



CXone Mpower EXPERT

RAID组不平衡导致写入延迟

https://kb-cn-stage.netapp.com/on-prem/ontap/Perf/Perf-KBs/Write_latency_due_to_imbalanced_Raid_...

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适用场景

- ONTAP

问题描述

- 应用程序或VM报告运行时很减。
- 延迟可从命令中的数据层或 AIQ卷延迟(组件)视图中的WAFL Susp CP报告

```
cluster1::> qos statistics volume latency show -vserver vs0 -volume vs0_vol0
Workload      ID  Latency  Network  Cluster  Data  Disk  QoS
  NVRAM      Cloud
-----
vs0_vol0-wid1.. 15658  42.8ms  155.00us  0ms    28.7ms  14.1ms  0ms
  0ms      0ms
```

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```

vs0_vol0-wid1.. 15658 31.6ms 128.00us 0ms 23.5ms 8.1.ms 0ms
  0ms 0ms
vs0_vol0-wid1.. 15658 47.1ms 130.00us 0ms 32.8ms 14.3ms 0ms
  0ms 0ms
vs0_vol0-wid1.. 15658 30.2ms 137.00us 0ms 19.2ms 11.0ms 0ms
  0ms 0ms
vs0_vol0-wid1.. 15658 42.4ms 143.00us 0ms 32.8ms 9.60ms 0ms
  0ms 0ms

```

- `systat -x`输出显示CP类型CP_Ty B (背靠背) CPS的证据。
- 没有直接迹象表明存在磁盘瓶颈。
- **Statut** 显示、其中一个RAID组包含一个或极少数数据磁盘、并且磁盘利用率不会均匀分布在各个RAID组中。

```

disk ut% xfers ureads--chain-usecs writes--chain-usecs cpreads-chain-usecs greads--chain-usecs gwrites-
chain-usecs /aggr0/plex0/rg0: 0a.03.0 1 5.76 0.00 .... 3.79 47.02 21 1.97 18.21 31 0.00 .... 0.00 .... 0b.
03.1 1 5.76 0.00 .... 3.80 46.91 21 1.96 18.09 31 0.00 .... 0.00 .... 0b.00.1 83 228 0.07 10.00 44 6.16 39.
95 19 0.06 38.16 38 0.00 .... 0.00 .... 0b.00.2 80 215 58.04 2.85 243 6.14 40.02 19 0.28 5.26 85 0.00 ....
0.00 .... /aggr0/plex0/rg1: 0a.01.0 1 120.54 0.00 .... 54.37 57.82 14 66.17 44.91 20 0.00 .... 0.00 .... 0b.
00.8 1 120.54 0.00 .... 54.38 57.81 19 66.16 44.91 23 0.00 .... 0.00 .... 0a.01.1 43 185.28 2061.95 4.04
135 57.25 32.25 20 66.09 12.07 60 0.00 .... 0.00 .... 0b.00.9 55 180.00 2057.09 4.04 150 57.25 32.29 23
65.66 12.11 74 0.00 .... 0.00 .... 0a.01.2 44 176.64 2054.20 4.02 141 56.59 32.40 20 65.85 12.20 62 0.00
.... 0.00 .... 0b.00.10 56 166.30 2043.93 4.03 163 56.86 32.45 24 65.50 12.31 73 0.00 .... 0.00 .... 0a.
01.3 73 179.01 2056.35 4.02 136 57.05 32.43 20 65.62 12.19 60 0.00 .... 0.00 .... 0b.00.11 75 162.22
2039.31 4.03 149 57.16 32.20 24 65.74 12.25 71 0.00 .... 0.00 .... 0a.01.4 63 177.86 2055.72 4.00 138
56.69 32.51 21 65.45 12.40 61 0.00 .... 0.00 .... 0b.00.22 55 169.34 2046.18 4.02 156 56.96 32.21 25 66.
20 12.36 73 0.00 .... 0.00 .... 0a.01.6 74 174.07 2051.05 4.03 139 57.32 32.47 21 65.70 12.02 62 0.00 ....
. 0.00 .... 0b.00.13 25 163.94 2041.44 4.02 150 56.64 32.27 26 65.86 12.38 75 0.00 .... 0.00 .... <<<<<<<
0b.00.14 21 165.87 2044.10 4.01 149 56.39 32.49 27 65.38 12.20 72 0.00 .... 0.00 .... 0b.00.23 15 170.
28 2047.49 4.00 150 56.80 32.12 28 65.99 12.13 73 0.00 .... 0.00 ....

```