

组网及说明

3par StoreServ 20850

问题描述

用户 3par 20850 连接多台 VMware 主机挂起, 要求分析 root cause.

VMware 主机报如下错误.

Error status H:0x0 D:0x18 P:0x0 Sense Data: 0x0 0x0 0x0.

Error code (D:0x18) is returned by storage. The storage supplier should check and confirm the reason.

用户先联系 VMware, VMware把问题推到 3par, 用户一周之后报 3PAR case, 当时 log 都已经被覆盖.

从 3par 端看, 无任何报错. 问题应该在主机端, 是某台主机设置 SCSI key, 引起访问冲突.

直到 用户再次出现挂起, 并及时上传 log.

过程分析

Log snippet showing SCSI reservation key settings for various LUNs.

Detailed log snippet showing reservation conflict errors and SCSI key settings for multiple LUNs.

从 3par log 可以看出, 主机51402EC0123F08CA, 51402EC0123F08C8 给 VLUN 60002AC0000 000000000010000234CF 设置了 SCSI Reservation KEY.

导致后面所有主机在访问 这个 VLun 时, 都报 Reservation conflict. 之后挂起.

Table listing VM names, personas, domains, and SCSI paths for various VMs, including reservation key details.

51402EC0123FEC32 0:5:1

13 MTRHZ5-PRD-SRV-DL560-24 WindowsServer - 51402EC0123F08CA 1:5:3

51402EC0123F08C8 1:5:1

51402EC0123F08CA 0:5:1

51402EC0123F08C8 0:5:3

Id Name Rd Mstr Prnt Roch Rwch PPrnt SPPrnt PBlkRemain -----VV_WWN-
-----CreationTime----- Udid

1 .srdata RW 0/1/- --- --- --- -- 60002AC0000000000000000100023
4CF 2019-08-23 13:12:38 CST 1

0 admin RW 1/0/- --- --- --- -- 60002AC0000000000000000000023
4CF 2019-08-23 13:11:52 CST 0

8 PRD_SS20800_1_VM_qbmaster.r RW 1/0/- --- --- --- -- 60002AC0000000000
0000002000233D8 2019-12-19 14:14:18 CST 8

2 PRD_SS20800_1_VM_WCmaster RW 1/0/- --- --- --- -- 60002AC0000000000
0000002000234CF 2019-11-05 15:08:08 CST 2

3 RC_TEST.r RW 0/1/- --- 16 --- -- 60002AC00000000000000003000
233D8 2019-12-19 10:15:36 CST 3

16 rcpy.1.3.1 RO 0/1/- 3 --- --- -- 60002AC000000000000000100002
34CF 2020-01-03 09:51:43 CST 16

6 total 0

Active VLUNs

Domain Lun VVName HostName -Host_WWN/iSCSI_Name- Port Type
Status ID

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-DMZ.SRV-DL560-51 51402EC0123F0956
0:5:1 host set active 257

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-DMZ.SRV-DL560-51 51402EC0123F0954
0:5:3 host set active 257

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-DMZ.SRV-DL560-51 51402EC0123F0954
1:5:1 host set active 257

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-DMZ.SRV-DL560-51 51402EC0123F0956
1:5:3 host set active 257

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-DMZ.SRV-DL560-52 51402EC011100DC6
0:5:1 host set active 257

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-DMZ.SRV-DL560-52 51402EC011100DC4
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-DMZ.SRV-DL560-52 51402EC011100DC4
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-DMZ.SRV-DL560-52 51402EC011100DC6
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-OPM.SRV-DL560-41 51402EC011100D7A
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-OPM.SRV-DL560-41 51402EC011100D78
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-OPM.SRV-DL560-41 51402EC011100D78
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-OPM.SRV-DL560-41 51402EC011100D7A
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-OPM.SRV-DL560-42 51402EC01110185A
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-OPM.SRV-DL560-42 51402EC011101858
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-OPM.SRV-DL560-42 51402EC011101858
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-OPM.SRV-DL560-42 51402EC01110185A
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-11 51402EC0123F095A
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-11 51402EC0123F0958
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-11 51402EC0123F0958
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-11 51402EC0123F095A
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-12 51402EC0123F096A
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-12 51402EC0123F0968
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-12 51402EC0123F0968
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-12 51402EC0123F096A
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-13 51402EC0123F093A
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-13 51402EC0123F0938
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-13 51402EC0123F0938

1:5:1 host set active 257

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-13 51402EC0123F093A
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-14 51402EC0123F0952
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-14 51402EC0123F0950
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-14 51402EC0123F0950
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-14 51402EC0123F0952
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-15 51402EC0123F092A
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-15 51402EC0123F0928
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-15 51402EC0123F0928
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-15 51402EC0123F092A
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-16 51402EC0123F08BA
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-16 51402EC0123F08B8
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-16 51402EC0123F08B8
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-16 51402EC0123F08BA
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-17 51402EC0123F092E
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-17 51402EC0123F092C
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-17 51402EC0123F092C
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-17 51402EC0123F092E
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-18 51402EC0123F0972
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-18 51402EC0123F0970
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-18 51402EC0123F0970
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-18 51402EC0123F0972
1:5:3 host set active 257

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-19 51402EC011100CBA
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-19 51402EC011100CB8
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-19 51402EC011100CB8
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-19 51402EC011100CBA
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-20 51402EC0123F0A1A
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-20 51402EC0123F0A18
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-20 51402EC0123F0A18
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-20 51402EC0123F0A1A
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-21 51402EC0123F0A3A
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-21 51402EC0123F0A38
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-21 51402EC0123F0A38
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-21 51402EC0123F0A3A
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-22 51402EC0123FEC32
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-22 51402EC0123FEC30
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-22 51402EC0123FEC30
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-22 51402EC0123FEC32
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-23 51402EC0111018FE
0:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-23 51402EC0111018FC
0:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-23 51402EC0111018FC
1:5:1 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-23 51402EC0111018FE
1:5:3 host set active 257
- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-24 51402EC0123F08CA
0:5:1 host set active 257

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-24 51402EC0123F08C8
0:5:3 host set active 257

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-24 51402EC0123F08C8
1:5:1 host set active 257

- 0 PRD_SS20800_1_VM_WCmaster MTRHZ5-PRD-SRV-DL560-24 51402EC0123F08CA
1:5:3 host set active 257

问题原因 就是MTRHZ5-PRD-SRV-DL560-24 这台 windows server 与 Vmware server 同时访问一个 Vln导致访问冲突.
这是不支持的用法.

解决方法

把 windows server 移除后问题解决.