of new partitions.

F1 Help  F2 Save = F3 Undo = F4 Mode = F5 Disk  ESC Quit

```

Unha vez eliminada a partición, mostraranse a continuación os pasos necesarios para recuperar unha partición borrada.

1.1.1 Recuperar unha partición utilizando testdisk

Neste caso, para recuperar a partición utilizarase o programa **testdisk**.

Unha vez iniciado este programa, seleccionárase a opción **Create** para gardar un arquivo de rexistro:

```
TestDisk 6.10, Data Recovery Utility, July 2008
Christophe GRENIER <grenier@cgsecurity.org>
http://www.cgsecurity.org
```

TestDisk is a free data recovery software designed to help recover lost partitions and/or make non-booting disks bootable again when these symptoms are caused by faulty software, certain types of viruses or human error. It can also be used to repair some filesystem errors.

Information gathered during TestDisk use can be recorded for later review. If you choose to create the text file, **testdisk.log**, it will contain TestDisk options, technical information and various outputs; including any folder/file names TestDisk was used to find and list onscreen.

Use arrow keys to select, then press Enter key:

```
[ Create ] Create a new log file
[ Append ] Append information to log file
[ No Log ] Don't record anything
```

A continuación hai que seleccionar o disco duro co cal se quere traballar. Neste caso só hai un. Pulsar na opción **Proceed** para poder traballar co disco duro elixido.

```
TestDisk 6.10, Data Recovery Utility, July 2008
Christophe GRENIER <grenier@cgsecurity.org>
http://www.cgsecurity.org
```

TestDisk is free software, and
comes with ABSOLUTELY NO WARRANTY.

Select a media (use Arrow keys, then press Enter):

```
Disk 80 - 12 GB / 12 GiB
```

```
[Proceed ] [ Quit ]
```

Note: Disk capacity must be correctly detected for a successful recovery. If a disk listed above has incorrect size, check HD jumper settings, BIOS detection, and install the latest OS patches and disk drivers.

Elixir o tipo de táboa de particións coa que se quere traballar para intentar recuperar particións. Usualmente soe ser a primeira opción: **Intel**.

```
TestDisk 6.10, Data Recovery Utility, July 2008
Christophe GRENIER <grenier@cgsecurity.org>
http://www.cgsecurity.org
```

```
Disk 80 - 12 GB / 12 GiB
```

```
Please select the partition table type, press Enter when done.
```

```
[Intel  ] Intel/PC partition
[EFI GPT] EFI GPT partition map (Mac i386, some x86_64...)
[Mac    ] Apple partition map
[None   ] Non partitioned media
[Sun    ] Sun Solaris partition
[XBox   ] XBox partition
[Return ] Return to disk selection
```

```
Note: Do NOT select 'None' for media with only a single partition. It's very
rare for a drive to be 'Non-partitioned'.
```

Agora hai que seleccionar **Analyse** para comezar a análise da estrutura das particións presentes e a procura de particións perdidas existentes:

```
TestDisk 6.10, Data Recovery Utility, July 2008
Christophe GRENIER <grenier@cgsecurity.org>
http://www.cgsecurity.org
```

```
Disk 80 - 12 GB / 12 GiB - CHS 1566 255 63
```

```
[Analyse ] Analyse current partition structure and search for lost partitions
[Advanced] Filesystem Utils
[Geometry] Change disk geometry
[Options ] Modify options
[MBR Code] Write TestDisk MBR code to first sector
[Delete  ] Delete all data in the partition table
[Quit    ] Return to disk selection
```

```
Note: Correct disk geometry is required for a successful recovery. 'Analyse'
process may give some warnings if it thinks the logical geometry is mismatched.
```

En principio non hai ningunha partición na táboa de particións, co cal hai que pulsar en **Quick Search** para facer unha análise non profunda de procura de particións na táboa de particións.

```
TestDisk 6.10, Data Recovery Utility, July 2008
Christophe GRENIER <grenier@cgsecurity.org>
http://www.cgsecurity.org
```

```
Disk 80 - 12 GB / 12 GiB - CHS 1566 255 63
```

```
Current partition structure:
```

Partition	Start	End	Size in sectors
-----------	-------	-----	-----------------

```
No partition is bootable
```

```
*=Primary bootable P=Primary L=Logical E=Extended D=Deleted
```

```
[Quick Search]
```

```
Try to locate partition
```

Ante a cuestión de se se queren procurar particións creadas baixo Vista responder que Si, co cal hai que pulsar a tecla **Y**

```
TestDisk 6.10, Data Recovery Utility, July 2008
Christophe GRENIER <grenier@cgsecurity.org>
http://www.cgsecurity.org
```

```
Should TestDisk search for partition created under Vista ? [Y/N] (answer Yes if
unsure)_
```

Na análise, Quick Search atopa unha partición -e como se pode comprobar, vén sendo a partición que previamente se borrou con Ranish Partition Manager-, co cal hai que pulsar en **Enter** para continuar:

```
TestDisk 6.10, Data Recovery Utility, July 2008
Christophe GRENIER <grenier@cgsecurity.org>
http://www.cgsecurity.org
```

```
Disk 80 - 12 GB / 12 GiB - CHS 1567 255 63
```

Partition	Start	End	Size in sectors
* HPFS - NTFS	0 1 1 1565	254 63	25157727

```
Structure: Ok. Use Up/Down Arrow keys to select partition.
Use Left/Right Arrow keys to CHANGE partition characteristics:
*=Primary bootable P=Primary L=Logical E=Extended D=Deleted
Keys A: add partition, L: load backup, T: change type, P: list files,
Enter: to continue
NTFS, 12 GB / 11 GiB
```

Seleccionar **Write** para guardar no disco duro a estrutura da táboa de particións atopada:

```
TestDisk 6.10, Data Recovery Utility, July 2008
Christophe GRENIER <grenier@cgsecurity.org>
http://www.cgsecurity.org
```

```
Disk 80 - 12 GB / 12 GiB - CHS 1567 255 63
```

Partition	Start	End	Size in sectors
1 * HPFS - NTFS	0 1 1 1565	254 63	25157727

```
[ Quit ] [Deeper Search] [ Write ]
Write partition structure to disk
```

Confirmar que se quere escribir no disco duro pulsando a tecla **Y**

```
TestDisk 6.10, Data Recovery Utility, July 2008  
Christophe GRENIER <grenier@cgsecurity.org>  
http://www.cgsecurity.org
```

```
Write partition table, confirm ? (Y/N)_
```

Sae un aviso dicindo que debemos reiniciar para que os cambios efectuados teñan efecto. Ler o aviso e pulsar **Enter** para continuar:

```
TestDisk 6.10, Data Recovery Utility, July 2008  
Christophe GRENIER <grenier@cgsecurity.org>  
http://www.cgsecurity.org
```

```
You will have to reboot for the change to take effect.
```

```
[Ok]
```

Seleccionar **Quit** para saír do Testdisk e **reiniciar** para que teñan lugar os cambios realizados:

```
TestDisk 6.10, Data Recovery Utility, July 2008
Christophe GRENIER <grenier@cgsecurity.org>
http://www.cgsecurity.org
```

```
Disk 80 - 12 GB / 12 GiB - CHS 1567 255 63
```

```
[ Analyse  ] Analyse current partition structure and search for lost partitions
[ Advanced ] Filesystem Utils
[ Geometry ] Change disk geometry
[ Options  ] Modify options
[ MBR Code ] Write TestDisk MBR code to first sector
[ Delete   ] Delete all data in the partition table
[ Quit     ] Return to disk selection
```

```
Note: Correct disk geometry is required for a successful recovery. 'Analyse'
process may give some warnings if it thinks the logical geometry is mismatched.
```

Unha vez feitos todos estes pasos, a partición previamente borrada foi recuperada. Pódese comprobar voltando a facer os primeiros pasos deste apartado (ver a táboa de particionamento con diversos programas de particionamento).

--ricardofc 14 nov 2008