ActualvsForecast

Method:GET

Path: /energy/api/ActualvsForecast/Greece/PT60M/date/2018-01-01

1.Number of Threads (users): 10 Ramp-up period (seconds): 5 Loop Count: 1

 -Summary Report:

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HTTP Request	10	212	114	678	165.58	0.00%	2.2/sec	15.67	0.82	7168.0
TOTAL	10	212	114	678	165.58	0.00%	2.2/sec	15.67	0.82	7168.0

-Results in Table (first 10 users):

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(ms)
1	19:24:15.793	Thread Group 1-1	HTTP Request	678		7168	374	678	571
2	19:24:16.153	Thread Group 1-2	HTTP Request	318		7168	374	318	211
3	19:24:16.655	Thread Group 1-3	HTTP Request	192		7168	374	192	96
4	19:24:17.146	Thread Group 1-4	HTTP Request	130		7168	374	130	40
5	19:24:17.637	Thread Group 1-5	HTTP Request	114		7168	374	114	20
6	19:24:18.135	Thread Group 1-6	HTTP Request	176		7168	374	176	48
7	19:24:18.630	Thread Group 1-7	HTTP Request	125		7168	374	125	34
8	19:24:19.133	Thread Group 1-8	HTTP Request	134		7168	374	134	43
9	19:24:19.634	Thread Group 1-9	HTTP Request	128		7168	374	127	41
10	19:24:20.131	Thread Group 1...	HTTP Request	128		7168	374	128	36

-Graph Results:

Για 10 χρήστες τα requests δεν ήταν αρκετά για να δούμε αντιπροσωπευτικά δεδομένα στο γράφημα

2.Number of Threads (users): 75 Ramp-up period (seconds): 5 Loop Count: 1

-Summary Reports:

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HTTP Request	75	113	99	160	11.37	0.00%	14.8/sec	103.86	5.42	7168.0
TOTAL	75	113	99	160	11.37	0.00%	14.8/sec	103.86	5.42	7168.0

-Results in table (10 first and 10 last users):

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(...
1	19:29:25.796	Thread Group ...	HTTP Request	114		7168	374	114	24
2	19:29:25.859	Thread Group ...	HTTP Request	107		7168	374	107	16
3	19:29:25.926	Thread Group ...	HTTP Request	100		7168	374	100	13
4	19:29:25.993	Thread Group ...	HTTP Request	119		7168	374	119	17
5	19:29:26.065	Thread Group ...	HTTP Request	106		7168	374	106	14
6	19:29:26.134	Thread Group ...	HTTP Request	123		7168	374	123	23
7	19:29:26.196	Thread Group ...	HTTP Request	102		7168	374	102	14
8	19:29:26.263	Thread Group ...	HTTP Request	116		7168	374	116	14
9	19:29:26.333	Thread Group ...	HTTP Request	104		7168	374	104	14
10	19:29:26.396	Thread Group ...	HTTP Request	102		7168	374	102	13
65	19:29:30.081	Thread Group ...	HTTP Request	106		7168	374	106	11
66	19:29:30.148	Thread Group ...	HTTP Request	107		7168	374	107	10
67	19:29:30.215	Thread Group ...	HTTP Request	107		7168	374	107	12
68	19:29:30.282	Thread Group ...	HTTP Request	117		7168	374	117	11
69	19:29:30.347	Thread Group ...	HTTP Request	112		7168	374	112	11
70	19:29:30.416	Thread Group ...	HTTP Request	105		7168	374	105	12
71	19:29:30.482	Thread Group ...	HTTP Request	109		7168	374	109	11
72	19:29:30.550	Thread Group ...	HTTP Request	110		7168	374	110	13
73	19:29:30.617	Thread Group ...	HTTP Request	108		7168	374	108	13
74	19:29:30.684	Thread Group ...	HTTP Request	113		7168	374	113	10
75	19:29:30.751	Thread Group ...	HTTP Request	100		7168	374	100	10

-Graph Results:

3. Number of Threads (users): 150 Ramp-up period (seconds): 5 Loop Count: 1
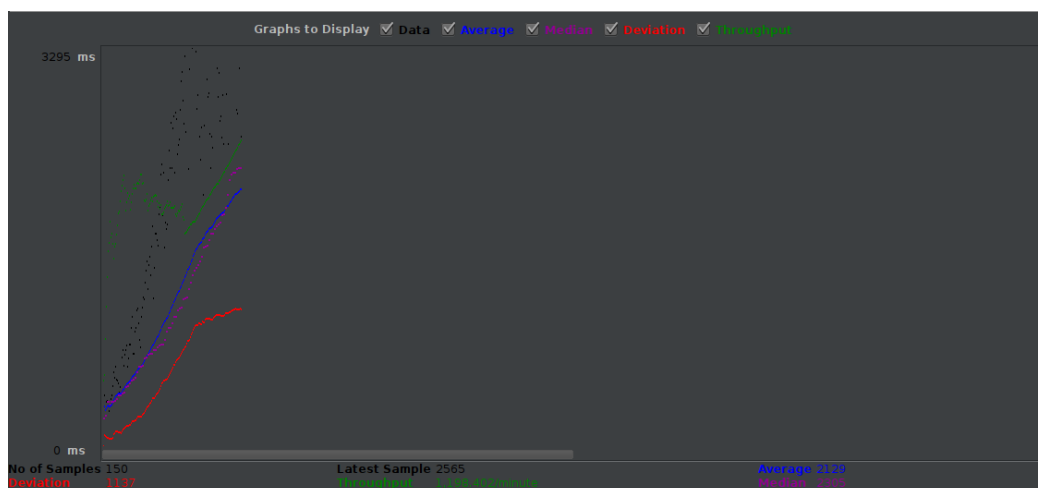
-Summary Reports:

Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/sec	Sent KB/sec	Avg. Bytes
HTTP Request	150	2129	231	4285	1137.09	0.00%	20.0/sec	139.81	7.29	7168.0
TOTAL	150	2129	231	4285	1137.09	0.00%	20.0/sec	139.81	7.29	7168.0

-Results in tables (for 10 first and 10 last users):

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(...
1	19:34:54.091	Thread Group ...	HTTP Request	231	✓	7168	374	230	27
2	19:34:54.118	Thread Group ...	HTTP Request	255	✓	7168	374	255	12
3	19:34:53.952	Thread Group ...	HTTP Request	428	✓	7168	374	428	33
4	19:34:54.023	Thread Group ...	HTTP Request	368	✓	7168	374	368	73
5	19:34:54.024	Thread Group ...	HTTP Request	381	✓	7168	374	380	72
6	19:34:54.057	Thread Group ...	HTTP Request	367	✓	7168	374	367	40
7	19:34:54.184	Thread Group ...	HTTP Request	296	✓	7168	374	296	14
8	19:34:54.151	Thread Group ...	HTTP Request	347	✓	7168	374	347	25
9	19:34:54.216	Thread Group ...	HTTP Request	396	✓	7168	374	396	17
10	19:34:54.251	Thread Group ...	HTTP Request	422	✓	7168	374	422	30

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(...
140	19:34:57.612	Thread Group ...	HTTP Request	3770	✓	7168	374	3770	51
141	19:34:57.569	Thread Group ...	HTTP Request	3817	✓	7168	374	3817	27
142	19:34:57.784	Thread Group ...	HTTP Request	3622	✓	7168	374	3622	42
143	19:34:57.663	Thread Group ...	HTTP Request	3745	✓	7168	374	3745	106
144	19:34:58.020	Thread Group ...	HTTP Request	3393	✓	7168	374	3393	27
145	19:34:58.644	Thread Group ...	HTTP Request	2789	✓	7168	374	2789	13
146	19:34:58.680	Thread Group ...	HTTP Request	2754	✓	7168	374	2754	20
147	19:34:57.848	Thread Group ...	HTTP Request	3588	✓	7168	374	3588	40
148	19:34:58.310	Thread Group ...	HTTP Request	3132	✓	7168	374	3131	17
149	19:34:57.762	Thread Group ...	HTTP Request	3685	✓	7168	374	3685	44
150	19:34:58.897	Thread Group ...	HTTP Request	2565	✓	7168	374	2565	79

-Graph Results:

Για την ανάλυση των επιδόσεων του REST API χρησιμοποιήθηκε το εργαλείο Jmeter

**ΑΝΑΛΥΣΗ ΔΕΙΓΜΑΤΩΝ:**

**Παρατηρήσαμε ότι ο μέγιστος αριθμός ταυτόχρονων requests που μπορεί να εξυπηρετήσει το REST API μας χωρίς κανένα error ειναι περίπου 150.

Ανάλυση Graph:
- `Data` - plot the actual data values
- `Average` - plot the Average
- `Median` - plot the Median (midway value)
- `Deviation` - plot the Standard Deviation (a measure of the variation)
- `Throughput` - plot the number of samples per unit of time

Ανάλυση Summary Report:
- `Label` - The label of the sample. If "`Include group name in label?`" is selected, then the name of the thread group is added as a prefix. This allows identical labels from different thread groups to be collated separately if required.
- `# Samples` - The number of samples with the same label
- `Average` - The average elapsed time of a set of results
- `Min` - The lowest elapsed time for the samples with the same label
- `Max` - The longest elapsed time for the samples with the same label
- `Std. Dev.` - the Standard Deviation of the sample elapsed time
- `Error %` - Percent of requests with errors
- `Throughput` - the Throughput is measured in requests per second/minute/hour. The time unit is chosen so that the displayed rate is at least `1.0`. When the throughput is saved to a CSV file, it is expressed in requests/second, i.e. 30.0 requests/minute is saved as `0.5`.
- `Received KB/sec` - The throughput measured in Kilobytes per second
- `Sent KB/sec` - The throughput measured in Kilobytes per second
- `Avg. Bytes` - average size of the sample response in bytes.

ΠΗΓΕΣ: https://jmeter.apache.org/