BootRest

Backup MBR mediante o programa BootSave/BootRest

Neste apartado empregaremos o programa BootSave/BootRest (Ver manual de uso) pola súa simplecidade e facilidade na copia. O procedemento é o seguinte:

- 1. Imos partir dun disco duro particionado do seguinte xeito:
 - · 8 particións.
 - · As particións 1, 2 e 3 -como indican os seus números- a priori son primarias xa que pode existir 1 estendida.
 - · A partición 3 será estendida.
 - \cdot As particións 5, 6, 7, 8 e 9 -como indican os seus números- son lóxicas.

🐠 Norton PartitionMag	jic Pro Server 8.05					×
<u>G</u> eneral <u>D</u> isks <u>P</u> artition	s <u>O</u> perations <u>H</u> elp					
Disk 1 - 2047 MB	- + c ×	(1) (1)		n 9 o	0	
		V []				
					C:	
Partition	Tupe	Size MB	Lised MB	Upused MB	Status	Pri / og
+ arddorr ++:	NTES	200.8	25	198.3	Active	Primary
*:	NTFS	252.0	2.8	249.2	None	Primary
*:	Extended	1,594.7	1,594.7	0.0	None	Primary
*:	Linux Ext3	200.8	22.4	178.4	None	Logical
*:	Linux Ext3	401.6	28.7	372.9	None	Logical
*:SWAP-SPACE	Linux Swap	102.3	0.0	102.3	None	Logical
*:	Linux Ext3	303.2	25.6	277.6	None	Logical
C:	FAT32	586.7	9.0	577.6	None	Logical
				6l	1	F -4
				Apply		Exit
				0	operation	s pending

2. Lanzamos un Live-CD co programa BootSave/BootRest identificado no mesmo como MBR Save & Restore, como podemos apreciar na seguinte imaxe,



Choose an option : 1
BootSave 2.1

Saves contents of hard disk master boot sector to a file on disk or floppy. copyright (c) 1991-2003 Roedy Green, Canadian Mind Products. #327 - 964 Heywood Avenue, Victoria, BC Canada V8V 2Y5 Telephone:(250) 361-9093 mailto:roedy@mindprod.com http://mindprod.com Shareware to freely distribute and use for any purpose except military.

Hard disk master boot sector successfully saved. Press any key to continue . . .

4. Prememos calquera tecla para continuar e saimos do programa. A continuación podemos comprobar como o arquivo está gardado en C:\

C:N>dir Volume in drive C has no label Volume Serial Number is DB40-6E39 Directory of C:N boot sav 516 11-08-08 11:46 1 file(s) 516 bytes 0 dir(s) 605,670,400 bytes free

5. Podemos facer outra copia do arquivo c:\boot.sav nunha unidade disqueteira, existente na computadora, da cal facemos o backup do MBR. O live-cd atopa a unidade A: existente na computadora como b:, co cal procedemos a facer a copia como na seguinte imaxe:

С:\>сору	boot.sav b:\ 1 file(s) copi	ed					
C:\>dir	b:						
Volume Volume Directo	in drive B has Serial Number ry of B:\	no lal is 2204	be 1 4-07D2				
boot	sav 1 file(s) 0 dir(s)	516 : 1,450	11-08-08 516 byt 6,640 byt	11:46 es es free			

Así como fixemos a copia en b:, teremos a posibilidade de facer máis copias noutras unidades ou dispositivos usb.

6. Agora imos comprobar que podemos restaurar a copia do MBR creada no caso de perda do mesmo ou de perda de información na táboa de particións . Para isto procedemos a borrar a táboa de particións mediante o Ranish Partition Manager e a gardar o novo MBR sen ningunha partición existente no disco duro previamente particionado,

Ranish Partition Manager	Versio	n 2.4	14 (be	ta) by	Muthu	ı Jun	e 09, 2002
Hard Disk 1 2,047 Mbytes [Using LBA	520 c	ylind	lers	x 128 1	heads	x 63	sectors 1
File	S	tarti	na]	Endino	r	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	50	127	63	205,600
3 Pri 2 Windows NT NTFS	51	0	1	114	127	63	258,048
4 Pri 3 Extended	115	0	1	519	127	63	1,632,960
5 - Log Linux ext2fs	115	1	1	165	127	63	205,600
6 Ext Extended	166	0	1	267	127	63	411,264
7 - Log Linux ext2fs	166	1	1	267	127	63	411,232
ENTER - Edit options S	- Save	MBR	to fi	le L	– Loa	d MBR	from file
# Partition Size MBR Executab 1*NTFS 200 Boot interfa	le code ce type	: Unk : Cor	mown ipact	IPL			
2 NTFS 252 Check for vi	ruses:	Yes	\$				
3 Extended 1,594 Boot prompt	timeout	: 6					
4 Unused 0 Default boot	choice	: Not	: set				
F1 Help F2 Save = F	3 Undo 🗉	= F4	Mode	= F5 D	isk —		ESC Quit —

Ranish Pa	rtition Mana	ager	Version	2.44	(bet	a) by I	Muthu	Jun	e 09, 2002
Hard Dis Using LBf	1 2,047	Mbytes [520 cy	linde	ers x	128 h	eads	x 63	sectors 1
	File		St	artir	na	E	nd i na		Partition
# Type Ro	w System	Гуре	Cyl H	lead S	Sect	Cyl	Head	Sect	Size [KB]
0 MBR	Master Boot	Record	0	0	1	0	0	1	
1 Pri	Unused		0	0	2	520	15	63	2,097,14
2	Unused		0	0	0	0	0	0	
3	Unused		0	0	0	0	0	0	
4	Unused		0	0	0	0	0	0	
5	Unused		0	0	0	0	0	0	
6	Unused		0	0	0	0	0	0	
7	Unused		0	0	0	0	0	0	
Part MBR — Partition	ition table	was saved	to hard	disk	¢.				
Unused	0	Press	ENTER t	o sta	rt Pa	rtitio	ning	Wizar	d,
Unused	0	which	will gu	ide u	jou th	rough	thec	reati	on
Unused	0	of ne	w partit	ions.					
Unused	0								

así saimos a un terminal de MS-DOS onde é posible restaurar o MBR.

Agora o que facemos é restaurar dende a disqueteira recoñecida polo live-cd como b: como amosa a seguinte imaxe:

C:N>dir b: Volume in drive B has no label Volume Serial Number is 2204-07D2 Directory of B:N boot sav 516 11-08-08 11:46 1 file(s) 516 bytes 0 dir(s) 1,456,640 bytes free

8. Executamos o seguinte comando: **bootrest b:\boot.sav** para restablecer a copia que tiñamos feita anteriormente dende c: e xa temos restaurado o MBR.

C:N>bootrest b:Nboot.sav BootRest 2.1

Restores hard disk master boot sector from a BootSave file on disk or floppy. copyright (c) 1991-2003 Roedy Green, Canadian Mind Products. #327 - 964 Heywood Avenue, Victoria, BC Canada V8V 2Y5 Telephone:(250) 361-9093 mailto:roedy@mindprod.com http://mindprod.com Shareware to freely distribute and use for any purpose except military. Hard disk master boot sector successfully restored

Hard disk master boot sector successfully restored Press any key to continue . . . Pulsamos calquera tecla para continuar e saímos.

xa temos restaurada a copia do MBR Comprobamos que temos ben o MBF	R con calquera progran	na de particior	namento.				
3 Norton PartitionMagic Pr	ro Server 8.05	•	,				×
<u>G</u> eneral <u>D</u> isks <u>P</u> artitions <u>D</u>	perations <u>H</u> elp						
		N []			~		
Disk 1 - 2047 MB	+ c ×	0.11		יפוע	0		
					L		
Partition Tyr	pe	Size MB	Used MB	Unused MB	Status	Pri/L	.og
*: NT	FS	200.8	2.5	198.3	Active	Prima	a y
*: NTI	FS	252.0	2.8	249.2	None	Prima	iry
Ext Ext	tended	1,594.7	1,594.7	0.0	None	Prima	iry al
Lin +: Lin	iux Ext3 iuv Evt3	200.8 401.6	22.4 28.7	372.9	None	Logic	ai
*:SWAP-SPACE Lin	iux Swap	102.3	0.0	102.3	None	Logic	al
+: Lin	iux Ext3	303.2	25.6	277.6	None	Logic	al
C: FA	Т32	586.7	9.0	577.6	None	Logic	al
					1		
				Applu		Exit	
				EPPly			
				0	J operatio	ns pending	
		llensier	2.44.0		J operatio	ns pending	
Ranish Partition M	lanager	Version	2.44 (b	eta) by	J operatio Muthu	ns pending	09, 2002
Ranish Partition M Hard Disk 1 2,0	lanager 047 Mbutes [Version 520 cu	2.44 (b	eta) by	J operatio Muthu eads	nspending June (x 63 se	09, 2002 ectors 1
Ranish Partition M Hard Disk 1 2,0 Using LBA	lanager 047 Mbytes [Version 520 cy	2.44 (b	eta) by x 128 h	J operatio Muthu eads	ns pending June (x 63 se	09, 2002 ectors 1
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi	Namager 047 Mbytes [ile_	Version 520 cy St	2.44 (b linders arting	eta) by x 128 h E	J operatio Muthu eads nding	ns pending June (x 63 se Pa	09, 2002 ectors 1 artition
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row System	lanager 047 Mbytes [ile :m Type	Version 520 cy St Cyl H	2.44 (b) linders arting lead Sect	eta) by x 128 h Cyl	J operatio Muthu eads nding Head	nspending June (x 63 se Sect S	09, 2002 ectors 1 artition ize [KB]
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row System 0 MBR Master Ro	Namager 047 Mbytes [ile em Type	Version 520 cy St Cyl H	2.44 (b linders arting lead Sect	eta) by x 128 h Cyl	J operatio Muthu eads nding Head	nspending June (x 63 so Pa Sect S:	09, 2002 ectors 1 artition ize [KB]
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row Syste 0 MBR Master Bo 1 Pri Unused	lanager 047 Mbytes [ile em Type oot Record	Version 520 cy St Cyl H 0 0	2.44 (b) linders arting lead Sect 0 1 0 2	eta) by x 128 h Cyl 0 0	J operatio Muthu eads nding Head 0 0	nspending Jume (x 63 se Pa Sect S: 1 63	09, 2002 ectors 1 artition ize [KB] 0 31
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row Syste 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows N	Nanager 047 Mbytes [ile em Type oot Record	Version 520 cy St Cyl H 0 0 0	2.44 (b) linders arting lead Sect 0 1 0 2 1 1	eta) by x 128 h Cyl 0 50	J operatio Muthu eads nding Head 0 0 127	ns pending June (x 63 se Pa Sect S: 1 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row Syste 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows N 3 Pri 2 Windows N	lanager 047 Mbytes [ile em Type oot Record IT NTFS IT NTFS	Version 520 cy 520 ly 6 0 0 0 51	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1	eta) by x 128 h Cyl 0 50 114	J operatio Muthu eads nding Head 0 0 127 127	ns pending June (x 63 se Sect S: 1 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row Syste 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows N 3 Pri 2 Windows N 4 Pri 3 Extended	lanager 047 Mbytes [ile em Type bot Record IT NTFS IT NTFS	Version 520 cy 520 ly 51 115	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1 0 1 0 1	eta) by x 128 h Cyl 0 50 114 519	J operatio Muthu eads nding Head 0 0 127 127 127 127	June (x 63 se Sect S: 1 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048 1,632,960
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row Syste 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows N 3 Pri 2 Windows N 4 Pri 3 Extended 5 Log Linux ext	Manager 047 Mbytes [ile em Type oot Record MT NTFS HT NTFS HT NTFS	Version 520 cy St Cyl H 0 0 0 51 115 115 115	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1 0 1 1 1	eta) by x 128 h Cyl 0 50 114 519 165	J operatio Muthu eads nding Head 0 127 127 127 127	ns pending June (x 63 so Pa Sect Si 63 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048 1,632,960 205,600
Ranish Partition M Hard Disk 1 2,0 Using LBA # Type Row Syste 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows N 3 Pri 2 Windows N 4 Pri 3 Extended 5 Log Linux ext 6 = Ext Extended	lanager 047 Mbytes [ile em Type oot Record IT NTFS IT NTFS IT NTFS	Version 520 cy 520 cy 51 0 0 0 51 115 115 166	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1 0 1 1 1 0 1	eta) by x 128 h Cyl 0 50 114 519 165 267	J operatio Muthu eads nding Head 0 0 127 127 127 127 127	June (x 63 se x 63 se Sect S: 1 63 63 63 63 63 63 63 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048 1,632,960 205,600 411,264
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row System 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows M 3 Pri 2 Windows M 4 Pri 3 Extended 5 Log Linux ext 6 = Ext Extended 7 Log Linux ext	lanager 047 Mbytes [ile em Type oot Record IT NTFS IT NTFS IT NTFS :2fs :2fs	Version 520 cy St Cyl H 0 0 0 51 115 115 115 166 166	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1 0 1 1 1 0 1 1 1	eta) by x 128 h Cyl 0 50 114 519 165 267 267	J operatio Muthu eads nding Head 0 127 127 127 127 127 127 127	ns pending June (x 63 se Sect S: 1 63 63 63 63 63 63 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048 1,632,960 205,600 411,264 411,232
Ranish Partition M Hard Disk 1 2,0 Using LBA # Type Row Syste 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows N 3 Pri 2 Windows N 4 Pri 3 Extended 5 Log Linux ext 6 = Ext Extended 7 Log Linux ext	lanager 047 Mbytes [ile em Type oot Record IT NTFS IT NTFS IT NTFS :2fs :2fs outions _S	Version 520 cy 520 cy 51 0 0 0 51 115 115 166 166	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1 0 1 1 1 0 1 1 1	eta) by x 128 h Cyl 0 0 50 114 519 165 267 267	J operatio Muthu eads nding Head 0 0 127 127 127 127 127 127	June (x 63 sect S: 1 63 63 63 63 63 63 63 63 63 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048 1,632,960 205,600 411,264 411,232
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row System 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows M 3 Pri 2 Windows M 4 Pri 3 Extended 5 Log Linux ext 6 Ext Extended 7 Log Linux ext ENTER - Edit	lanager 047 Mbytes [ile em Type oot Record IT NTFS IT NTFS 17 NTFS 22fs 22fs 22fs 22fs 30ptions S	Version 520 cy St Cyl H 0 0 0 51 115 115 166 166 166	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1 0 1 1 1 1 1 0 1 1 1	eta) by x 128 h Cyl 0 50 114 519 165 267 267 267 267	J operatio Muthu eads nding Head 0 127 127 127 127 127 127 127 127	June (x 63 se x 63 se Sect S: 1 63 63 63 63 63 63 63 63 63 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048 1,632,960 205,600 411,264 411,232 rom file
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row Syste 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows N 3 Pri 2 Windows N 4 Pri 3 Extended 5 Log Linux ext 6 Ext Extended 7 Log Linux ext ENTER - Edit # Partition Size	lanager 047 Mbytes [ile em Type oot Record IT NTFS IT NTFS :2fs :2fs :2fs options S MBR Executab	Version 520 cy St Cyl H 0 0 0 51 115 115 166 166 166 166	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1 0 1 1 1 1 1 MBR to f Unknown	Epply eta) by x 128 h Cyl 0 0 50 114 519 165 267 267 267 ile L IPL	J operatio Muthu eads nding Head 0 0 127 127 127 127 127 127 127	June (x 63 sect S: 1 63 63 63 63 63 63 63 63 63 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048 1,632,960 205,600 411,264 411,232 rom file
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row System 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows N 3 Pri 2 Windows N 4 Pri 3 Extended 5 Log Linux ext 6 Ext Extended 7 Log Linux ext ENTER - Edit MBR # Partition Size 1*NTFS	lanager 047 Mbytes [ile em Type oot Record IT NTFS IT NTFS 22fs 22fs 22fs 22fs 0ptions S MBR Executab Boot interfa	Version 520 cy St Cyl H 0 0 0 51 115 166 166 166 - Save le code: ce type:	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1 0 1 1 1 1 1 MBR to f Unknown Compact	Eppy eta) by x 128 h Cyl 0 50 114 519 165 267 267 267 ile L IPL	J operatio Muthu eads nding Head 0 0 127 127 127 127 127 127 127 127	June (x 63 se Sect S: 1 63 63 63 63 63 63 63 63 63 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048 1,632,960 205,600 411,264 411,232 rom file
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row System 0 MBR Master Bo 1 Pri Unused 2 *Pri 1 Windows N 3 Pri 2 Windows N 4 Pri 3 Extended 5 Log Linux ext 6 Ext Extended 7 Log Linux ext ENTER - Edit MBR # Partition Size 1*NTFS 200 2 NTFS 252	lanager 047 Mbytes [ile em Type oot Record IT NTFS IT NTFS 22fs 22fs 22fs 22fs 22fs 30ptions S MBR Executab Boot interfa Check for vi	Version 520 cy St Cyl H 0 0 0 51 115 115 166 166 166 166 166	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1 0 1 1 1 1 1 MBR to f Unknown Compact Yes	22007 eta) by x 128 h Cyl 0 50 114 519 165 267 267 267 267 267	J operatio Muthu eads nding Head 0 127 127 127 127 127 127 127 127	June (x 63 se x 63 se Sect S: 1 63 63 63 63 63 63 63 63 63 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048 1,632,960 205,600 411,264 411,232 rom file
Ranish Partition M Hard Disk 1 2,0 Using LBA Fi # Type Row System 0 MBR Master Boo 1 Pri Unused 2 *Pri 1 Windows N 3 Pri 2 Windows N 4 Pri 3 Extended 5 Log Linux ext 6 = Ext Extended 7 Log Linux ext ENTER - Edit MBR # Partition Size 1*NTFS 200 2 NTFS 252 3 Extended 1,594	Ianager 047 Mbytes I ile em Type oot Record IT NTFS iI NTFS iZfs options S MBR Executab Boot interfat Check for vit Boot prompt	Version 520 cy St Cyl H 0 0 51 115 166 166 166 - Save le code: ce type: ruses: timeout:	2.44 (b) linders arting lead Sect 0 1 0 2 1 1 0 1 0 1 1 1 1 1 MBR to f Unknown Compact Yes 6	Epply eta) by x 128 h Cyl 0 0 50 114 519 165 267 267 267 ile L IPL	J operatio Muthu eads nding Head 0 0 127 127 127 127 127 127 127 127	June (x 63 sec x 63 sec Sect S: 1 63 63 63 63 63 63 63 63 63 63 63 63 63	09, 2002 ectors 1 artition ize [KB] 0 31 205,600 258,048 1,632,960 205,600 411,264 411,232 rom file

Ademais xa poderiamos volver a traballar de igual xeito coa computadora como o faciamos previamente ao borrado do MBR.

--ricardofc 20 out 2009