

DayAheadTotalLoadForecast

Method:GET

Path: /energy/api/DayAheadTotalLoadForecast/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/s...	Sent KB/sec	Avg. Bytes
DayAheadT...	10	45	31	159	37.78	0.00%	2.2/sec	15.93	0.72	7409.0

-Results in Table (first 10 users):

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(...)
1	15:55:44.270	Thread Grou...	DayAheadTot...	159		7409	334	159	29
2	15:55:44.772	Thread Grou...	DayAheadTot...	34		7409	334	34	7
3	15:55:45.271	Thread Grou...	DayAheadTot...	34		7409	334	34	8
4	15:55:45.770	Thread Grou...	DayAheadTot...	33		7409	334	33	8
5	15:55:46.277	Thread Grou...	DayAheadTot...	32		7409	334	32	7
6	15:55:46.777	Thread Grou...	DayAheadTot...	34		7409	334	34	8
7	15:55:47.276	Thread Grou...	DayAheadTot...	33		7409	334	33	7
8	15:55:47.774	Thread Grou...	DayAheadTot...	31		7409	334	31	5
9	15:55:48.279	Thread Grou...	DayAheadTot...	35		7409	334	35	8
10	15:55:48.779	Thread Grou...	DayAheadTot...	32		7409	334	32	7

-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/s...	Sent KB/sec	Avg. Bytes
DayAheadT...	75	35	30	139	13.33	0.00%	15.0/sec	108.75	4.90	7409.0

-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	15:59:55.647	Thread Grou...	DayAheadTo...	139		7409	334	139	36
2	15:59:55.713	Thread Grou...	DayAheadTo...	77		7409	334	77	41
3	15:59:55.782	Thread Grou...	DayAheadTo...	41		7409	334	41	14
4	15:59:55.849	Thread Grou...	DayAheadTo...	33		7409	334	33	8
5	15:59:55.917	Thread Grou...	DayAheadTo...	32		7409	334	32	7
6	15:59:55.984	Thread Grou...	DayAheadTo...	32		7409	334	32	7
7	15:59:56.052	Thread Grou...	DayAheadTo...	31		7409	334	31	7
8	15:59:56.118	Thread Grou...	DayAheadTo...	35		7409	334	35	7
9	15:59:56.185	Thread Grou...	DayAheadTo...	37		7409	334	37	8
10	15:59:56.249	Thread Grou...	DayAheadTo...	36		7409	334	36	8
65	15:59:59.937	Thread Grou...	DayAheadTo...	32		7409	334	32	8
66	16:00:00.006	Thread Grou...	DayAheadTo...	31		7409	334	31	7
67	16:00:00.073	Thread Grou...	DayAheadTo...	33		7409	334	33	7
68	16:00:00.139	Thread Grou...	DayAheadTo...	34		7409	334	34	7
69	16:00:00.205	Thread Grou...	DayAheadTo...	44		7409	334	44	11
70	16:00:00.271	Thread Grou...	DayAheadTo...	38		7409	334	38	9
71	16:00:00.336	Thread Grou...	DayAheadTo...	31		7409	334	31	6
72	16:00:00.407	Thread Grou...	DayAheadTo...	31		7409	334	31	6
73	16:00:00.473	Thread Grou...	DayAheadTo...	31		7409	334	31	6
74	16:00:00.540	Thread Grou...	DayAheadTo...	34		7409	334	34	6
75	16:00:00.607	Thread Grou...	DayAheadTo...	30		7409	334	30	6

-Graph Results:



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

-Summary Reports:

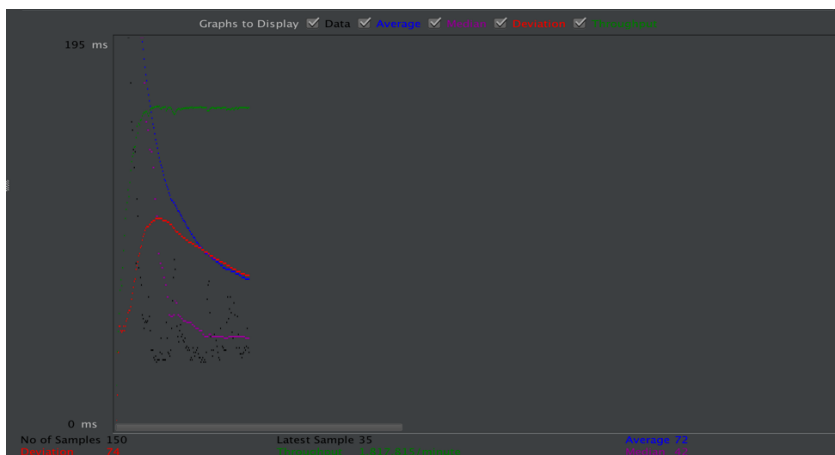
Label	# Samples	Average	Min	Max	Std. Dev.	Error %	Throughput	Received KB/s...	Sent KB/sec	Avg. Bytes
DayAheadT...	150	72	30	385	74.13	0.00%	30.3/sec	219.21	9.88	7409.0

-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	15:13:39.044	Thread Grou...	DayAheadTo...	289	✓	7409	334	289	118
2	15:13:39.081	Thread Grou...	DayAheadTo...	262	✓	7409	334	262	84
3	15:13:39.009	Thread Grou...	DayAheadTo...	347	✓	7409	334	347	151
4	15:13:38.977	Thread Grou...	DayAheadTo...	385	✓	7409	334	385	31
5	15:13:39.109	Thread Grou...	DayAheadTo...	265	✓	7409	334	265	58
6	15:13:39.144	Thread Grou...	DayAheadTo...	273	✓	7409	334	273	26
7	15:13:39.254	Thread Grou...	DayAheadTo...	258	✓	7409	334	258	131
8	15:13:39.278	Thread Grou...	DayAheadTo...	239	✓	7409	334	239	113
9	15:13:39.174	Thread Grou...	DayAheadTo...	350	✓	7409	334	350	26
10	15:13:39.208	Thread Grou...	DayAheadTo...	328	✓	7409	334	328	175

140	15:13:43.562	Thread Grou...	DayAheadTo...	34	✓	7409	334	34	8
141	15:13:43.595	Thread Grou...	DayAheadTo...	34	✓	7409	334	34	7
142	15:13:43.632	Thread Grou...	DayAheadTo...	32	✓	7409	334	32	6
143	15:13:43.662	Thread Grou...	DayAheadTo...	34	✓	7409	334	34	7
144	15:13:43.695	Thread Grou...	DayAheadTo...	35	✓	7409	334	35	7
145	15:13:43.730	Thread Grou...	DayAheadTo...	37	✓	7409	334	37	7
146	15:13:43.759	Thread Grou...	DayAheadTo...	36	✓	7409	334	36	8
147	15:13:43.792	Thread Grou...	DayAheadTo...	38	✓	7409	334	37	9
148	15:13:43.829	Thread Grou...	DayAheadTo...	47	✓	7409	334	47	7
149	15:13:43.860	Thread Grou...	DayAheadTo...	37	✓	7409	334	37	7
150	15:13:43.893	Thread Grou...	DayAheadTo...	35	✓	7409	334	35	7

-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 είναι 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/>