cube4 体系结构报告

１．ＣＰＵ信息

cube4 物理 CPU 个数为２，每个物理 CPU 中 core 的个数(即核数)为 10,逻辑 CPU 的个数为 40。

因此，推测 memcached 最优线程数配置应为 40。

# 总核数 = 物理 CPU 个数 X 每颗物理 CPU 的核数
# 总逻辑 CPU 数 = 物理 CPU 个数 X 每颗物理 CPU 的核数 X 超线程数

# cube4 物理 CPU 个数为 2
# cat /proc/cpuinfo| grep "physical id"| sort| uniq| wc -l
2

# cube4 每个物理 CPU 中 core 的个数(即核数)为 10
#   cat /proc/cpuinfo| grep "cpu cores"| uniq
cpu cores     : 10

# cube4 逻辑 CPU 的个数为 40
#   cat /proc/cpuinfo| grep "processor"| wc -l
40

# cube4CPU 信息（型号）
#   cat /proc/cpuinfo | grep name | cut -f2 -d: | uniq -c
40  Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz

# cat /proc/cpuinfo
processor     : 0
vendor_id     : GenuineIntel
cpu family    : 6
model         : 63
model name    : Intel(R) Xeon(R) CPU E5-2650 v3 @ 2.30GHz
stepping: 2
microcode     : 0x3d
cpu MHz           : 2301.000
cache size    : 25600 KB
physical id    : 0
siblings ：20
core id        : 0
cpu cores     : 10
apicid        : 0
initial apicid : 0
fpu        : yes
fpu_exception    : yes
cpuid level    : 15
wp        : yes
flags         : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush dts
acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc arch_perfmon pebs bts
rep_good nopl xtopology nonstop_tsc aperfmperf eagerfpu pni pclmulqdq dtes64 monitor ds_cpl vmx

smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt
tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm epb tpr_shadow vnmi flexpriority ept vpid
fsgsbase tsc_adjust bmi1 avx2 smep bmi2 erms invpcid cqm xsaveopt cqm_llc cqm_occup_llc dtherm
ida arat pln pts
bugs            :
bogomips     : 4600.13
clflush size   : 64
cache_alignment : 64
address sizes: 46 bits physical, 48 bits virtual
power management:
...

２．内存信息
# cat /proc/meminfo
MemTotal:      131854660 kB
MemFree:       110189688 kB
MemAvailable:   127843508 kB
Buffers:        1105464 kB
Cached:        15763344 kB
SwapCached:       12036 kB
Active:         3819360 kB
Inactive:      13227376 kB
Active(anon):      90160 kB
Inactive(anon):    89892 kB
Active(file):    3729200 kB
Inactive(file): 13137484 kB
Unevictable:          0 kB
Mlocked:           0 kB
SwapTotal:      58253308 kB
SwapFree:       58229172 kB
Dirty:            0 kB
Writeback:          0 kB
AnonPages:       174856 kB
Mapped:          61008 kB
Shmem:           2124 kB
Slab:          1568208 kB
SReclaimable:    1413228 kB
SUnreclaim:       154980 kB
KernelStack:       9584 kB
PageTables:        9352 kB
NFS_Unstable:        0 kB
Bounce:           0 kB
WritebackTmp:        0 kB
CommitLimit:    123132060 kB
Committed_AS:     676800 kB
VmallocTotal:   34359738367 kB
VmallocUsed:         0 kB
VmallocChunk:        0 kB
HardwareCorrupted:    0 kB

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AnonHugePages:     75776 kB
CmaTotal:          0 kB
CmaFree:           0 kB
HugePages_Total:   1024
HugePages_Free:    1024
HugePages_Rsvd:       0
HugePages_Surp:       0
Hugepagesize:      2048 kB
DirectMap4k:       571028 kB
DirectMap2M:       17025024 kB
DirectMap1G:       118489088 kB
```