



## Performance Test Report

Client Name	BluTop Toys Limited
Project Name	Internet Shop Free Trial
Test Profile Name	BLTP_01_FreeTrial
Date and Time	20/10/2009 11:46

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# 1 Summary

The testing being reported here was carried out on to the following set of requirements.

<b>Client Name</b>	BluTop Toys
<b>Project Name</b>	Internet Shop Free Trial
<b>Test Profile Name</b>	BLTP_01_FreeTrial
<b>Start Date Time</b>	20/11/2009 11:46
<b>Total Load (Virtual Users)</b>	5
<b>Test Duration</b>	5 minutes
<b>Ramp Up Period</b>	30 seconds

The table below is a summary of the test that has been run.

## BLTP\_01\_FreeTrial: Script tasks

Start time	VU s	Ramp up	Waits	Script 1
20 Oct 09 11:46	5	started in 30 seconds	Random wait between 2000 and 8000 ms	BLTP_SearchAndCart (Duration: 900 seconds)

## 2 Timer Statistics

Timers indicate the performance of the application under a load of a given number of users and a certain transaction rate.

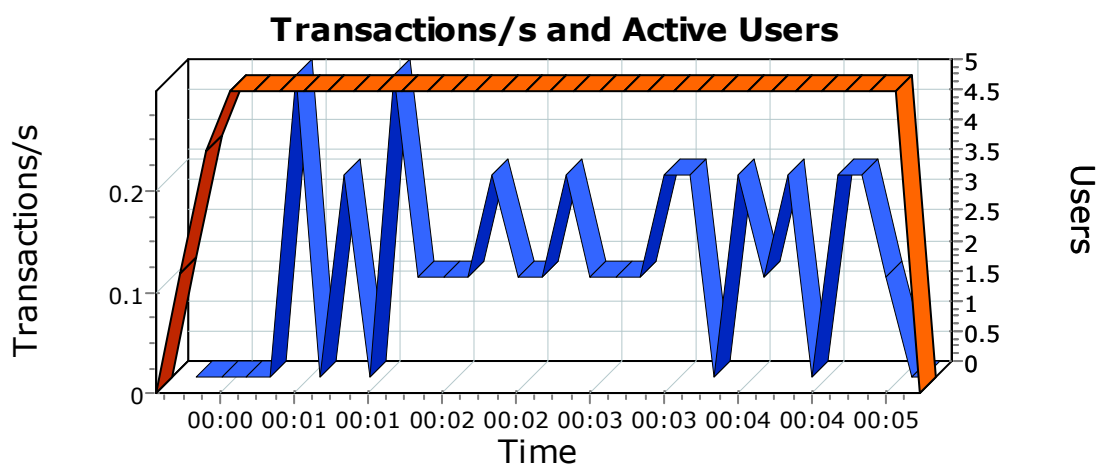
### 2.1 Transaction

Timers as opposed to page timers are timers that encapsulate several events (a transaction). For example a timer is usually wrapped around the entire script to show the full transaction time including WAIT time\*. A timer can be manually added during the recording or script editing phase to encapsulate a process such as log on which may be made up of more than one page.

Transaction statistics are important because they usually directly relate to a business requirement. E.g. the system must be able to process X transactions in one day or one hour and so on.

#### 2.1.1 Transaction Rates

The graph below shows the transaction rates achieved while under a specific load indicated by the orange line. Unlike hits per second transactions per second provide a higher level insight to performance; each transaction may contain many hits.



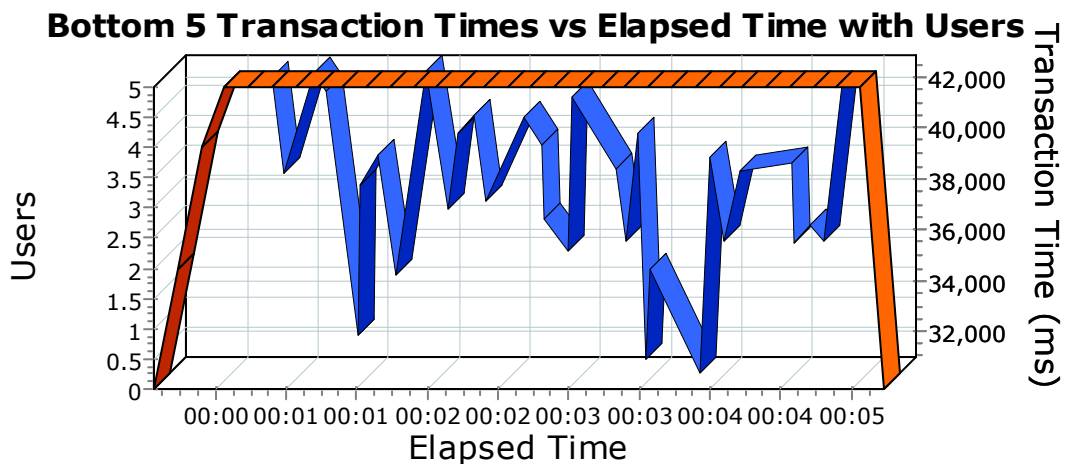
\* WAIT time is a pause in the script to simulate a user entering data such as remembering a password or filling in an on line form. WAIT time can be adjusted and is configured as part of the scenario (random, original, fixed), typically the WAIT time is the time QTest experienced while waiting for the user to enter some data unless the WAIT time has been overwritten when editing the script.

Name	Scale	Min	Max	Avg	$\sigma$
BLTP_01_SearchAndCart, Transactions per second	1	0	0.3	0.11	0.09
HTTP\Started Users	1	0	5	4.56	1.3

## 2.1.2 Transaction Response Times over Time

The graph below shows transaction timer values along with virtual users over time.

These times include WAIT times and are. If there are no bottle necks then these values should not increase over time even if the users values increase.

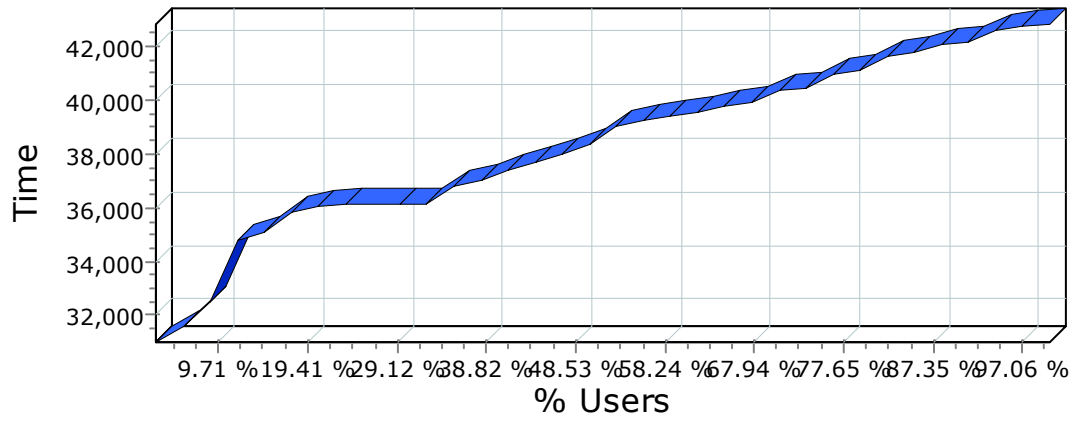


Name	Scale	Min	Max	Avg	$\sigma$
BLTP_01_SearchAndCart, Transaction timer values in milliseconds	1	30984	42843	38272.5	3151.63
HTTP\Active Users	1	0	5	4.56	1.3

## 2.1.3 Transaction Time Distribution

This next graph shows the response time for a transaction (including WAIT time) distributed by the percentage of users that saw those response times. E.g. looking at 90% on the x axis will reveal the time that 90% of the users saw during the test.

### Transaction Time Distribution



Name	Scale	Min	Max	Avg	$\sigma$
BLTP_01_SearchAndCart, Transaction timer distribution	1	30984	42843	0	0

## 2.1.4 Tabular Results

Below is a tabular summary of the timers.

### **Rampup Step 1: 5 Virtual Users; From Tue 11:47:01 To Tue 11:51:41**

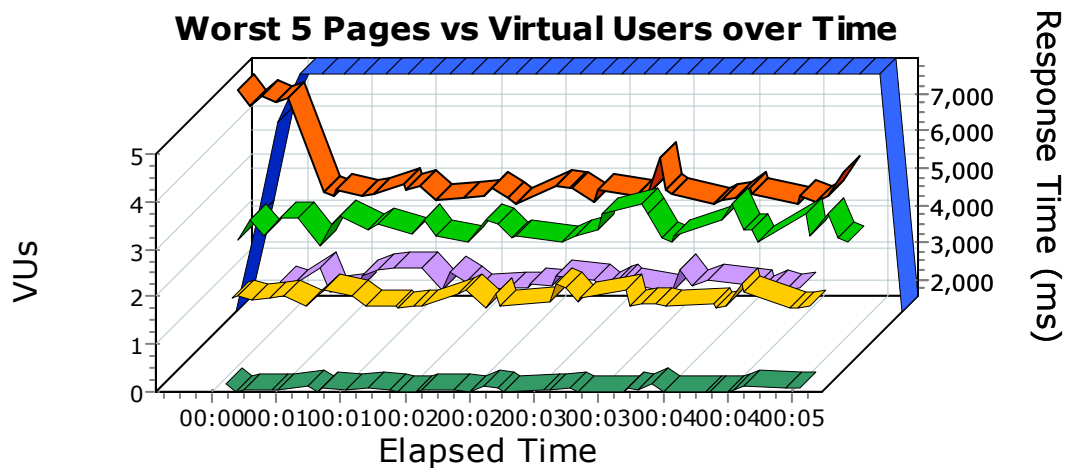
Timer Name	Nb	Min	Max	$\sigma$	Avg	Q1	Q2	Q3	Centile 90%
BLTP_01_SearchAndCart	34	31	42.8	3.1	38.3	36.1	38.3	40.4	42.1

## 2.2 Pages

The page timers result from timers in the script, each timer is wrapped around a specific request for a page from the web server. The time represents the amount of time between the request being sent for the page and the last byte (the page in whole) to be returned from the server.

### 2.2.1 Response Time over Time

The graph below shows real page response time over elapsed time along with the number of virtual users (denoted by the thicker line). The graph is useful for determining the number of users the site can handle while under the specific load generated in the test.

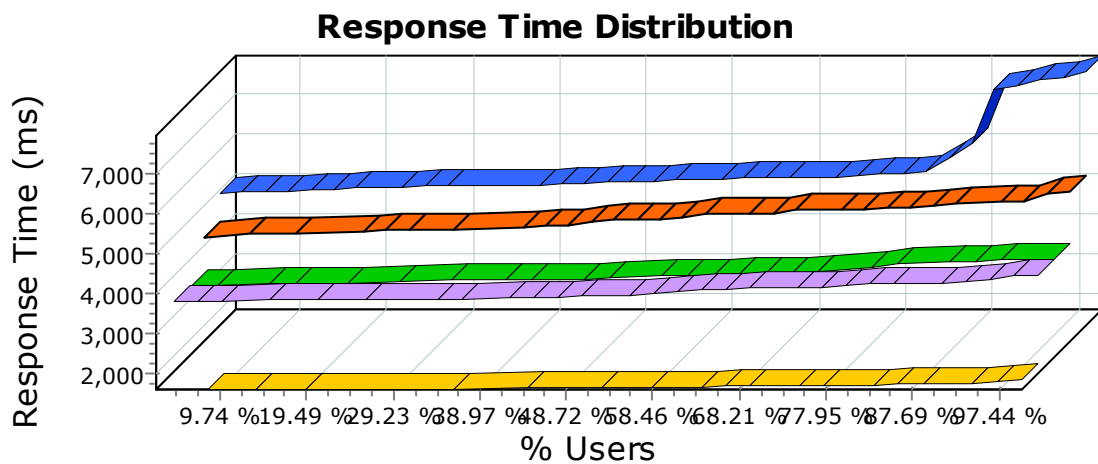


Name	Scale	Min	Max	Avg	$\sigma$
HTTP\Started Users	1	0	5	4.56	1.3
BLTP_0010_OpenHomePage, Page timer values in milliseconds	1	4875	7953	5525.08	873.9
BLTP_0020_SearchForItem, Page timer values in milliseconds	1	4203	5344	4675.59	304.15
BLTP_0050_Continue, Page timer values in milliseconds	1	3375	4062	3656.05	204.04
BLTP_0030_SelectItem, Page timer values in milliseconds	1	3390	4031	3614.78	193.72
BLTP_0040_AddToCart, Page timer values in milliseconds	1	1578	1812	1647.06	62.66



## 2.2.2 Response Time Distribution

This next graph shows the page response time distributed by the percentage of users that saw those response times. E.g. looking at 90% on the x axis will reveal the time that 90% of the users saw during the test.



Name	Scale	Min	Max	Avg	$\sigma$
BLTP_0010_OpenHomePage, Page timer distribution	1	4875	7953	0	0
BLTP_0020_SearchForItem, Page timer distribution	1	4203	5344	0	0
BLTP_0050_Continue, Page timer distribution	1	3375	4062	0	0
BLTP_0030_SelectItem, Page timer distribution	1	3390	4031	0	0
BLTP_0040_AddToCart, Page timer distribution	1	1578	1812	0	0

### 2.2.3 Tabular Results

What follows are tables showing the page response time for each part of the test. If the test was set up with a staged ramp then there will be multiple tables, each table will show the summary for each plateau in the test.

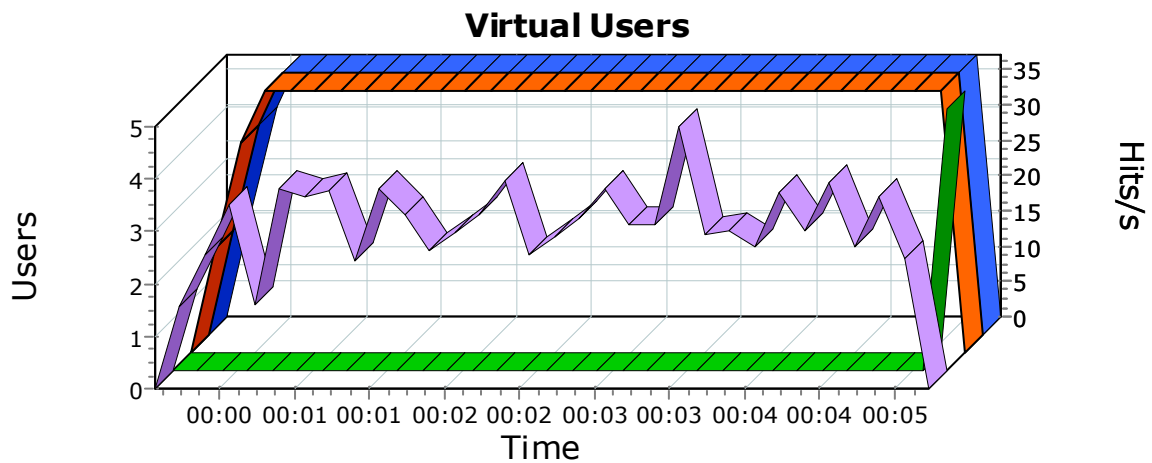
#### **Rampup Step 1: 5 Virtual Users; From Tue 11:47:01 To Tue 11:51:41**

Timer Name	Nb	Min	Max	$\sigma$	Avg	Q1	Q2	Q3	Centile 90%
BLTP_0010_OpenHomePage	35	4.9	7.8	0.5	5.3	5	5.2	5.3	5.4
BLTP_0020_SearchForItem	36	4.2	5.3	0.3	4.7	4.4	4.6	4.9	5.1
BLTP_0030_SelectItem	36	3.4	4	0.2	3.6	3.4	3.5	3.8	3.9
BLTP_0040_AddToCart	36	1.6	1.8	0.1	1.6	1.6	1.6	1.7	1.7
BLTP_0050_Continue	34	3.4	4.1	0.2	3.7	3.5	3.6	3.7	4

### 3 HTTP Statistics

#### 3.1.1 Virtual Users & Hits

The virtual users graph shows the number of virtual users achieved during the test, along side this the hit rate is displayed (axis on right hand side). The hit rate should increase with the number of virtual users, there should be a constant relationship between these two counters.

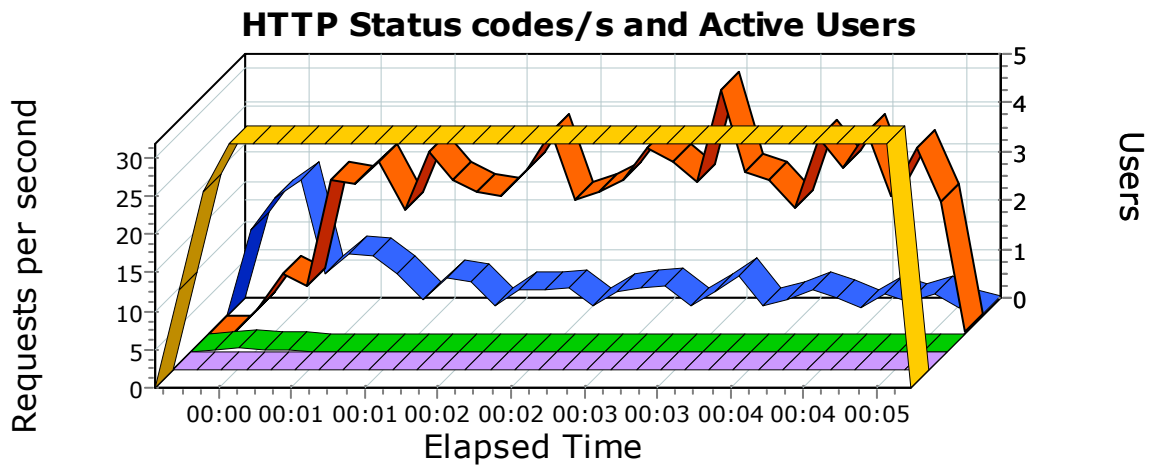


Name	Scale	Min	Max	Avg	$\sigma$
HTTP\Started Users	1	0	5	4.56	1.3
HTTP\Active Users	1	0	5	4.56	1.3
HTTP\Finished Users	1	0	5	0.16	0.87
HTTP\Hits Per Second	1	0	37.1	22.01	7.61

### 3.1.2 HTTP status

This graph shows the rate and type of HTTP codes returned from the server.

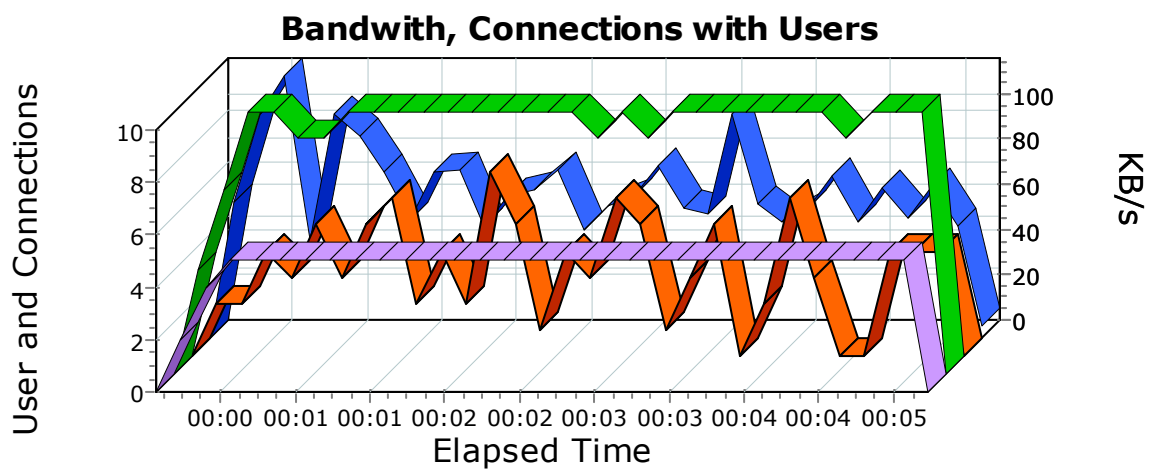
Too many 4xx's or 5xx's may indicate an web server or application problem.



Name	Scale	Min	Max	Avg	$\sigma$
HTTP Status/s (2XX)	1	0	17.8	4.21	3.98
HTTP Status/s (3XX)	1	0	31.8	17.77	7.96
HTTP Status/s (4XX)	1	0	0.4	0.03	0.09
HTTP Status/s (5XX)	1	0	0	0	0
HTTP\Started Users	1	0	5	4.56	1.3

### 3.1.3 Bandwidth & Virtual Users

The graph below shows the relationship between the bandwidth the users were demanding and the number of users on the system



Name	Scale	Min	Max	Avg	$\sigma$
HTTP KBytes per Second Per Second	1	0	115.6	62.95	23.08
Network\Active TCP Connections	1	0	7	3.16	1.99
Network\Total TCP Connections	1	0	10	8.94	2.59
HTTP\Active Users	1	0	5	4.56	1.3

### 3.1.4 HTTP Summary

#### **Rampup Step 1: 5 Virtual Users; From Tue 11:47:01 To Tue 11:51:41**

Counter Name	Min	Max	Avg	Total
Hits/s	0	37.1	24.07	6739
Connections opened/s	0	3	2.23	623
Failed Requests/s	0	0	0	0
Request Retries/s	0	0	0	0
Input KiloBytes/s	4.6	95.5	47.77	13376
Output KiloBytes/s	0.3	28.2	18.52	5185
200/s	0.2	17.8	3.86	1081
2xx/s	0.2	17.8	3.86	1081
302/s	0	0.3	0.13	37
304/s	0.2	31.8	20.07	5619
3xx/s	0.2	31.8	20.2	5656
401/s	0	0	0	0
403/s	0	0	0	0
404/s	0	0.2	0.01	4
4xx/s	0	0.2	0.01	4
5xx/s	0	0	0	0

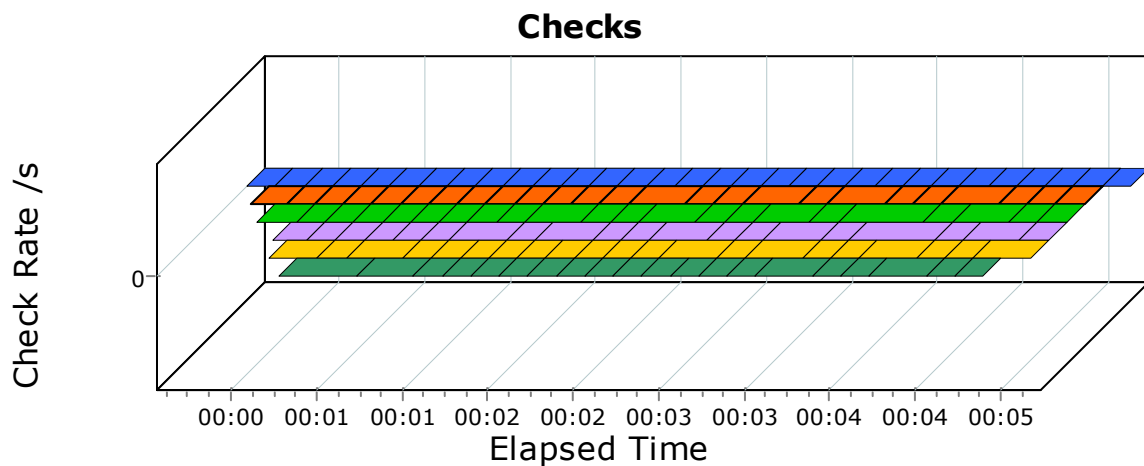
Cache/s	0	0	0	0
Total Tcp Connections/s	0	1	0.98	275
Active Tcp Connections/s	0	0.7	0.35	97
Network errors/s	0	0	0	0
Parsing errors/s	0	0	0	0
Checks succeeded/s	0	0.9	0.65	181
Checks failed/s	0	0	0	0

## 4 Checks

Checks are performed on every page request by default and where they have been manually configured in the script(s). A check will typically check for some text in the reply such as a document title or a message in a web page, if the text received does not match the specifications of the check then the check fails.

### 4.1 Checks

The graph shows the number of checks passed and failed. More detail can be obtained by engaging blucap™ advanced analysis services, some detail can be found at the in the checks tables after the graph.



Name	Scale	Min	Max	Avg	$\sigma$
Checks and Parses\Parsing Errors per Second	1	0	0	0	0
BLTP_01_FreeTrial_1:BLTP_SearchAndCart:BLTP_0010_OpenHomePage, Checks failed per second	1	0	0	0	0
BLTP_01_FreeTrial_1:BLTP_SearchAndCart:BLTP_0020_SearchForItem, Checks failed per second	1	0	0	0	0
BLTP_01_FreeTrial_1:BLTP_SearchAndCart:BLTP_0030_SelectItem, Checks failed per second	1	0	0	0	0
BLTP_01_FreeTrial_1:BLTP_SearchAndCart:BLTP_0040_AddToCart, Checks failed per second	1	0	0	0	0
BLTP_01_FreeTrial_1:BLTP_SearchAndCart:BLTP_0050_Continue, Checks failed per second	1	0	0	0	0

### 4.1.1 Tabular Results

#### Rampup Step 1: 5 Virtual Users; From Tue 11:47:01 To Tue 11:51:41

Check Name	TaskGroup	Script	OK	Error	Avg OK/s	Avg Err/s
BLTP_0010_OpenHomePage	BLTP_01_FreeTrial_1	BLTP_SearchAndCart	36	0	0.13	0
BLTP_0020_SearchForItem	BLTP_01_FreeTrial_1	BLTP_SearchAndCart	38	0	0.14	0
BLTP_0030_SelectItem	BLTP_01_FreeTrial_1	BLTP_SearchAndCart	36	0	0.14	0
BLTP_0040_AddToCart	BLTP_01_FreeTrial_1	BLTP_SearchAndCart	36	0	0.13	0
BLTP_0050_Continue	BLTP_01_FreeTrial_1	BLTP_SearchAndCart	34	0	0.14	0