

SUGAR 7 LOAD TESTING & SIZING

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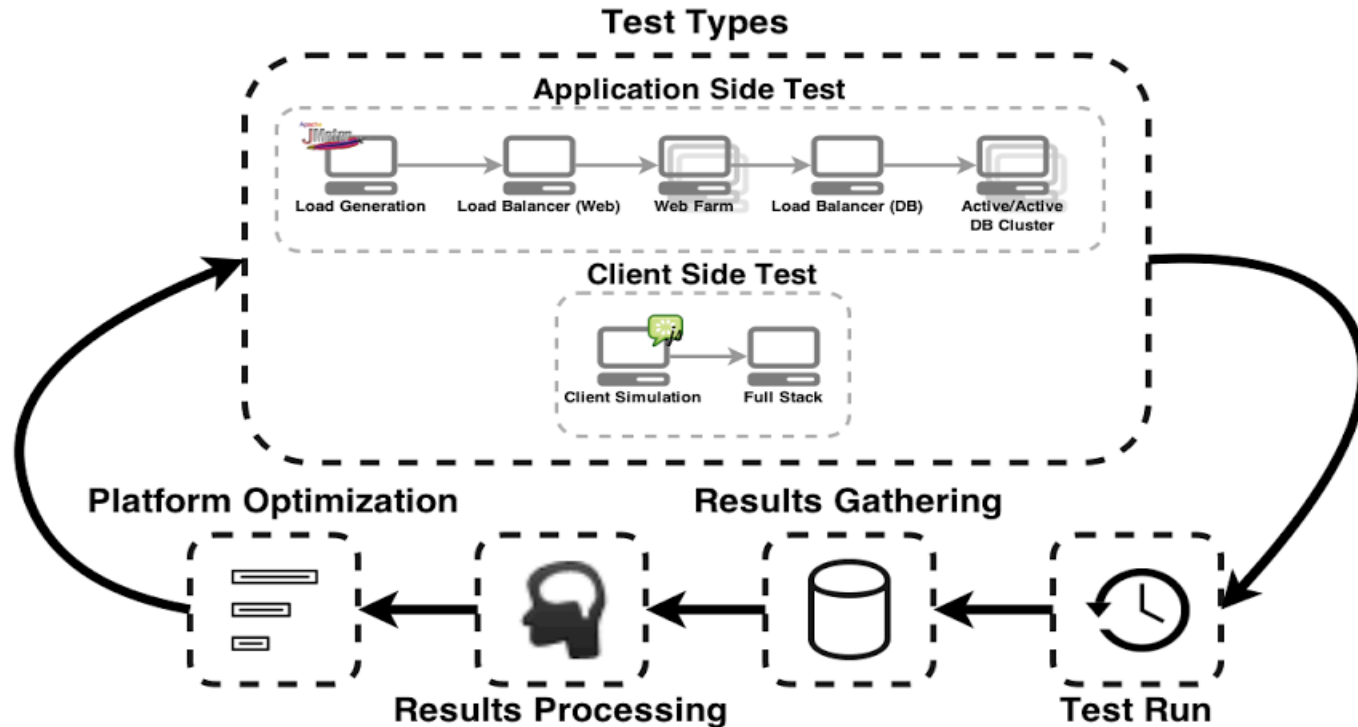
IS IT QUICK ENOUGH?

Load testing - Tools

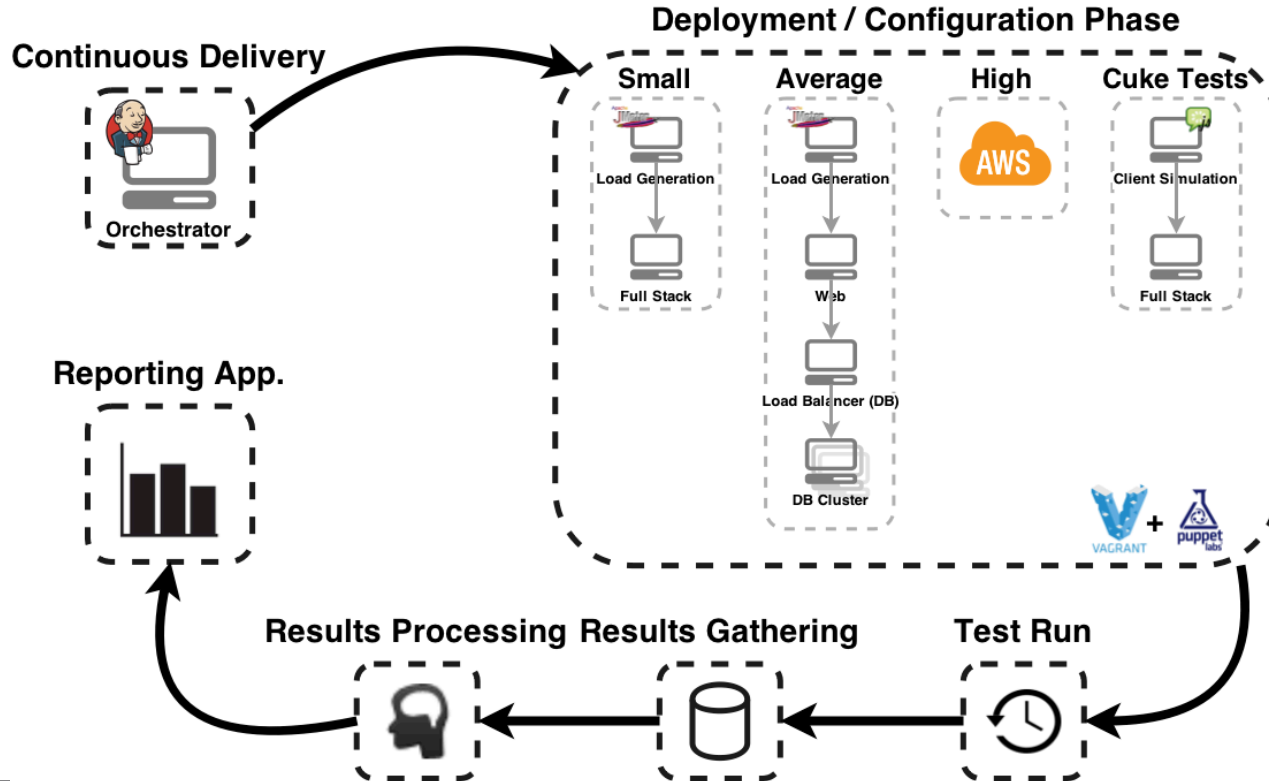
- Jmeter
- PerfMon plugin for jMeter (server performance)
- Seedbed + BrowserPerf (for Sidecar)
- XHProf (profiler for PHP)
- TidBit (Data generation tool)
- Deployment: Puppet + Vagrant + more
- Jenkins
- SAR (System Activity Report) for monitoring



Performance testing -Platform



Performance testing -Tests Profiles



Sizing example

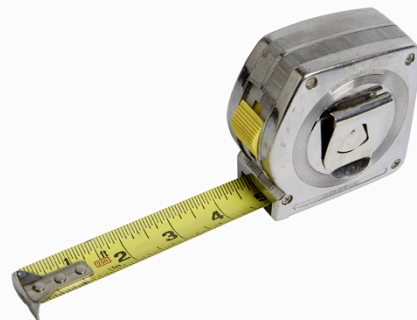
- Based on benchmarking results
- Average Profile (250 users, 60 concurrent)

Web x 1

- CPU: 8 cores
- CPU Model: Intel Xeon E5-2620 - 2.00GHz
- Memory: 8192MB

DB x 2 – Active/Active Percona XtraDB Cluster

- CPU: 4 cores
- CPU Model: Intel Xeon E5-2620 - 2.00GHz
- Memory: 32768MB



ElasticSearch x 1

- CPU: 4 cores
- CPU Model: Intel Xeon E5-2620 - 2.00GHz
- Memory: 4096MB

DB LoadBalancers x 1 - HAProxy

- CPU: 4 cores
- CPU Model: Intel Xeon E5-2620 - 2.00GHz
- Memory: 8192MB

Sizing - settings ...

Settings to take into consideration for DB (MySQL) sizing:

- Active/Active Clusters need to have the less network latency possible
- `innodb_buffer_pool_size` (50% - 70% of Physical Memory)
- `innodb_log_buffer_size` (Depends on size of data and recurrent queries, recommended to begin from 32MB and increase depending on needs)
- `innodb_additional_mem_pool_size` (same as `innodb_log_buffer_size`, recommended 64MB)
- `tmp_table_size` (Measure carefully with Slow Query Log how big are the queries in the system that requires the server to write disk tables and adjust as necessary. Possible workaround to improve performance, use RAMDISK as the `TMPDIR` in MySQL)
- On Linux systems, adjust `sysctl` settings:
 - `vm.swappiness = 0`
 - `fs.file-max` Adjust for the system to support more sockets opened

Sizing - settings ...

Settings to take into consideration for Web (Apache+PHP) sizing:

- MaxRequestWorkers/MaxChilds according to Web capacity and amount of users
Remember users concurrency \neq active users
- Always use Mod_deflate for compression of static content
- PHP + Opcode Caching (APC) is your friend
- apc.shm_size don't be greedy
- apc.shm_segments = 1
- Extra: Configuration directive in Sugar
 - `$sugar_config['perfProfile']['TeamSecurity']['default']['where_condition'] = true;`



THANK YOU!

