一、顺序读写的性能和随机读写

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N | 顺序读 | 顺序写 | 随机读 | 随机写 |
| 100 | 0.380 | 44.090 | 1.070 | 45.660 |
| 1000 | 0.201 | 6.920 | 1.133 | 7.692 |
| 1 0000 | 0.166 | 3.048 | 1.466 | 4.242 |
| 10 0000 | 0.162 | 2.713 | 1.717 | 4.219 |
| 100 0000 | 0.246 | 2.704 | 6.603 | 4.556 |
| 500 0000 | 0.286 | 2.723 | 10.778 | 4.726 |
| 1000 0000 | 0.294 | 2.754 | 10.245 | 4.687 |
| 2000 0000 | 0.294 | 3.054 | 6.114 | 4.760 |
| 5000 0000 | 0.296 | 2.701 | 11.212 | 4.675 |

注：性能衡量指标为平均每次操作所耗时（单位：微秒），其他参数配置为默认配置

二、不同的读写比例

随机读写数量N=10000000，其他参数配置为默认配置

|  |  |
| --- | --- |
| Read / Write (%) | Time (micros/op) |
| 1 | 5.967 |
| 10 | 7.238 |
| 20 | 8.294 |
| 30 | 9.330 |
| 40 | 10.152 |
| 50 | 10.370 |
| 60 | 11.106 |
| 70 | 12.386 |
| 80 | 12.396 |
| 90 | 13.837 |
| 99 | 12.600 |

持续随机读写时间 T = 120s，max\_write\_buffer\_number=128MB，

|  |  |
| --- | --- |
| Read / Write (%) | Time (micros/op) |
| 1 | 26.019 |
| 10 |  |
| 20 |  |
| 30 |  |
| 40 |  |
| 50 | 14.751 |
| 60 |  |
| 70 |  |
| 80 |  |
| 90 |  |
| 99 |  |

三、不同的键KEY的范围

四、不同的并发数

总操作次数N = 1000 0000，进行随机读写操作

|  |  |
| --- | --- |
| Threads | Time (micros/op) |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

五、Flush过程

六、不同的Compaction量