

pThreads
Kelsey Morris
3/1/2022

no synchronization - free for all

With this lock I just ran the one required test and the counter didn't get too terribly high compared to pthread locks, but much higher than TAS locks.

The performance went as the following:

First Program: Parameters were 4 threads 10000 iterations. counter got to 1768

with pthread locks

With this lock running the 4 threads with 10000 iterations the counter got very high, so I tested it more by upping the threads and the iterations and the counter dropped drastically. Therefore, the more threads the lower the counter appears to be with this lock.

The performance went as the following:

Second Program 1st test: Parameters were 4 threads 10000 iterations. counter got to 12632

Second Program 2nd test: Parameters were 8 threads 20000 iterations. counter got to 43

Second Program 3rd test: Parameters were 3 threads 20000 iterations. counter got to 5611

with Test And Set (TAS) locks

The counter stayed at a much lower number compared to the rest of the locks even with two different tests performed.

The performance went as the following:

Third Program: Parameters were 4 threads 10000 iterations. counter got to 4

Third Program: Parameters were 3 threads 20000 iterations. counter got to 4

with Test And Test And Set (TATAS) locks

Was not able to figure this one out.

