

Laboratorium - NoSQL - raport

Bartosz Szar

wyniki testu trwającego 3 minuty i wykonanego lokalnie z wykorzystaniem aplikacji locust dla parametrów:

- "Number of total users to simulate": 40
- "Hatch rate": 10



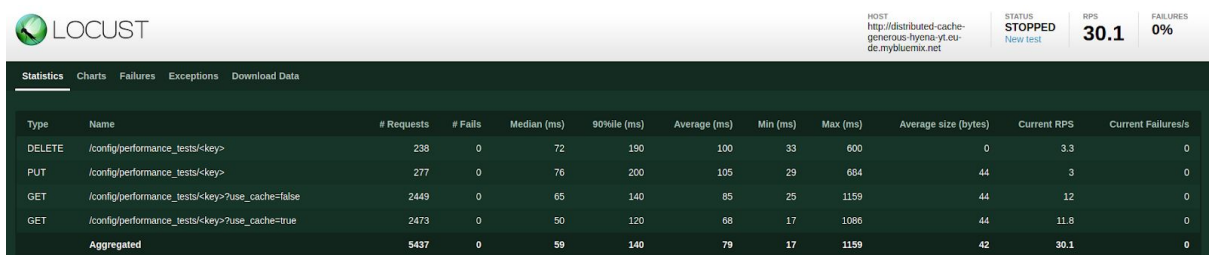
The screenshot shows the Locust web interface with the following data:

Type	Name	# Requests	# Fails	Median (ms)	90thile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
DELETE	/config/load_tests/<key>	220	0	190	510	237	50	1106	0	0.3	0
PUT	/config/load_tests/<key>	260	0	160	510	229	52	1284	44	0.5	0
GET	/config/load_tests/<key>?use_cache=false	2239	0	120	440	199	48	1587	44	10.5	0
GET	/config/load_tests/<key>?use_cache=true	2612	0	5	12	9	3	419	44	15	0
Aggregated		5331	0	51	310	109	3	1587	42	26.3	0

Summary: HOST: http://0.0.0.0:8080, STATUS: STOPPED, RPS: 26.3, FAILURES: 0%

wyniki testu trwającego 3 minuty i wykonanego na IBM Cloud z wykorzystaniem aplikacji locust dla parametrów:

- "Number of total users to simulate": 40
- "Hatch rate": 10



The screenshot shows the Locust web interface with the following data:

Type	Name	# Requests	# Fails	Median (ms)	90thile (ms)	Average (ms)	Min (ms)	Max (ms)	Average size (bytes)	Current RPS	Current Failures/s
DELETE	/config/performance_tests/<key>	238	0	72	190	100	33	600	0	3.3	0
PUT	/config/performance_tests/<key>	277	0	76	200	105	29	684	44	3	0
GET	/config/performance_tests/<key>?use_cache=false	2449	0	65	140	85	25	1159	44	12	0
GET	/config/performance_tests/<key>?use_cache=true	2473	0	50	120	68	17	1086	44	11.8	0
Aggregated		5437	0	59	140	79	17	1159	42	30.1	0

Summary: HOST: http://distributed-cache-generous-hyena-yl.eu-de.mybluemix.net, STATUS: STOPPED, RPS: 30.1, FAILURES: 0%

wyjaśnienie rozbieżności w wynikach uruchomionych lokalnie oraz w chmurze:

Wyniki testów przedstawiają zauważalną (aczkolwiek nie miażdżącą) różnicę na korzyść instancji w chmurze. Jest to spowodowane jej bezpośrednim dostępem do bazy danych.

odpowieź z komendy `ibmcloud target`:

```
[brtk@T480 distributed-cache-python]$ ibmcloud target

API endpoint:      https://cloud.ibm.com
Region:           eu-de
User:             szarbartosz@student.agh.edu.pl
Account:          Bartosz Szar's Account (e5ac19ff559ee4bb4a020223337586c04)
Resource group:    No resource group targeted, use 'ibmcloud target -g RESOURCE_GROUP'
CF API endpoint:   https://api.eu-de.cf.cloud.ibm.com (API version: 2.147.0)
Org:              szarbartosz@student.agh.edu.pl
Space:            test
```

odpowieź z komendy `ibmcloud cf app distributed-cache`:

```
[brtk@T480 distributed-cache-python]$ ibmcloud cf app distributed-cache
Invoking 'cf app distributed-cache'...

Showing health and status for app distributed-cache in org szarbartosz@student.agh.edu.pl / space test as szarbartosz@student.agh.edu.pl...

name:           distributed-cache
requested state: started
routes:         distributed-cache-generous-hyena-yt.eu-de.mybluemix.net
last uploaded:  Tue 26 May 20:03:09 CEST 2020
stack:          cflinuxfs3
buildpacks:     python

type:           web
instances:      4/4
memory usage:   256M

   state   since                cpu    memory       disk          details
#0   running  2020-05-26T18:03:29Z    0.5%   37.2M of 256M  253.1M of 16
#1   running  2020-05-26T18:03:39Z    0.3%   37.5M of 256M  253.1M of 16
#2   running  2020-05-26T18:03:29Z    0.4%   37M of 256M    253.1M of 16
#3   running  2020-05-26T18:03:27Z    0.2%   37.3M of 256M  253.1M of 16
```

odpowieź z komendy `ibmcloud cf logs distributed-cache --recent | head -n 20`:

```
[brtk@T480 distributed-cache-python]$ ibmcloud cf logs distributed-cache --recent | head -n 20
Invoking 'cf logs distributed-cache --recent'...

Retrieving logs for app distributed-cache in org szarbartosz@student.agh.edu.pl / space test as szarbartosz@student.agh.edu.pl...

2020-05-26T20:31:20.68+0200 [RTR/0] OUT distributed-cache-generous-hyena-yt.eu-de.mybluemix.net - [2020-05-26T18:31:20.648235897Z] "GET /config/performance_tests/AVPrcrQ0w6LmKfGjAckVImrLdZxpxuKGPdVpTBFvYkHGcKpBVgKjDTTImoCL?use_cache=false HTTP/1.1" 200 0 44 "-" "python-requests/2.23.0" "18.05.78.52:14268" "149.81.69.196, 18.05.78.52" x_forwarded_proto:"http" vcap_request_id:"f6defe33-475b-4668-7977-6f6f397a889a" response_time:0.839259 gorouter_time:0.888647 app_id:"8f835f37-8c04-4d0c-9a38-245b48d80c5c" app_index:"3" x_global_transaction_id:"aad3ade5ecd6878762e1fc" true_client_ip:"" x_b3_traceid:"641828987c17ba4c" x_b3_spanid:"641828987c17ba4c" x_b3_parentspanid:"" b3:"641828987c17ba4c-641828987c17ba4c"
2020-05-26T20:31:20.68+0200 [RTR/0] OUT
2020-05-26T20:31:20.78+0200 [APP/PROC/WEB/2] OUT <etcd_client.EtcdClient object at 0x7fe1768dd10b> szarbartosz/performance_tests/AVPrcrQ0w6LmKfGjAckVImrLdZxpxuKGPdVpTBFvYkHGcKpBVgKjDTTImoCL
2020-05-26T20:31:20.78+0200 [APP/PROC/WEB/3] OUT <etcd_client.EtcdClient object at 0x7f9b5f86de18> szarbartosz/performance_tests/AVPrcrQ0w6LmKfGjAckVImrLdZxpxuKGPdVpTBFvYkHGcKpBVgKjDTTImoCL
2020-05-26T20:31:20.71+0200 [APP/PROC/WEB/2] ERR 18.244.430.131 - [26/May/2020 18:31:20] "GET /config/performance_tests/AVPrcrQ0w6LmKfGjAckVImrLdZxpxuKGPdVpTBFvYkHGcKpBVgKjDTTImoCL?use_cache=false HTTP/1.1" 200 -
2020-05-26T20:31:20.71+0200 [RTR/1] OUT distributed-cache-generous-hyena-yt.eu-de.mybluemix.net - [2020-05-26T18:31:20.692243482Z] "GET /config/performance_tests/AVPrcrQ0w6LmKfGjAckVImrLdZxpxuKGPdVpTBFvYkHGcKpBVgKjDTTImoCL?use_cache=false HTTP/1.1" 200 0 44 "-" "python-requests/2.23.0" "18.05.78.51:58594" "161.156.72.88:61802" x_forwarded_for:"149.81.69.196, 18.05.78.51" x_forwarded_proto:"http" vcap_request_id:"d9a55bba-3b49-4865-655f-ade805f5424" response_time:0.821729 gorouter_time:0.888432 app_id:"8f835f37-8c04-4d0c-9a38-245b48d80c5c" app_index:"3" x_global_transaction_id:"48cd8a595ecd68787797b3fd" true_client_ip:"" x_b3_traceid:"276beeb6b383df5d" x_b3_spanid:"276beeb6b383df5d" x_b3_parentspanid:"" b3:"276beeb6b383df5d-276beeb6b383df5d"
2020-05-26T20:31:20.71+0200 [RTR/1] OUT
2020-05-26T20:31:20.71+0200 [APP/PROC/WEB/3] ERR 18.244.216.202 - [26/May/2020 18:31:20] "GET /config/performance_tests/AVPrcrQ0w6LmKfGjAckVImrLdZxpxuKGPdVpTBFvYkHGcKpBVgKjDTTImoCL?use_cache=false HTTP/1.1" 200 -
2020-05-26T20:31:20.72+0200 [RTR/1] OUT distributed-cache-generous-hyena-yt.eu-de.mybluemix.net - [2020-05-26T18:31:20.692369988Z] "GET /config/performance_tests/AVPrcrQ0w6LmKfGjAckVImrLdZxpxuKGPdVpTBFvYkHGcKpBVgKjDTTImoCL?use_cache=false HTTP/1.1" 200 0 44 "-" "python-requests/2.23.0" "18.05.78.52:14268" "149.81.69.196, 18.05.78.52" x_forwarded_proto:"http" vcap_request_id:"2ab98ba-96ab-4286-837c-286f4b4133d5" response_time:0.837892 gorouter_time:0.888389 app_id:"8f835f37-8c04-4d0c-9a38-245b48d80c5c" app_index:"0" x_global_transaction_id:"aad3ade5ecd6878781888377" true_client_ip:"" x_b3_traceid:"84c49a31d262c999" x_b3_spanid:"84c49a31d262c999" x_b3_parentspanid:"" b3:"84c49a31d262c999-84c49a31d262c999"
2020-05-26T20:31:20.72+0200 [RTR/1] OUT
2020-05-26T20:31:20.74+0200 [APP/PROC/WEB/0] ERR 18.244.51.9 - [26/May/2020 18:31:20] "GET /config/performance_tests/wXuoP2AjznxHwET1LR0nbahPOBfKARdWJEBOVIOyBMKsvWNNXKPFwNzIm3fCRgk?use_cache=true HTTP/1.1" 200 -
2020-05-26T20:31:20.74+0200 [RTR/1] OUT distributed-cache-generous-hyena-yt.eu-de.mybluemix.net - [2020-05-26T18:31:20.731213387Z] "GET /config/performance_tests/wXuoP2AjznxHwET1LR0nbahPOBfKARdWJEBOVIOyBMKsvWNNXKPFwNzIm3fCRgk?use_cache=true HTTP/1.1" 200 0 44 "-" "python-requests/2.23.0" "18.05.78.52:152912" "149.81.69.233:61170" x_forwarded_for:"149.81.69.196, 18.05.78.52" x_forwarded_proto:"http" vcap_request_id:"2697f761-7189-4848-6f8a-e870876c327c" response_time:0.815514 gorouter_time:0.888868 app_id:"8f835f37-8c04-4d0c-9a38-245b48d80c5c" app_index:"0" x_global_transaction_id:"aad3ade5ecd687882cf6893" true_client_ip:"" x_b3_traceid:"768c17db5708841b" x_b3_spanid:"768c17db5708841b" x_b3_parentspanid:"" b3:"768c17db5708841b-768c17db5708841b"
```