



Created by Team Catalyst

Final Project Presentation

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Project Overview:

- Client: run POST three times with varied day id from 1, 2, 3 with the following arguments
 - num_threads : 256
 - num_skiers: 20000
 - num_lifts: 40
- Send data to server and publish data to queue
- Three consumers subscribe and receive data from queue, store the data into Redis storage
- Server implemented three GET requests



3 GET Requests:

- Skier Total Vertical:
 - **GET /skiers/{resortID}/seasons/{seasonID}/days/{dayID}/skiers/{skierID}**
 - get the total vertical for the skier for the specified ski day
- Skier Total Vertical Result List:
 - **GET /skiers/{skierID}/vertical**
 - get the total vertical for the skier for specified seasons at the specified resort
- Resort:
 - **GET /resorts/{resortID}/seasons/{seasonID}/day/{dayID}/skiers**
 - get number of unique skiers at resort/season/day



Client POST Day-1 Statistics



----- Client Post Statistics -----

----- PART 1 -----

number of successful requests sent: 160420

number of unsuccessful requests: 0

the total run time for all phases to complete: 105030

the total throughput in requests per second: 1000

----- PART 2 -----

mean response time (millisecs): 118

median response time (millisecs): 40

throughput: 1000

p99 (99th percentile) response time: 1090

min response time (millisecs): 12

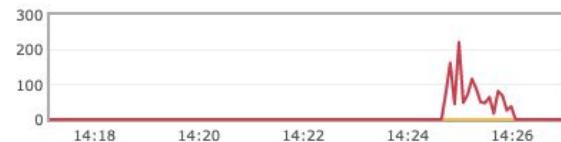
max response time (millisecs): 9996

Day-1 Skier Total Vertical Queue

Queue consumer_skier_queue

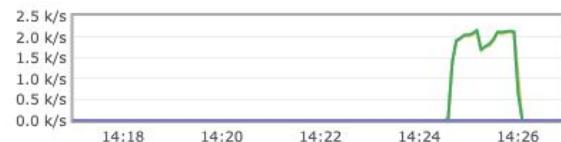
▼ Overview

Queued messages last ten minutes ?



Ready	0
Unacked	0
Total	0

Message rates last ten minutes ?



- Publish
- Deliver (manual ack)
- Deliver (auto ack)

Consumer ack	■ 0.00/s
Redelivered	■ 0.00/s
Get (manual ack)	■ 0.00/s

Get (auto ack)	0.00/s
Get (empty)	0.00/s

Details

Client POST Day-2 Statistics



----- Client Post Statistics -----

----- PART 1 -----

number of successful requests sent: 160420

number of unsuccessful requests: 0

the total run time for all phases to complete: 96045

the total throughput in requests per second: 1000

----- PART 2 -----

mean response time (millisecs): 115

median response time (millisecs): 32

throughput: 1000

p99 (99th percentile) response time: 2021

min response time (millisecs): 12

max response time (millisecs): 9601

Day-2 Skier Total Vertical Queue

Queue consumer_skier_queue

▼ Overview

Queued messages last ten minutes ?



Message rates last ten minutes ?



Details

Day-2 Skier Total Vertical Result List Queue

Queue consumer_skier_2_queue

▼ Overview

Queued messages last ten minutes ?



Message rates last ten minutes ?



Details

Day-2 Resort Queue

Queue consumer_resort_queue

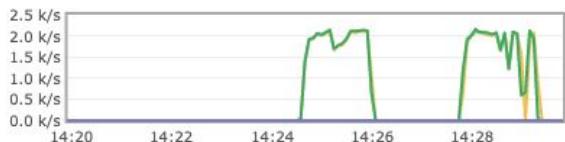
▼ Overview

Queued messages last ten minutes ?



Ready	0
Unacked	0
Total	0

Message rates last ten minutes ?



Publish	0.00/s	Consumer ack	0.00/s	Get (auto ack)	0.00/s
Deliver (manual ack)	0.00/s	Redelivered	0.00/s	Get (empty)	0.00/s
Deliver (auto ack)	0.00/s	Get (manual ack)	0.00/s		

Details

Client POST Day-3 Statistics



----- Client Post Statistics -----

----- PART 1 -----

number of successful requests sent: 160420

number of unsuccessful requests: 0

the total run time for all phases to complete: 102934

the total throughput in requests per second: 1000

----- PART 2 -----

mean response time (millisecs): 118

median response time (millisecs): 31

throughput: 1000

p99 (99th percentile) response time: 2062

min response time (millisecs): 12

max response time (millisecs): 9888

Day-3 Skier Total Vertical Queue

Queue consumer_skier_queue

▼ Overview

Queued messages last ten minutes ?



Message rates last ten minutes ?



Details

Features	durable: true	State	running	Total	Ready	Unacked	In memory	Persistent	Transient, Paged Out
Policy		Consumers	512	Messages	?	0	0	0	0
Operator policy		Consumer capacity	?	Message body bytes	?	0 B	0 B	0 B	0 B
Effective policy definition			100%	Process memory	?	1.2 MiB			

Day-3 Skier Total Vertical Result List Queue

Queue consumer_skier_2_queue

▼ Overview

Queued messages last ten minutes ?



Message rates last ten minutes ?



Details

Features	durable: true	State	idle	Total	Ready	Unacked	In memory	Persistent	Transient, Paged Out
Policy		Consumers	512	Messages	0	0	0	0	0
Operator policy		Consumer capacity	100%	Message body bytes	0 B	0 B	0 B	0 B	0 B
Effective policy definition				Process memory	309 kB				

Day-3 Resort Queue

Queue consumer_resort_queue

▼ Overview

Queued messages last ten minutes ?



Ready 0
Unacked 0
Total 0

Message rates last ten minutes ?



Publish	0.00/s	Consumer ack	0.00/s	Get (auto ack)	0.00/s
Deliver (manual ack)	0.00/s	Redelivered	0.00/s	Get (empty)	0.00/s
Deliver (auto ack)	0.00/s	Get (manual ack)	0.00/s		

Details

Features	durable: true	State	idle	Messages	Total	Ready	Unacked	In memory	Persistent	Transient, Paged Out
Policy		Consumers	512	Message body bytes	0 B	0 B	0 B	0 B	0 B	0 B
Operator policy		Consumer capacity	100%	Process memory	309 kB					
Effective policy definition										

JMeter Test Result



Skier Total Vertical GET

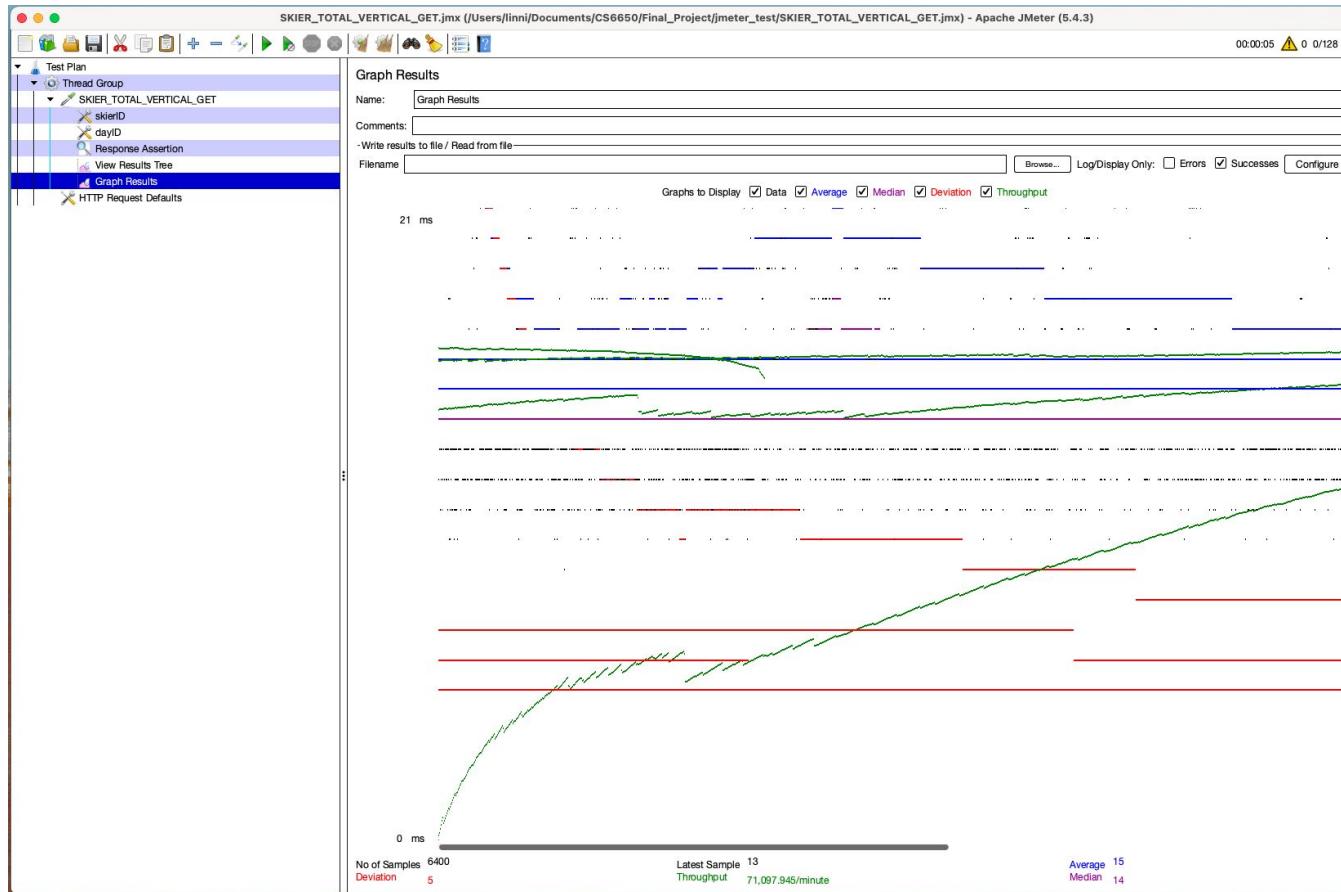
The screenshot shows the Apache JMeter interface version 5.4.3. The top menu bar displays the file path "SKIER_TOTAL_VERTICAL_GET.jmx (/Users/linni/Documents/CS6650/Final_Project/jmeter_test/SKIER_TOTAL_VERTICAL_GET.jmx) - Apache JMeter (5.4.3)" and the status "00:00:05 0 0/128".

The left sidebar contains the "Test Plan" tree, which includes a "Thread Group" named "SKIER_TOTAL_VERTICAL_GET" containing "skierID" and "dayID" samplers, a "Response Assertion" sampler, and listeners for "View Results Tree" and "Graph Results". It also lists "HTTP Request Defaults".

The main workspace features a "View Results Tree" configuration panel with fields for "Name" (set to "View Results Tree"), "Comments" (containing the note "- Write results to file / Read from file"), and "Filename" (empty). There are buttons for "Browse...", "Log/Display Only", "Errors", "Successes", and "Configure". Below this is a search bar with options for "Case sensitive" and "Regular exp.", and buttons for "Search" and "Reset".

A "JSON Path Tester" window is open, showing a list of 1370 results for the path "SKIER_TOTAL_VERTICAL_GET". The results are listed in a table with columns for index (1-1370) and value. The first result is highlighted in yellow. The "JSON Path Expression" field at the bottom is empty, and there is a "Test" button.

Skier Total Vertical GET



Skier Total Vertical GET

00:00:05 ⚠ 0 / 0:128

Test Plan

Thread Group
SKIER_TOTAL_VERTICAL_GET
skierID
dayID
Response Assertion
View Results Tree
Graph Results
Aggregate Report
HTTP Request Defaults

Aggregate Report

Name: Aggregate Report

Comments:

-Write results to file / Read from file

Filename []

Browse... Log/Display Only: Errors Successes Configure

Label	# Samples	Average	Median	90% Line	95% Line	99% Line	Min	Maximum	Error %	Throughput	Received KB/sec	Sent KB/sec
SKIER_TOTAL_VERTIC...	6400	13	13	16	19	28	10	222	0.00%	1137.6/sec	214.58	192.67
TOTAL	6400	13	13	16	19	28	10	222	0.00%	1137.6/sec	214.58	192.67

Skier Total Vertical Result List GET

SKIER_TOTAL_VERTICAL_LIST_GET.jmx (/Users/linni/Documents/CS6650/Final_Project/jmeter_test/SKIER_TOTAL_VERTICAL_LIST_GET.jmx) - Apache JMeter (5.4.3)

00:00:05 1 0/128

Test Plan

Thread Group

- HTTP Request Defaults
- SKIER_TOTAL_VERTICAL_LIST_GET
 - skierID
- Response Assertion
- View Results Tree
- Graph Results

View Results Tree

Name: View Results Tree

Comments:

-Write results to file / Read from file—

Filename Log/Display Only: Errors Successes

Search: Case sensitive Regular exp.

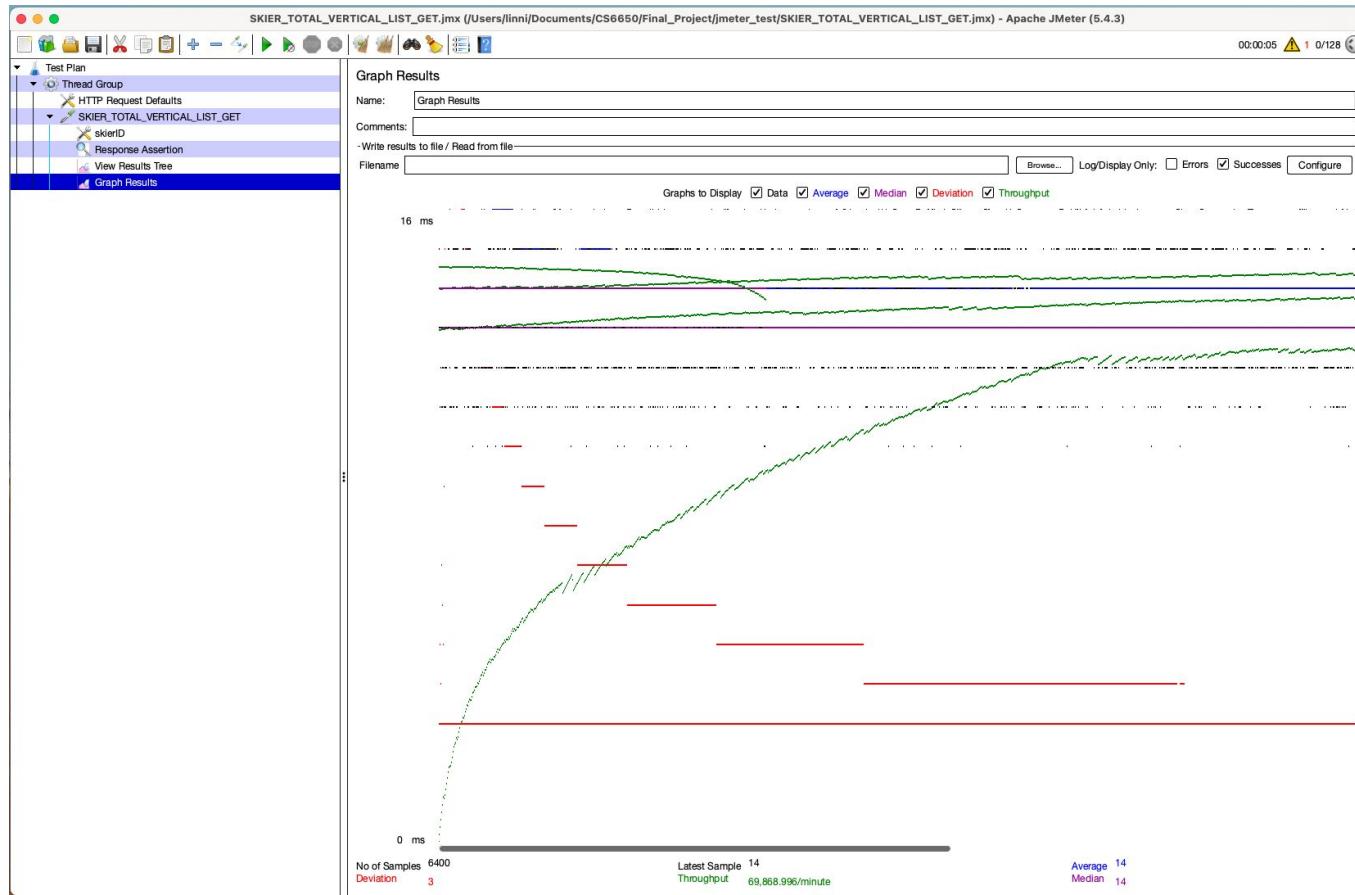
JSON Path Tester

```
1 {  
2   "resorts": [  
3     {  
4       "seasonID": "2019",  
5       "totalVert": 2268  
6     }  
7   ]  
8 }
```

JSON Path Expression

Scroll automatically?

Skier Total Vertical Result List GET



Skier Total Vertical Result List GET

00:05 0/128

Test Plan

Thread Group

- HTTP Request Defaults
- skierID
- Response Assertion
- View Results Tree
- Graph Results

Aggregate Report

Name: Aggregate Report

Comments:

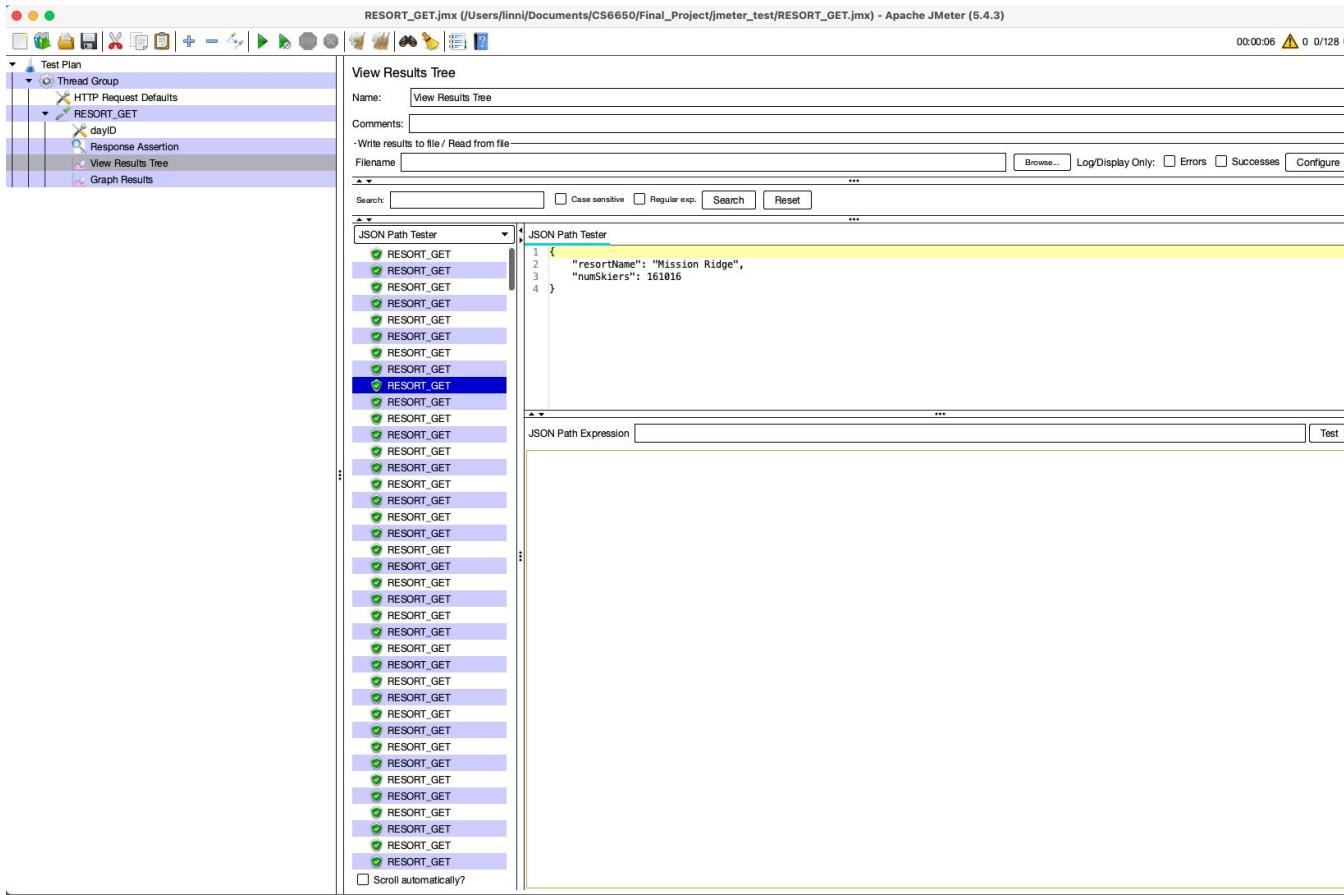
- Write results to file / Read from file

Filename:

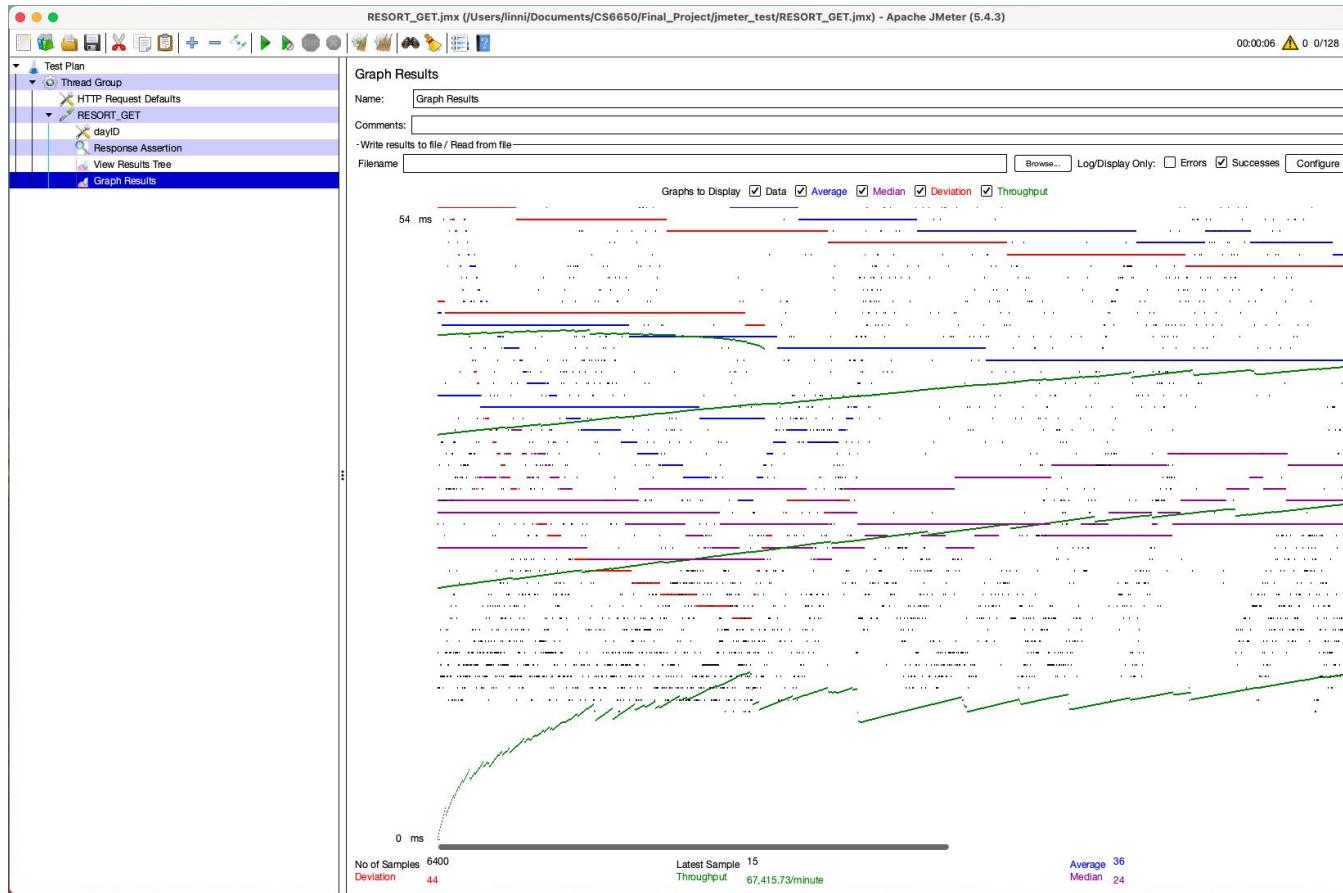
Browse... Log Display Only: Errors Successes Configure

Label	# Samples	Average	Median	90% Line	95% Line	99% Line	Min	Maximum	Error %	Throughput	Received KB/sec	Sent KB/sec
SKIER_TOTAL_VERTICAL_LIST_GET	6400	13	13	16	19	27	9	146	17.06%	1151.3/sec	245.81	168.53
TOTAL	6400	13	13	16	19	27	9	146	17.06%	1151.3/sec	245.81	168.53

Resort GET



Resort GET



Resort GET

00:00:05 0 0/128

Test Plan

Thread Group

- HTTP Request Defaults
- RESORT_GET
- dryID
- Response Assertion
- View Results Tree
- Graph Results
- Aggregate Graph
- Aggregate Report

Aggregate Report

Name: Aggregate Report

Comments: -Write results to file / Read from file

Filename:

Browse... Log/Display Only: Errors Successes Configure

Label	# Samples	Average	Median	90% Line	95% Line	99% Line	Min	Maximum	Error %	Throughput	Received KB/sec	Sent KB/sec
RESORT_GET	6400	13	13	16	19	26	9	52	0.00%	1159.8/sec	179.77	190.29
TOTAL	6400	13	13	16	19	26	9	52	0.00%	1159.8/sec	179.77	190.29

Thank you

