

Readings:

Metric	Spark Core	GraphX
Tasks	1251	2351
Shuffle Read	15.8 GB	16.5 GB
Shuffle Write	11.8 GB	8.4 GB
Total IO Read	2.0 MB	2.1 MB
Total IO Write	12.38 MB	7.7 MB
Total Network Receive	22.23 GB	17.47 GB
Total Network Send	11.32 MB	7.7 MB
Time	438 secs	246 secs

PageRank on GraphX performs 1.78X better than Spark core.

Reasons:

GraphX spawns more tasks leading to better parallelism and hence, faster completion time. Also, GraphX's default partitioning is better than Spark Core and hence, Shuffle Write, IO Writes and Network IO are better in GraphX than Spark Core.

Resources allocated to Spark Core and GraphX:

Driver memory	4GB
Executor memory	4GB
Executor cores	4
Task cpus	1