

COP5615 – Distributed Operating System Principles

Fall 2020

Project 4 – Tweeter (Part 1)

Team:

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USAGE

Engine: *"dotnet fsi /langversion:preview Server.fsx"*

Simulator: *"dotnet fsi /langversion:preview Client.fsx {number of nodes} {duration of simulation (ms)}"*

Default Values:

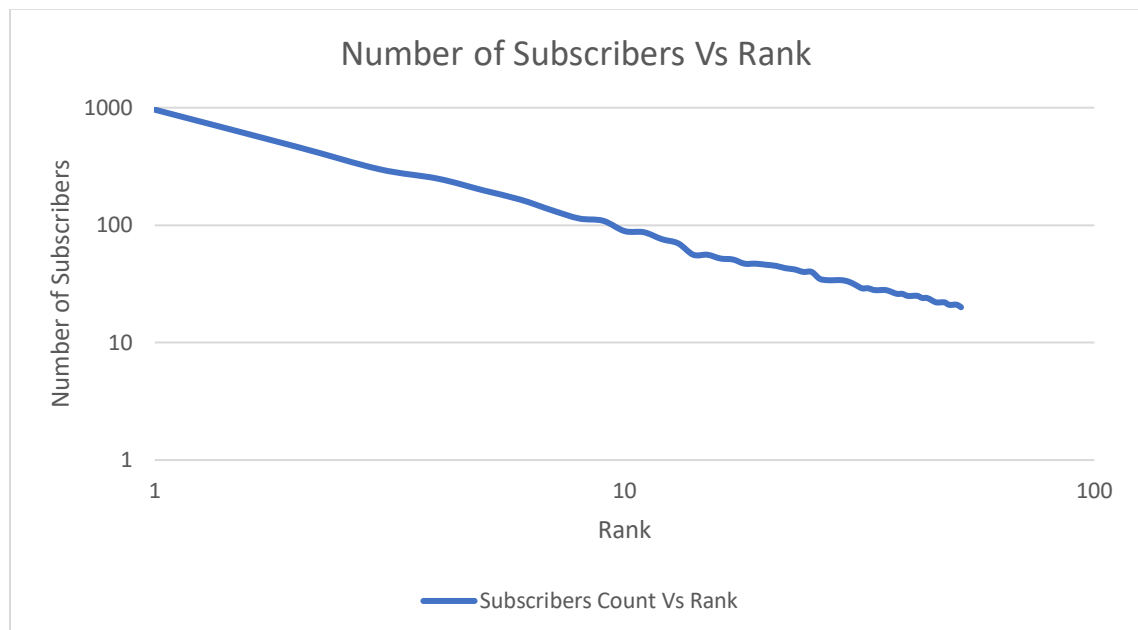
number of nodes: 1000

duration of simulation: 50000

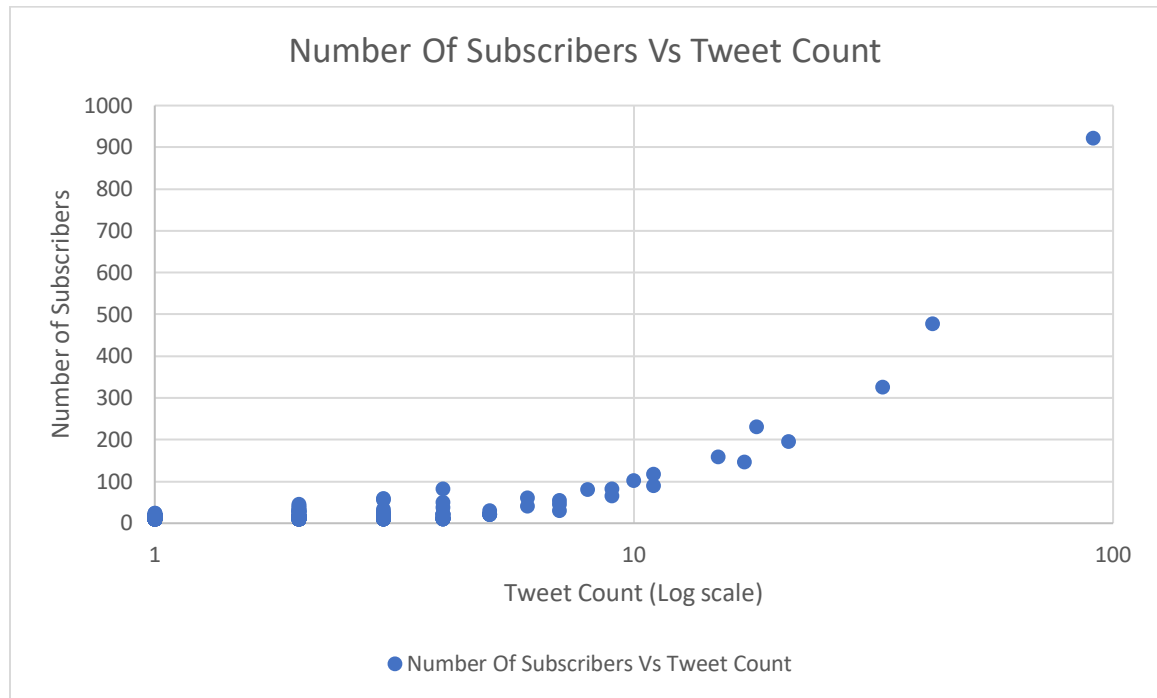
On two different CLIs kindly start by running the Engine first followed by the Simulator.

PERFORMANCE STATISTICS

Number of Subscribers Vs Rank



Number of Subscribers Vs Number of Tweets



LARGEST NETWORK SIMULATED (Stats taken from the engine directly)

Overall Stats:

TotalTweets = 184373

UsersCount = 4000

RetweetCount = 167514

RequestsReceived = 500368L

TimeTaken 219663

Requests processed per second 2284

SELECT INDIVIDUAL USER STATS SIMULATED FOR DIFFERENT USER COUNT

SIMULATION DURATION: 60000 ms								
Total Users	Tweet Count	Tweet Probability	Subscribers Count	Total Queries	Re-Tweet Count	Avg. time to query Subscriptions(ms)	Avg. time to query Hashtags(ms)	Avg. time to query Mentions(ms)
100	519L	0.96	96	60L	19L	262L	257L	268L
500	502L	0.976	488	59L	11L	750L	720L	707L
1000	93L	0.948	948	49L	10L	1178L	1141L	1178L
2000	462L	0.94	1880	30L	8L	388L	540L	349L
3000	116L	0.9716	2915	59L	56L	4447L	3368L	3424L
4000	113L	0.96375	3855	59L	20L	3309L	2252L	2320L