# ActualTotalLoad

### Method:GET

Path: /energy/api/ActualTotalLoad/Greece/PT60M/year/2018

1.Number of Threads (users): 50 Ramp-up period (seconds): 3 Loop Count: 1

## -Summary Report:

| Label        | # Samples | Average | Min  | Max  | Std. Dev. | Error % | Throughput | Received KB/s | Sent KB/sec | Avg. Bytes |
|--------------|-----------|---------|------|------|-----------|---------|------------|---------------|-------------|------------|
| HTTP Request |           | 3009    | 1225 | 4508 | 923,94    | 0,00%   | 9,2/sec    | 3,67          | 2,85        | 409,0      |
| TOTAL        |           | 3009    | 1225 | 4508 | 923,94    | 0,00%   | 9,2/sec    | 3,67          | 2,85        | 409,0      |

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

|          |              | 10 jii 30 aii    | U U . U. U . |               |          |       |            |         |               |
|----------|--------------|------------------|--------------|---------------|----------|-------|------------|---------|---------------|
| Sample # | Start Time   | Thread Name      | Label        | Sample Time(m | Status   | Bytes | Sent Bytes | Latency | Connect Time( |
| 1        | 17:24:23.644 | 4 ActualTotalLoa | HTTP Request | 1225          | <b>⊙</b> | 409   | 318        | 1225    | 13            |
| 2        | 17:24:23.414 | 4 ActualTotalLoa | HTTP Request | 1473          | <b>⊙</b> |       | 318        | 1473    | 24            |
| 3        | 17:24:22.820 | ActualTotalLoa   | HTTP Request | 2074          | €        |       | 318        | 2074    | 410           |
| 4        | 17:24:22.820 | ActualTotalLoa   | HTTP Request | 2076          | <b>⊙</b> |       | 318        | 2076    | 459           |
| 5        | 17:24:23.591 | 1 ActualTotalLoa | HTTP Request | 1307          | <b>⊙</b> | 409   | 318        | 1307    | 13            |
| 6        | 17:24:22.997 | 7 ActualTotalLoa | HTTP Request | 1904          | €        | 409   | 318        | 1904    | 233           |
| 7        | 17:24:22.877 | 7 ActualTotalLoa | HTTP Request | 2032          | €        | 409   | 318        | 2032    | 353           |
| 8        | 17:24:22.820 | ActualTotalLoa   | HTTP Request | 2092          | €        | 409   | 318        | 2092    |               |
| 9        | 17:24:23.233 | ActualTotalLoa   | HTTP Request | 1682          | <b>⊙</b> | 409   | 318        | 1682    |               |
| 10       | 17:24:23.302 | 2 ActualTotalLoa | HTTP Request | 2060          | ਂ        | 409   | 318        | 2060    | 25            |
| 40       | 17:24:24.013 | 3 ActualTotalLoa | HTTP Request | 4230          | <b>⊙</b> |       | 318        | 4229    |               |
| 41       | 17:24:24.133 | 3 ActualTotalLoa | HTTP Request | 4113          | <b>⊙</b> |       | 318        | 4113    | 14            |
| 42       | 17:24:24.609 | 9 ActualTotalLoa | HTTP Request | 3638          | <b>⊙</b> | 409   | 318        | 3638    |               |
| 43       | 17:24:24.969 | 9 ActualTotalLoa | HTTP Request | 3279          | <b>⊙</b> | 409   | 318        | 3279    | 8             |
| 44       | 17:24:24.549 | 9 ActualTotalLoa | HTTP Request | 3703          |          | 409   | 318        | 3703    | 14            |
| 45       |              | 9 ActualTotalLoa |              | 3824          | <b>⊙</b> | 409   | 318        | 3824    | 12            |
| 46       | 17:24:25.203 | 3 ActualTotalLoa | HTTP Request | 3054          |          | 409   | 318        | 3054    | 9             |
| 47       |              | 3 ActualTotalLoa |              | 4497          | <u> </u> | 409   | 318        | 4497    | 11            |
| 48       |              | 9 ActualTotalLoa |              | 4382          | Ÿ        | 409   |            | 4381    | 13            |
| 49       |              | 3 ActualTotalLoa |              | 3001          | <u> </u> | 409   | 318        | 3001    | 12            |
| 50       | 17:24:24.728 | B ActualTotalLoa | HTTP Request | 3537          | €        | 409   | 318        | 3537    | 12            |

-Graph Results:



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

## -Summary Report:

| -            | -         |         |     |      |           |         |            |               |             |            |
|--------------|-----------|---------|-----|------|-----------|---------|------------|---------------|-------------|------------|
| Label        | # Samples | Average | Min | Max  | Std. Dev. | Error % | Throughput | Received KB/s | Sent KB/sec | Avg. Bytes |
| HTTP Request | 150       | 4163    | 747 | 8881 | 1542,68   | 0,00%   | 12,7/sec   | 5,06          | 3,93        | 409,0      |
| TOTAL        | 150       | 4163    | 747 | 8881 | 1542 68   | 0.00%   | 12.7/sec   | 5.06          | 3.93        | 409 0      |

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

|          |               |                   |              |               |          | - :   |            |         |               |
|----------|---------------|-------------------|--------------|---------------|----------|-------|------------|---------|---------------|
| Sample # | Start Time    | Thread Name       | Label        | Sample Time(m | Status   | Bytes | Sent Bytes | Latency | Connect Time( |
|          | 1 18:11:16.59 | 96 ActualTotalLoa | HTTP Request | 781           | <b>⊘</b> | 409   | 318        | 781     | 9             |
|          | 2 18:11:16.45 | 57 ActualTotalLoa | HTTP Request | 923           | <b>⊙</b> | 409   | 318        | 923     | 15            |
| :        | 3 18:11:16.65 | 57 ActualTotalLoa | HTTP Request | 747           | <b>⊙</b> | 409   | 318        | 747     | 9             |
|          | 4 18:11:16.49 | 98 ActualTotalLoa | HTTP Request | 912           | €        | 409   | 318        | 912     | 9             |
|          | 5 18:11:16.37 | 74 ActualTotalLoa | HTTP Request | 1049          | <b>⊙</b> | 409   | 318        | 1049    | 56            |
|          | 18:11:16.24   | 40 ActualTotalLoa | HTTP Request | 1188          | €        | 409   | 318        | 1188    | 20            |
|          | 7 18:11:16.27 | 73 ActualTotalLoa | HTTP Request | 1168          | €        | 409   | 318        | 1168    | 144           |
|          | 18:11:16.61   | 16 ActualTotalLoa | HTTP Request | 829           | €        |       | 318        | 829     | 8             |
|          | 18:11:16.35   | 54 ActualTotalLoa | HTTP Request | 1107          | €        |       | 318        | 1106    | 71            |
| 1        | 18:11:16.5    | 56 ActualTotalLoa | HTTP Request | 913           | <b>⊙</b> |       | 318        | 913     | 10            |
| 140      | 18:11:17.22   | 22 ActualTotalLoa | HTTP Request | 5395          | €        | 409   | 318        | 5395    | 8             |
| 14       | 18:11:17.36   | 32 ActualTotalLoa | HTTP Request | 5256          | <b>⊙</b> | 409   | 318        | 5256    | 9             |
| 142      | 2 18:11:19.08 | 33 ActualTotalLoa | HTTP Request | 3538          | <b>⊙</b> | 409   | 318        | 3538    | 6             |
| 143      | 18:11:17.56   | 3 ActualTotalLoa  | HTTP Request | 5058          | <b>⊙</b> | 409   | 318        |         | 10            |
| 144      | 18:11:18.22   | 26 ActualTotalLoa | HTTP Request | 4397          | <b>⊙</b> | 409   | 318        | 4397    | 8             |
| 145      | 18:11:18.52   | 24 ActualTotalLoa | HTTP Request | 4100          | <b>⊙</b> | 409   | 318        | 4100    | 7             |
| 140      | 18:11:19.04   | 12 ActualTotalLoa | HTTP Request | 3584          | €        | 409   | 318        | 3584    | 9             |
| 147      | 7 18:11:17.90 | 06 ActualTotalLoa | HTTP Request | 4720          | €        | 409   | 318        | 4720    | 6             |
| 148      | 18:11:19.24   | 43 ActualTotalLoa | HTTP Request | 8830          | <b>⊙</b> |       | 318        | 8830    | 9             |
| 149      | 18:11:19.22   | 23 ActualTotalLoa | HTTP Request | 8857          | <b>⊙</b> |       | 318        | 8857    | 6             |
| 150      | 18:11:19.20   | 3 ActualTotalLoa  | HTTP Request | 8881          | <b>⊘</b> |       | 318        | 8881    | 7             |

# -Graph Results:



# 3. Number of Threads (users): 153 Ramp-up period (seconds): 3 Loop Count: 1

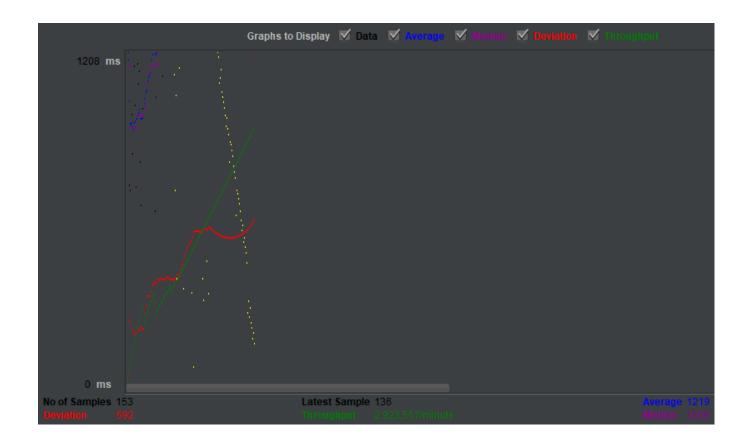
# -Summary Report:

| Label        | # Samples | Average | Min | Max  | Std. Dev. | Error % | Throughput | Received KB/s | Sent KB/sec | Avg. Bytes |
|--------------|-----------|---------|-----|------|-----------|---------|------------|---------------|-------------|------------|
| HTTP Request | 153       | 1219    |     | 2496 | 592,91    | 66,01%  | 48,7/sec   | 130,91        | 5,14        | 2751,1     |
| TOTAL        | 153       | 1219    | 50  | 2496 | 592.91    | 66.01%  | 48.7/sec   | 130.91        | 5.14        | 2751.1     |

## -Results in tables:

| Sample # | Start Time     | Thread Name      | Label        | Sample Time(m | Status   | Bytes | Sent Bytes | Latency | Connect Time( |
|----------|----------------|------------------|--------------|---------------|----------|-------|------------|---------|---------------|
|          | 1 18:29:31.759 | ActualTotalLoa   | HTTP Request | 1159          | <b>⊙</b> |       | 318        | 1159    | 57            |
|          | 2 18:29:31.714 | 4 ActualTotalLoa | HTTP Request | 1208          | <b>⊙</b> |       | 318        | 1208    | 101           |
|          | 3 18:29:32.210 | ActualTotalLoa   | HTTP Request | 718           | €        |       | 318        | 718     | 6             |
|          | 4 18:29:32.230 | ActualTotalLoa   | HTTP Request | 700           | <b>⊙</b> |       | 318        |         | 6             |
|          | 5 18:29:32.014 | 4 ActualTotalLoa | HTTP Request | 931           | <b>⊙</b> |       | 318        | 931     | 5             |
|          | 6 18:29:31.967 | 7 ActualTotalLoa | HTTP Request | 979           | <b>⊙</b> |       | 318        | 979     | 7             |
|          | 7 18:29:32.110 | ActualTotalLoa   | HTTP Request | 837           | <b>⊙</b> |       | 318        | 837     | 7             |
|          | 8 18:29:32.089 | ActualTotalLoa   | HTTP Request | 863           | <b>⊙</b> |       | 318        | 863     | 7             |
|          | 9 18:29:31.80  | 1 ActualTotalLoa | HTTP Request | 1156          | €        |       | 318        | 1156    | 18            |
| 1        | 0 18:29:31.947 | 7 ActualTotalLoa | HTTP Request | 1014          | €        | 409   | 318        | 1014    | 8             |
| :        | 50 18:29:33.04 | 1 ActualTotalLoa | HTTP Request | 1450          | Ó        |       | 318        | 1450    | 10            |
|          | 18:29:32.92    | 1 ActualTotalLoa | HTTP Request | 1583          | ©        |       | 318        | 1583    | 14            |
| :        | 18:29:32.90    | 1 ActualTotalLoa | HTTP Request | 1613          | <b>⊙</b> |       | 318        | 1613    | 7             |
| :        | 18:29:33.07    | 9 ActualTotalLoa | HTTP Request | 1681          | ◎        | 3957  |            |         | 7             |
|          | 18:29:33.53    | 8 ActualTotalLoa | HTTP Request | 1222          | <b>©</b> | 3957  |            |         | 9             |
|          | 55 18:29:32.98 | 3 ActualTotalLoa | HTTP Request | 1777          | ⊗        | 3957  | 0          | 0       | 7             |

# -Graph Results:



#### ΑΝΑΛΥΣΗ ΔΕΙΓΜΑΤΩΝ:

Παρατηρούμε ότι για την συγκεκριμένη λειτουργικότητα το REST API μας μπορεί να εξυπηρετήσει επιτυχώς 150 αιτήματα. Αν όμως 153 χρήστες πραγματοποιήσουν αίτημα το API μας θα καταφέρει να εξυπηρετήσει μόνο 52 αιτήματα ποσοστό 33%. Από τα παραπάνω δείγματα φαίνεται πιο ξεκάθαρα οι επιδόσεις του REST API.

#### 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 <u>Throughput</u> 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.