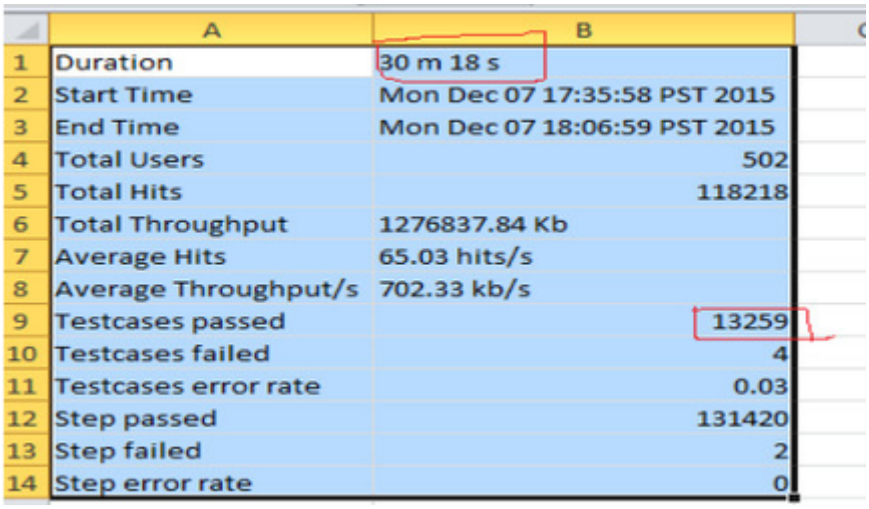
Understand TPS in AIQ Scalability Reports

How TPS values are calculated in Appvance IQ scalability report?
Assuming that reader of this article has fair knowledge in creating the scenarios and viewing the reports. This document is intended to explain how the TPS and Linear TPS values are calculated in scalability report. Below is the scalability report for the TPS calculation.

The formula for calculation is TPS = Test Cases Passed / (duration in seconds).
From iteration summary report, we will get test cases passed and duration in seconds



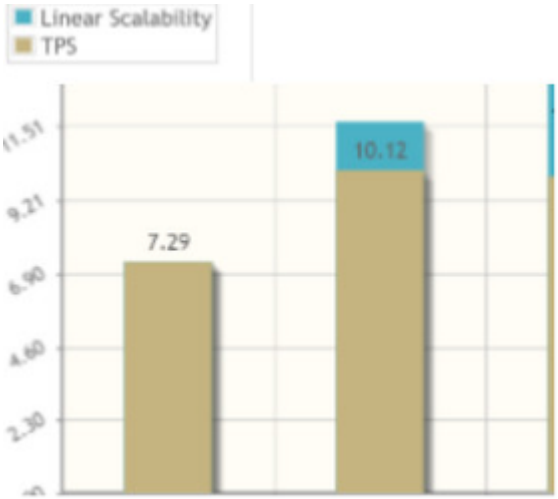
	A	B
1	Duration	30 m 18 s
2	Start Time	Mon Dec 07 17:35:58 PST 2015
3	End Time	Mon Dec 07 18:06:59 PST 2015
4	Total Users	502
5	Total Hits	118218
6	Total Throughput	1276837.84 Kb
7	Average Hits	65.03 hits/s
8	Average Throughput/s	702.33 kb/s
9	Testcases passed	13259
10	Testcases failed	4
11	Testcases error rate	0.03
12	Step passed	131420
13	Step failed	2
14	Step error rate	0

Using the above iteration report 7.29 TPS is calculated.
For 502 (i.e for total users) iteration:
7.29 TPS = 13259/ (30*60 + 18) s
Take the iteration summary _801 and calculate 10.12 TPS.
Iteration summary:

1	Duration	30 m 24 s
2	Start Time	Mon Dec 07 18:06:59 PST 2015
3	End Time	Mon Dec 07 18:38:05 PST 2015
4	Total Users	802
5	Total Hits	159613
6	Total Throughput	1670301.55 Kb
7	Average Hits	87.51 hits/s
8	Average Throughput/s	915.74 kb/s
9	Testcases passed	18463
10	Testcases failed	25
11	Testcases error rate	0.14
12	Step passed	178063
13	Step failed	7
14	Step error rate	0

For 802(i.e for total users) iteration:
18463/ (30*60 + 24) s=10.12 TPS.

To calculate the Linear TPS:



Linear TPS: 11.65 TPS = 802 * (7.29 / 502)
Linear TPS= (total users in iteration summary which has linear scalability) * (TPS of preceding iteration summary/total user in preceding iteration summary).

If you have any feedback on this topic, please contact us at documentation@appvance.ai

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