

Profiling node js application

node -prof ./bin/www

node --prof-process bin/www

Shows the usage of languages in application

```
Statistical profiling result from .\isolate-000001678CB28310-v8.log, (29 ticks, 28 unaccounted, 0 excluded).

[Shared libraries]:
  ticks  total  nonlib   name
[JavaScript]:
  ticks  total  nonlib   name
    1     3.4%    3.4%  Stub: CEntryStub
[C++]:
  ticks  total  nonlib   name
[Summary]:
  ticks  total  nonlib   name
    1     3.4%    3.4%  JavaScript
    0     0.0%    0.0%  C++
    1     3.4%    3.4%  GC
    0     0.0%    0.0%  Shared libraries
   28    96.6%    0.0%  Unaccounted
[C++ entry points]:
  ticks  cpp  total   name
```

Bottom up (heavy) profile is where you can get information about “heavy” functions. Here there is nothing that is bottleneck in application.

```
[Bottom up (heavy) profile]:
Note: percentage shows a share of a particular caller in the total
amount of its parent calls.
Callers occupying less than 2.0% are not shown.

  ticks parent  name
    28   96.6% UNKNOWN
     7   25.0%   LazyCompile: ~runInThisContext node.js:882:28
     7  100.0%   LazyCompile: ~NativeModule.compile node.js:963:44
     7  100.0%   LazyCompile: ~NativeModule.require node.js:897:34
     2   28.6%   LazyCompile: ~startup node.js:13:19
     2  100.0%   Function: ~<anonymous> node.js:10:10
     2   28.6%   Function: ~<anonymous> module.js:1:11
     2  100.0%   LazyCompile: ~NativeModule.compile node.js:963:44
     1   14.3%   LazyCompile: ~startup.globalVariables node.js:192:37
     1  100.0%   LazyCompile: ~startup node.js:13:19
     1   14.3%   Function: ~<anonymous> timers.js:1:11
     1  100.0%   LazyCompile: ~NativeModule.compile node.js:963:44
     1   14.3%   Function: ~<anonymous> stream.js:1:11
     1  100.0%   LazyCompile: ~NativeModule.compile node.js:963:44
     2    7.1%   Function: ~<anonymous> buffer.js:1:11
     2  100.0%   LazyCompile: ~NativeModule.compile node.js:963:44
     2  100.0%   LazyCompile: ~NativeModule.require node.js:897:34
     2  100.0%   LazyCompile: ~startup.globalVariables node.js:192:37
     2  100.0%   LazyCompile: ~startup node.js:13:19
     1    3.6%   LazyCompile: ~startup.processKillAndExit node.js:755:40
     1  100.0%   LazyCompile: ~startup node.js:13:19
     1  100.0%   Function: ~<anonymous> node.js:10:10
     1    3.6%   LazyCompile: ~some native array.js:987:19
     1  100.0%   Function: ~<anonymous> node.js:10:10
     1    3.6%   LazyCompile: ~replace native string.js:152:23
     1  100.0%   LazyCompile: ~startup.processConfig node.js:267:35
     1  100.0%   LazyCompile: ~startup node.js:13:19
     1  100.0%   Function: ~<anonymous> node.js:10:10
     1    3.6%   LazyCompile: ~hasOwnProperty native v8natives.js:111:30
     1  100.0%   LazyCompile: ~NativeModule.exists node.js:925:33
     1  100.0%   LazyCompile: ~NativeModule.require node.js:897:34
     1  100.0%   LazyCompile: ~startup node.js:13:19
     1  100.0%   Function: ~<anonymous> node.js:10:10
     1    3.6%   LazyCompile: ~forEach native array.js:961:22
     1  100.0%   Function: ~<anonymous> fs.js:1:11
     1  100.0%   LazyCompile: ~NativeModule.compile node.js:963:44
     1  100.0%   LazyCompile: ~NativeModule.require node.js:897:34
     1  100.0%   Function: ~<anonymous> module.js:1:11
     1    3.6%   LazyCompile: ~exports.inherits util.js:745:28
     1  100.0%   Function: ~<anonymous> stream.js:1:11
     1  100.0%   LazyCompile: ~NativeModule.compile node.js:963:44
     1  100.0%   LazyCompile: ~NativeModule.require node.js:897:34
     1  100.0%   Function: ~<anonymous> fs.js:1:11
```

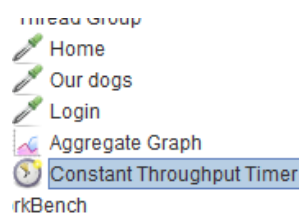
```

1 100.0% LazyCompile: ~startup node.js:13:19
1 100.0% Function: ~<anonymous> node.js:10:10
1 3.6% LazyCompile: ~some native array.js:987:19
1 100.0% Function: ~<anonymous> node.js:10:10
1 3.6% LazyCompile: ~replace native string.js:152:23
1 100.0% LazyCompile: ~startup.processConfig node.js:267:35
1 100.0% LazyCompile: ~startup node.js:13:19
1 100.0% Function: ~<anonymous> node.js:10:10
1 3.6% LazyCompile: ~hasOwnProperty native v8natives.js:111:30
1 100.0% LazyCompile: ~NativeModule.exists node.js:925:33
1 100.0% LazyCompile: ~NativeModule.require node.js:897:34
1 100.0% LazyCompile: ~startup node.js:13:19
1 100.0% Function: ~<anonymous> node.js:10:10
1 3.6% LazyCompile: ~forEach native array.js:961:22
1 100.0% Function: ~<anonymous> fs.js:1:11
1 100.0% LazyCompile: ~NativeModule.compile node.js:963:44
1 100.0% LazyCompile: ~NativeModule.require node.js:897:34
1 100.0% Function: ~<anonymous> module.js:1:11
1 3.6% LazyCompile: ~exports.inherits util.js:745:28
1 100.0% Function: ~<anonymous> stream.js:1:11
1 100.0% LazyCompile: ~NativeModule.compile node.js:963:44
1 100.0% LazyCompile: ~NativeModule.require node.js:897:34
1 100.0% Function: ~<anonymous> fs.js:1:11
1 3.6% LazyCompile: ~Revive native json.js:19:16
1 100.0% LazyCompile: ~Revive native json.js:19:16
1 100.0% LazyCompile: ~Revive native json.js:19:16
1 100.0% LazyCompile: ~parse native json.js:43:19
1 100.0% LazyCompile: ~startup.processConfig node.js:267:35
1 3.6% LazyCompile: ~NativeModule.getCached node.js:921:36
1 100.0% LazyCompile: ~NativeModule.require node.js:897:34
1 100.0% LazyCompile: ~startup.globalVariables node.js:192:37
1 100.0% LazyCompile: ~startup node.js:13:19
1 100.0% Function: ~<anonymous> node.js:10:10
1 3.6% LazyCompile: ~Module._resolveFilename module.js:313:35
1 100.0% LazyCompile: Module._load module.js:273:24
1 100.0% LazyCompile: ~Module.runMain module.js:429:26
1 100.0% LazyCompile: ~startup node.js:13:19
1 100.0% Function: ~<anonymous> node.js:10:10
1 3.6% LazyCompile: ~DefineOwnProperty native v8natives.js:633:27
1 100.0% LazyCompile: ~defineProperties native v8natives.js:801:32
1 100.0% LazyCompile: ~create native v8natives.js:757:22
1 100.0% LazyCompile: ~startup node.js:13:19
1 100.0% Function: ~<anonymous> node.js:10:10
1 3.6% LazyCompile: ~CallSiteToString native messages.js:432:26
1 100.0% LazyCompile: FormatStackTrace native messages.js:568:26
1 100.0% LazyCompile: ~aU native messages.js:618:16
1 3.6% Function: ~<anonymous> util.js:1:11
1 100.0% LazyCompile: ~NativeModule.compile node.js:963:44
1 100.0% LazyCompile: ~NativeModule.require node.js:897:34
1 100.0% Function: ~<anonymous> assert.js:1:11
1 100.0% LazyCompile: ~NativeModule.compile node.js:963:44

1 3.4% Stub: CEntryStub
1 100.0% LazyCompile: ~GetStackFrames native messages.js:553:24
1 100.0% LazyCompile: FormatStackTrace native messages.js:568:26
1 100.0% LazyCompile: ~aU native messages.js:618:16

```

JMeter



Login POST

Web Server		Timeouts (milliseconds)	
Server Name or IP:	localhost	Port Number:	3000
		Connect:	
		Response:	
HTTP Request			
Implementation:		Protocol [http]:	
		Method:	POST
		Content encoding:	
Path: login			
<input type="checkbox"/> Redirect Automatically <input checked="" type="checkbox"/> Follow Redirects <input checked="" type="checkbox"/> Use KeepAlive <input type="checkbox"/> Use multipart/form-data for POST <input type="checkbox"/> Browser-compatible headers			
<div>Parameters Body Data Files Upload</div>			
Send Parameters With the Request:			
Name:	Value	Encode?	
username	amela		<input type="checkbox"/>
password	123		<input type="checkbox"/>

Our dogs GET

HTTP Request			
Name: Our dogs			
Comments:			
<div>Basic Advanced</div>			
Web Server		Timeouts (milliseconds)	
Server Name or IP:	localhost	Port Number:	3000
		Connect:	
HTTP Request			
Implementation:		Protocol [http]:	
		Method:	GET
		Content encoding:	
Path: ourdogs			
<input type="checkbox"/> Redirect Automatically <input checked="" type="checkbox"/> Follow Redirects <input checked="" type="checkbox"/> Use KeepAlive <input type="checkbox"/> Use multipart/form-data for POST <input type="checkbox"/> Browser-compatible headers			
<div>Parameters Body Data Files Upload</div>			
Send Parameters With the Request:			

Home GET

HTTP Request			
Name: Home			
Comments:			
<div>Basic Advanced</div>			
Web Server		Timeouts (milliseconds)	
Server Name or IP:	localhost	Port Number:	3000
		Connect:	
HTTP Request			
Implementation:		Protocol [http]:	
		Method:	GET
		Content encoding:	
Path:			
<input type="checkbox"/> Redirect Automatically <input checked="" type="checkbox"/> Follow Redirects <input checked="" type="checkbox"/> Use KeepAlive <input type="checkbox"/> Use multipart/form-data for POST <input type="checkbox"/> Browser-compatible headers			
<div>Parameters Body Data Files Upload</div>			
Send Parameters With the Request:			
Name:	Value		

Tests:

Test Plan

- Thread Group
 - Home
 - Our dogs
 - Login
 - Aggregate Graph
 - Constant Throughput Timer
- WorkBench

Thread Group

Name: Thread Group

Comments:

Action to be taken after a Sampler error

☒ Continue ☐ Start Next Thread L

Thread Properties

Number of Threads (users): 10

Ramp-Up Period (in seconds): 60

Loop Count: ☐ Forever 2

☐ Delay Thread creation until needed

☐ Scheduler

Scheduler Configuration

Duration (seconds)

Test Plan

- Thread Group
 - Home
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 - Aggregate Graph
 - Constant Throughput Timer
- WorkBench

Aggregate Graph

Name: Aggregate Graph

Comments:

Write results to file / Read from file

Filename Log/Display Only: ☐ Errors ☐ Successes

Label	# Samples	Average	Median	90% Line	95% Line	99% Line	Min	Max	Error %	Throughput	Received KB	Sent KB
Home	80	37	34	53	67	70	29	78	0.00%	15.2/min	0.74	
Our dogs	80	53	49	69	75	86	40	100	0.00%	15.2/min	1.08	
Login	80	35	32	48	51	59	27	78	0.00%	15.2/min	0.68	
TOTAL	240	42	37	58	69	85	27	100	0.00%	45.6/min	2.49	

Settings **Graph**

Aggregate Graph

Test Plan

- Thread Group
 - Home
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 - Aggregate Graph
 - Constant Throughput Timer
- WorkBench

Thread Group

Name: Thread Group

Comments:

Action to be taken after a Sampler error

☒ Continue ☐ Start

Thread Properties

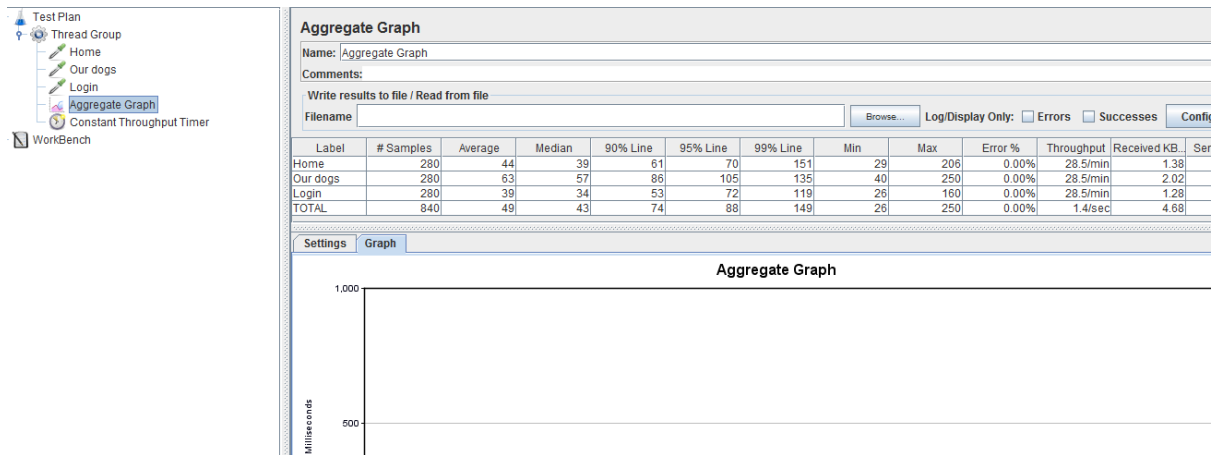
Number of Threads (users): 100

Ramp-Up Period (in seconds): 60

Loop Count: ☐ Forever 2

☐ Delay Thread creation until needed

☐ Scheduler



For 10 000 users

