??:OSSLab thx

?Raid ??,?????????????.??Raid ??????.??????????????

Raid ???(Raw recovery)

??????????????? ??Rebuild?

???? ???disk dump? image (???????), dump to file ????.????????? ??????

?windows 2003??Winhex or Diskgenius?image file ??
http://zhangyu.blog.51cto.com/197148/36358

???? raid image, ????? ??????? Raid disk image file
?????? ???,????,???? ??

???? Raid 5 ??
?????
D0 Xor D1 Xor D2 =P0
P0 ?D0 D1 D2 ????

?D0 (?D1 D2 ???? ???
?? P0 Xor D1 Xor D2= D0
??D0 ??

?????HDD ,Raid 5???????P?(????)

	??0	??1	??2	??3
??0	D0	D1	D2	**P0**
??1	D3	D4	**P1**	D5
??2	D6	**P2**	D7	D8
??3	**P3**	D9	D10	D11
??4	D12	D13	D14	**P4**

??????????????
??disk 0,1,2,3 ?raid disk ??????? (Strip)
????? 0?? ???P??disk 3?? ????
        1?? ???P????disk 2

P?(???) ?????
???? ???? backward

	??0	??1	??2	??3
??0	D0	D1	D2	**P0**
??1	D3	D4	**P1**	D5
??2	D6	**P2**	D7	D8
??3	**P3**	D9	D10	D11
??4	D12	D13	D14	**P4**

???? forward

	??0	??1	??2	??3
??0	P0			
??1		P1		
??2			P2	
??3				P3
??4	P4			
??		P5		
.	.	.	.	.
.	.	.	.	.

?????????? ??
?? parity :?????????????disk?
?? dynamic :???????????????disk

?????

<o> </o>	??0	??1	??2	??3
??0	D0	D1	D2	**P0**
??1	D4	D5	**P1**	D3
??2	D8	**P2**	D6	D7
??3	**P3**	D9	D10	D11
??4	D12	D13	D14	**P4**
.<o/>	.<o/>	.<o/>	.<o/>	.<o/>
.<o/>	.<o/>	.<o/>	.<o/>	.<o/>

?????

<o> </o>	??0	??1	??2	??3
??0	**P0**	D0	D1	D2
??1	D3	**P1**	D4	D5
??2	D6	D7	**P2**	D8
??3	D9	D10	D11	**P3**
??4	**P4**	D12	D13	D14
.<o/>	.<o/>	.<o/>	.<o/>	.<o/>
.<o/>	.<o/>	.<o/>	.<o/>	.<o/>

?????

<o> </o>	??0	??1	??2	??3
??0	**P0**	D0	D1	D2
??1	D5	**P1**	D3	D4
??2	D7	D8	**P2**	D6
??3	D9	D10	D11	**P3**
??4	**P4**	D12	D13	D14
.<o/>	.<o/>	.<o/>	.<o/>	.<o/>
.<o/>	.<o/>	.<o/>	.<o/>	.

???? ??P???,????????
?????   (???Win image ??,?????????????)

????? backward parity
????? backward dynamic
????? forward partity
????? forward dynamic

????

1.??????? ?????.????MBR

2.??????????

3.???????????????????.(??????)

??????????. ???? backward parity 64Kbytes Stripe Size ??.
?????disk 0,1,2,3 ????
?image file ?win hex ?Rstudio ???raid 5 recovery
??????....(????????)

 ??????

1.???? 0,1,3??? ??????? ???????
2.??? ?? data ???? ??? ??????
3.???????????????? ????2????? ??????????? ????????????

??????????disk image file?????.?imgage file? ????????
??????????file system recovery

??????????

http://www.z-a-recovery.com/raid-recovery-tutorial.htm
http://www.runtime.org/raid.htm
http://www.diskinternals.com/raid-recovery/
http://www.getwayrecovery.com/purchase.html (support raid 6)
http://www.unformat-unerase.com/Articles/RAID_Recovery_Presentation/index.shtml (raird 5,raid6)

?????????filesystem ,Raid ?????,80%???????? ..

?????.?raid 5 ????? ?? raid 6 ?????
??????? ????????????????.????raid disk ????. ??recovery??