Performance Evaluation Report

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**Description of the Web application:**

The evaluation is planned to be done on the Creative project.

**Experiments selected:**

1. Apache Web server performance evaluation

This experiment is selected to evaluate general metrics of the Apache Web server. The performance metrics which we are interested here are system resources used, average system resources available at any given time, number of users/requested that can be serviced per unit time, query response time.

1. Apache Web Server performance with and without optimizations and tuning

Optimizations like standard HTTP caching would be implemented and the server performance results before and after the implementation would be presented as a comparative study. The advantage of doing a comparative study enables us to recognize the necessity of optimization of the system.

**Environment Setup:**

The web application is expected to have data in form of text, images, forms. All the tests would be conducted on a single system under identical system conditions.

**Results:**

The results would be reported in Microsoft Excel tables for visualization.

ab -c 10 -n 1000 <http://www.google.com/>

Benchmarking www.google.com (be patient)

Completed 100 requests

Completed 200 requests

Completed 300 requests

Completed 400 requests

Completed 500 requests

Completed 600 requests

Completed 700 requests

Completed 800 requests

Completed 900 requests

Completed 1000 requests

Finished 1000 requests

Server Software: gws

Server Hostname: www.google.com

Server Port: 80

Document Path: /

Document Length: 10350 bytes

Concurrency Level: 10

Time taken for tests: 5.622 seconds

Complete requests: 1000

Failed requests: 975

(Connect: 0, Receive: 0, Length: 975, Exceptions: 0)

Total transferred: 11150666 bytes

HTML transferred: 10522693 bytes

Requests per second: 177.86 [#/sec] (mean)

Time per request: 56.224 [ms] (mean)

Time per request: 5.622 [ms] (mean, across all concurrent requests)

Transfer rate: 1936.78 [Kbytes/sec] received

Connection Times (ms)

min mean[+/-sd] median max

Connect: 6 9 31.6 8 1007

Processing: 34 46 23.2 42 376

Waiting: 34 46 23.2 42 376

Total: 41 55 39.3 50 1054

Percentage of the requests served within a certain time (ms)

50% 50

66% 52

75% 53

80% 54

90% 58

95% 64

98% 101

99% 169

100% 1054 (longest request)