

The first test shows the time of calculation(matrix multiplication) on AWS Lambda. All matrix were initialized in functions. The operation parallelized on 100 threads due to Lambda safe limit for concurrent functions. For comparing was made the same test on the one node(Intel I7)

| | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 |
|-------------|------|-------|------|------|------|------|
| AWS Lambda | 5.9c | 9.92c | 23c | 50c | - | - |
| Single node | 2.3c | 27c | 98c | 238c | 483c | 822c |

At some point when you try to multiply matrix of size more then 4000, you receive exceptions. And if you try to run this test 2 times with short delay between then there are might be the same exceptions.

The second test is the same as previous but matrix don't initialize in the functions but they sent on server as attributes and back by HTTP response\request.

| | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 |
|-------------|-------|------|------|------|------|------|
| AWS Lambda | 80,4c | - | - | - | - | - |
| Single node | 2.3c | 27c | 98c | 238c | 483c | 822c |

Data sends to lambda as JSON and matrix of size more than 1000 couldn't be transferred in to JSON due to lack of resources(Heap, GC).