

```
==> Log data will now stream in as it occurs:
                                                                                      5:40.249Z [WARN] agent: BootstrapExpect is set to 1; this is the same as Bootstrap mo
                                                                                      5:40.249Z [WARN] agent: bootstrap = true: do not enable unless necessary
CONSUL_NAME=services-manager
                                                                                      5:40.253Z [WARN] agent.auto config: BootstrapExpect is set to 1; this is the same as
                                                                                      5:40.253Z [WARN] agent.auto config: bootstrap = true: do not enable unless necessary
                                                                                      5:40.280Z [INFO] agent.server.raft: initial configuration: index=1 servers="[{Suffrag
docker run \
                                                                                      1a29-07b2-f793-2e37-adb2741f0378 Address:172.17.0.2:8300}]"
    -p 8500:8500 \
                                                                                      5:40.281Z [INFO] agent.server.raft: entering follower state: follower="Node at 172.17
                                                                                      ower]" leader-address= leader-id=
    -p 8600:8600/udp \
                                                                                      5:40.282Z [INFO] agent.server.serf.wan: serf: EventMemberJoin: server-1.dc1 172.17.0.
    --name="${CONSUL_NAME}" \
                                                                                      5:40.284Z [INFO]
                                                                                                        agent.server.serf.lan: serf: EventMemberJoin: server-1 172.17.0.2
    consul agent -server -ui -node=server-1 -bootstrap-expect=1 -client=0.0.0.0
                                                                                      5:40.284Z [INFO]
                                                                                                       agent.router: Initializing LAN area manager
                                                                                      5:40.284Z [INFO]
                                                                                                        agent.server.autopilot: reconciliation now disabled
                                                                                                       agent.server: Adding LAN server: server="server-1 (Addr: tcp/172.17.
                                                                       2023-05-30T14:46:40.284Z [INFO]
                                                                       0.2:8300) (DC: dc1)"
                                                                                                       agent.server: Handled event for server in area: event=member-join se
                                                                       2023-05-30T14:46:40.285Z [INFO]
                                                                        rver=server-1.dc1 area=wan
                                                                       2023-05-30T14:46:40.287Z [INFO]
                                                                                                        agent.server.cert-manager: initialized server certificate management
                                                                                                        agent: Started DNS server: address=0.0.0.0:8600 network=udp
                                                                       2023-05-30T14:46:40.287Z [INFO]
                                                                       2023-05-30T14:46:40.287Z [INFO]
                                                                                                        agent: Started DNS server: address=0.0.0.0:8600 network=tcp
                                                                       2023-05-30T14:46:40.288Z [INFO]
                                                                                                        agent: Starting server: address=[::]:8500 network=tcp protocol=http
                                                                                                        agent: Started gRPC listeners: port name=grpc tls address=[::]:8503
                                                                       2023-05-30T14:46:40.289Z [INFO]
                                                                       2023-05-30T14:46:40.289Z [INFO]
                                                                                                       agent: started state syncer
                                                                       2023-05-30T14:46:40.289Z [INFO] agent: Consul agent running!
```

Version: '1.15.2'

Node name: 'server-1'

Build Date: '2023-03-30 17:51:19 +0000 UTC'

Cluster Addr: 172.17.0.2 (LAN: 8301, WAN: 8302)

Datacenter: 'dc1' (Segment: '<all>') Server: true (Bootstrap: true)

Node ID: '7a8c1a29-07b2-f793-2e37-adb2741f0378'

gRPC TLS: Verify Incoming: false, Min Version: TLSv1 2

karyna@karyna: ~/Documents/APZ lab5/APZ labs/bash scripts

Client Addr: [0.0.0.0] (HTTP: 8500, HTTPS: -1, qRPC: -1, qRPC-TLS: 8503, DNS: 8600)

HTTPS TLS: Verify Incoming: false, Verify Outgoing: false, Min Version: TLSv1 2

karyna@karyna: ~/Documents/APZ lab5/APZ labs/bash scripts 101x55

_ 🗆 X

I скрипт, який додасть key/value для мапи і черги повідомлень

```
#!/bin/bash
CONSUL_NAME=services-manager

MSG_QUEUE_KEY="msg_queue_name"

MSG_QUEUE_VALUE="my-distributed-key"

docker exec -it "${CONSUL_NAME}" consul kv put "${MSG_QUEUE_KEY}" "${MSG_QUEUE_VALUE}"

MAP_KEY="map_name"

MAP_VALUE="my-distributed-map"

docker exec -it "${CONSUL_NAME}" consul kv put "${MAP_KEY}" "${MAP_VALUE}"
```

```
karyna@karyna:~/Documents/APZ_lab5/APZ_labs/bash_scripts$ ./add_kv.sh
Success! Data written to: msg_queue_name
Success! Data written to: map_name
```

_ D X karvna@karvna: ~ karyna@karyna: ~ 42x55 karyna@karyna: ~ 52x55 karyna@karyna: ~ 47x55 2023-05-30 14:50:11,044 [INFO] [main] [c.h.i.i 2023-05-30 14:50:05,357 [INFO] [main] [c.h.j.i.JetS 2023-05-30 14:50:02,778 [INFO] [main] [c rviceBackend]: [172.17.0.4]:5701 [dev] [5.2.2] Sett dev] [5.2.2] ing number of cooperative threads and default parall ulticast discovery elism to 8 2023-05-30 14:50:11,048 [WARN] [main] [c.h.c.C embers {size:1, ver:1} [2023-05-30 14:50:05,409 [INFO] [main] [c.h.i.d.Diag Subsystem]: [172.17.0.5]:5701 [dev] [5.2.2] CP Member [172.17.0.3]:5701 - b239d1e ostics]: [172.17.0.4]:5701 [dev] [5.2.2] Diagnostic Subsystem is not enabled. CP data structures w -0a19-43a6-926b-07ee8d00cb56 this disabled. To enable add -Dhazelcast.diagnostics.en ill operate in UNSAFE mode! Please note that UN abled=true to the JVM arguments. SAFE mode will not provide strong consistency g 2023-05-30 14:50:05,421 [INFO] [main] [c.h.c.Lifecy uarantees. 023-05-30 14:50:02,786 [INFO] [main] [c. cleService]: [172.17.0.4]:5701 [dev] [5.2.2] [172.17 2023-05-30 14:50:11,309 [INFO] [main] [c.h.j.i .0.4]:5701 is STARTING JetServiceBackend]: [172.17.0.5]:5701 [dev] [5 :5701 [dev] [5.2.2] Jet started scanning 2023-05-30 14:50:05,579 [INFO] [main] [c.h.i.c.i.Mu .2.2] Setting number of cooperative threads and lticastJoiner]: [172.17.0.4]:5701 [dev] [5.2.2] Tryi default parallelism to 8 Запускаємо 3 ноди хейзелкасту 1023-05-30 14:50:02,790 [INFO] [main] [c. ng to join to discovered node: [172.17.0.3]:5701 2023-05-30 14:50:11,361 [INFO] [main] [c.h.i.d c.LifecycleService]: [172.17.0.3]:5701 [2023-05-30 14:50:05,604 [INFO] [hz.charming shtern. Diagnostics]: [172.17.0.5]:5701 [dev] [5.2.2] lev] [5.2.2] [172.17.0.3]:5701 is STARTED Diagnostics disabled. To enable add -Dhazelcast 2023-05-30 14:50:05,602 [INFO] [hz.trusti 2.17.0.4]:5701 [dev] [5.2.2] Initialized new cluster .diagnostics.enabled=true to the JVM arguments. connection between /172.17.0.4:35085 and /172.17.0. 2023-05-30 14:50:11,376 [INFO] [main] [c.h.c.L /erConnection]: [172.17.0.3]:5701 [dev] [fecycleService]: [172.17.0.5]:5701 [dev] [5.2. .2.2] Initialized new cluster connection 2023-05-30 14:50:10,715 [INFO] [hz.charming_shtern. 2] [172.17.0.5]:5701 is STARTING petween /172.17.0.3:5701 and /172.17.0.4:3 2023-05-30 14:50:11,501 [INFO] [main] [c.h.i.c Service]: [172.17.0.4]:5701 [dev] [5.2.2] .i.MulticastJoiner]: [172.17.0.5]:5701 [dev] [5 1023-05-30 14:50:10,704 [INFO] [hz.trusti .2.2] Trying to join to discovered node: [172.1 Members {size:2, ver:2} [7.0.3]:5701 -0] [c.h.i.c.ClusterService]: [172.17.0.3 Member [172.17.0.3]:5701 - b239d1e8-0a19-43a 2023-05-30 14:50:11,524 [INFO] [hz.flamboyant_ :5701 [dev] [5.2.2] 6-926b-07ee8d00cb56 Member [172.17.0.4]:5701 - b9242311-7072-493 tion]: [172.17.0.5]:5701 [dev] [5.2.2] Initial embers {size:2, ver:2} [-9d0b-44815c7945a6 this ized new cluster connection between /172.17.0.5 :55131 and /172.17.0.3:5701 -0a19-43a6-926b-07ee8d00cb56 this 2023-05-30 14:50:16,631 [INFO] [hz.flamboyant_ Member [172.17.0.4]:5701 - b924231 2023-05-30 14:50:10,724 [INFO] [main] [c.h.j.i.Job oordinationService]: [172.17.0.4]:5701 [dev] [5.2.2] 7072-493f-9d0b-44815c7945a6 tion]: [172.17.0.5]:5701 [dev] [5.2.2] Initial ized new cluster connection between /172.17.0.5 Jet started scanning for jobs 2023-05-30 14:50:10,727 [INFO] [main] [c.h.c.Lifec :5701 and /172.17.0.4:38705 2023-05-30 14:50:11,523 [INFO] [hz.trusti verConnection]: [172.17.0.3]:5701 [dev] [2023-05-30 14:50:16,626 [INFO] [hz.charming shtern. .i.c.ClusterService]: [172.17.0.5]:5701 [dev] [.2.2] Initialized new cluster connection riority-generic-operation.thread-0] [c.h.i.c.Cluste 5.2.2] petween /172.17.0.3:5701 and /172.17.0.5:5 Service]: [172.17.0.4]:5701 [dev] [5.2.2] Members {size:3, ver:3} [2023-05-30 14:50:16,619 [INFO] [hz.trusti Members {size:3, ver:3} [Member [172.17.0.3]:5701 - b239d1e8-0a1 Member [172.17.0.3]:5701 - b239d1e8-0a19-43a -43a6-926b-07ee8d00cb56 -0] [c.h.i.c.ClusterService]: [172.17.0.3 -926b-07ee8d00cb56 Member [172.17.0.4]:5701 - b9242311-707 :5701 [dev] [5.2.2] Member [172.17.0.4]:5701 - b9242311-7072-493 2-493f-9d0b-44815c7945a6 -9d0b-44815c7945a6 this Member [172.17.0.5]:5701 - 10286836-6ae lembers {size:3, ver:3} [Member [172.17.0.5]:5701 - 10286836-6ae3-4e5 ▮ 3-4e5a-bbb4-03220452fe40 this Member [172.17.0.3]:5701 - b239d1e a-bbb4-03220452fe40 -0a19-43a6-926b-07ee8d00cb56 this Member [172.17.0.4]:5701 - b924231 2023-05-30 14:50:16,659 [INFO] [main] [c.h.j.i JobCoordinationService]: [172.17.0.5]:5701 [de -7072-493f-9d0b-44815c7945a6 O.thread-in-1] [c.h.i.s.t.TcpServerConnection]: [17 ▮v] [5.2.2] Jet started scanning for jobs

2.17.0.4]:5701 [dev] [5.2.2] Initialized new cluster connection between /172.17.0.4:38705 and /172.17.0.

5:5701

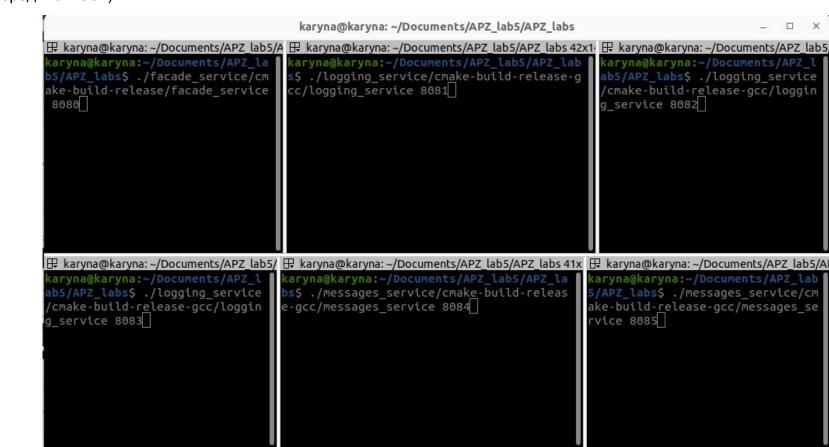
-6ae3-4e5a-bbb4-03220452fe40

2023-05-30 14:50:16,663 [INFO] [main] [c.h.c.l

2] [172.17.0.5]:5701 is STARTED

fecycleService]: [172.17.0.5]:5701 [dev] [5.2.

Запускаємо мікросервіси (наприклад, з іншими портами для logging і messages services відносно попередньої лаби)



```
karyna@karyna: ~/Documents/APZ_lab5/APZ_labs
6, server version: 5.2.2, local
                                   version: 5.2.2, local address: Address[1
                                                                             t=Address[172.17.0.4:5701], las
address: Address[172.17.0.1:4888
                                 72.17.0.1:42204]. Connection{alive=1, conn
                                                                             t read time=2023-05-30 10:59:27
0]. Connection{alive=1, connecti
                                 ection id=3, remote endpoint=Address[172.1
                                                                             .763, last write time=2023-05-3
on id=3, remote endpoint=Address
                                 7.0.4:5701], last read time=2023-05-30 10:
                                                                             0 10:59:27.760, closedTime=neve
[172.17.0.4:5701], last read tim
                                 59:26.326, last write time=2023-05-30 10:5
                                                                             r. connected server version=5.2
                                 9:26.325, closedTime=never, connected serv
e=2023-05-30 10:59:24.207, last
write time=2023-05-30 10:59:24.1
                                 er version=5.2.2}
                                                                             [2023-05-30 10:59:27.769] [info
94, closedTime=never, connected
                                 [2023-05-30 10:59:26.330] [info] Creating
                                                                              Creating HazelcastLoggingServ
                                 HazelcastLoggingService
server version=5.2.2}
                                                                             ice
[2023-05-30 10:59:24.247] [info]
                                 [2023-05-30 10:59:26.342] [info] Register
                                                                             [2023-05-30 10:59:27.791] [info
                                                                              Register a resource
Register a resource
                                 a resource
2023-05-30 10:59:24.248] [info]
                                 [2023-05-30 10:59:26.342] [info] Start ser
                                                                             [2023-05-30 10:59:27.791] [info
Start server
                                                                              Start server
B karyna@karyna: ~/Documents/APZ lab5/ 日 karyna@karyna: ~/Documents/APZ lab5/APZ lab5 41x 日 karyna@karyna: ~/Documents/APZ lab5/AI
.519, last write time=2023-05-3
                                erver version: 5.2.2. local address: Addr
                                                                           nection{alive=1, connection id=3,
0 10:59:29.517, closedTime=neve
                                ess[172.17.0.1:42238]. Connection{alive=1
                                                                            remote endpoint=Address[172.17.0
                                                                           .4:5701], last read time=2023-05-
 , connected server version=5.2
                                 , connection id=3, remote endpoint=Addres
                                s[172.17.0.4:5701], last read time=2023-0
                                                                           30 10:59:32.998, last write time=
                                                                           2023-05-30 10:59:32.995, closedTi
[2023-05-30 10:59:29.524] [info
                                 5-30 10:59:30.997, last write time=2023-0
 Creating HazelcastLoggingServ
                                 5-30 10:59:30.994, closedTime=never, conn
                                                                           me=never, connected server versio
                                 ected server version=5.2.2}
                                                                           n=5.2.2
                                 [2023-05-30 10:59:31.017] [info] Register
[2023-05-30 10:59:29.544] [info
                                                                           [2023-05-30 10:59:33.018] [info]
 Register a resource
                                                                           Register a resource
                                 a resource
[2023-05-30 10:59:29.544] [info
                                 [2023-05-30 10:59:31.017] [info] Start se
                                                                           [2023-05-30 10:59:33.018] [info]
 Start server
                                                                           Start server
                                 ver
```

Дивимося на вивід в consul:

```
2023-05-30T14:59:24.236Z [INFO] agent: Synced service: service=facade-service-8080 2023-05-30T14:59:26.339Z [INFO] agent: Synced service: service=logging-service-8081 2023-05-30T14:59:27.787Z [INFO] agent: Synced service: service=logging-service-8082 2023-05-30T14:59:29.541Z [INFO] agent: Synced service: service=logging-service-8083 2023-05-30T14:59:31.014Z [INFO] agent: Synced service: service=messages-service-8084 2023-05-30T14:59:33.014Z [INFO] agent: Synced service: service=messages-service-8085
```

Id представлені у вигляді <назва сервісу>-<порт>

Робимо 10 POST запитів

```
POST http://127.0.0.1:8080/facade-service
HTTP/1.1 200 OK
Date: Tue, 30 May 2023 15:02:44 GMT
Content-Type: text/plain
Content-Length: 0
<Response body is empty>
Response code: 200 (OK); Time: 135ms (135 ms); Content length: 0 bytes (0 B)
```

2023-05-30 11:03:56.754] [info] Sending a response: ime=never, connected server version=5.2.2} [2023-05-30 11:03:44.943] [info] Message was added 2023-05-30 11:03:59.718] [info] Received POST request by Fa 30/05/2023 10:59:26.325 INFO: [139933358896704] hz.client_1[dev] [5.2.0] Trying [2023-05-30 11:03:44.944] [info] All content was added to a cadeController to connect to Address[172.17.0.4:5701]. [2023-05-30 11:03:59.718] [info] Content of request: "msg9" [2023-05-30 11:03:50.870] [info] Received POST request by L [2023-05-30 11:03:59.718] [info] Pushing message to queue: ' ticated with server Address[172.17.0.4:5701]:b9242311-7072-493f-9d0b-44815c794 5a6, server version: 5.2.2, local address: Address[172.17.0.1:42204]. Connectio [2023-05-30 11:03:50.870] [info] Add message to HazelcastLo ggingService: uuid = 1ec7cc15-bd5d-4e49-aa30-fb161d9c14d1, [2023-05-30 11:03:59.718] [info] Adding message: uuid = ea74 n{alive=1, connection id=3, remote endpoint=Address[172.17.0.4:5701], last_read fc26-f8e5-4eae-9a51-ff233157df2c text = "msg9" time=2023-05-30 10:59:26.326, last write time=2023-05-30 10:59:26.325, closedT [2023-05-30 11:03:59.720] [info] Sending POST request to cho ime=never, connected server version=5.2.2} [2023-05-30 11:03:50.871] [info] Message was added sen logging service: url = http://localhost:8081/logging-ser [2023-05-30 10:59:26.330] [info] Creating HazelcastLoggingService [2023-05-30 11:03:50.871] [info] All content was added to a [2023-05-30 10:59:26.342] [info] Register a resource viceservice = http://localhost:8081/logging-service [2023-05-30 11:03:53.572] [info] Received POST request by L [2023-05-30 11:03:59.722] [info] Response of logging service [2023-05-30 10:59:26.342] [info] Start server [2023-05-30 11:03:40.734] [info] Received POST request by LoggingController oggingController [2023-05-30 11:03:53.572] [info] Add message to HazelcastLo [2023-05-30 11:03:59.722] [info] Sending a response: [2023-05-30 11:03:40.734] [info] Add message to HazelcastLoggingService: uuid = [2023-05-30 11:04:03.138] [info] Received POST request by Fa d63fe41f-09d1-4f8a-98ed-92539a53ac13, text = "msq3" ggingService: uuid = 62c5c2f0-8ba7-4157-b660-064df1a31977, [2023-05-30 11:03:40.735] [info] Message was added text = "msq7" [2023-05-30 11:04:03.138] [info] Content of request: "msq10" [2023-05-30 11:03:40.735] [info] All content was added to a map [2023-05-30 11:03:53.577] [info] Message was added [2023-05-30 11:04:03.138] [info] Pushing message to queue: " [2023-05-30 11:03:56.752] [info] Received POST request by LoggingController [2023-05-30 11:03:53.577] [info] All content was added to a 1sq10" [2023-05-30 11:03:56.752] [info] Add message to HazelcastLoggingService: uuid 4d81a4c9-6054-42c2-93d5-60aadae42d32, text = "msq8" $[2023-05-30\ 11:04:03.138]$ [info] Adding message: uuid = 019a [2023-05-30 11:04:03.140] [info] Received POST request by I 89c0-9134-4550-80ec-aed251071bff text = "msq10" [2023-05-30 11:03:56.753] [info] Message was added pagingController [2023-05-30 11:04:03.140] [info] Sending POST request to cho [2023-05-30 11:03:56.753] [info] All content was added to a map [2023-05-30 11:04:03.140] [info] Add message to HazelcastLo, sen logging service: url = http://localhost:8082/logging-ser [2023-05-30 11:03:59.720] [info] Received POST request by LoggingController ggingService: uuid = 019a89c0-9134-4550-80ec-aed251071bff, [2023-05-30 11:03:59.720] [info] Add message to HazelcastLoggingService: uuid = viceservice = http://localhost:8082/logging-service text = "msq10" [2023-05-30 11:04:03.141] [info] Response of logging service ea74fc26-f8e5-4eae-9a51-ff233157df2c, text = "msq9" [2023-05-30 11:04:03.141] [info] Message was added [2023-05-30 11:03:59.722] [info] Message was added [2023-05-30 11:04:03.141] [info] All content was added to a [2023-05-30 11:04:03.141] [info] Sending a response: [2023-05-30 11:03:59.722] [info] All content was added to a map karyna@karyna: ~/Documents/APZ labs/APZ labs 59x25 karyna@karyna: ~/Documents/APZ lab5/APZ labs 77x25 karyna@karyna: ~/Documents/APZ lab5/APZ labs 62x25 ed server version=5.2.2} 30/05/2023 10:59:32.995 INFO: [140174579914304] hz.client 1[de 30/05/2023 10:59:30.994 INFO: [140585552025152] hz.client 1[dev] [5.2.0] Auth 30/05/2023 10:59:29.517 INFO: [140039128888896] hz.client_1 enticated with server Address[172.17.0.5:5701]:10286836-6ae3-4e5a-bbb4-03220 v] [5.2.0] Trying to connect to Address[172.17.0.4:5701].

karyna@karyna: ~/Documents/APZ_lab5/APZ_labs

karyna@karyna: ~/Documents/APZ lab5/APZ labs 79x28

karyna@karyna: ~/Documents/APZ lab5/APZ labs 59x28

karyna@karyna: ~/Documents/APZ_lab5/APZ_labs 60x28

452fe40, server version: 5.2.2, local address: Address[172.17.0.1:57182]. Con 30/05/2023 10:59:32.998 INFO: [140174579914304] hz.client 1[de [dev] [5.2.0] Trying to connect to Address[172.17.0.4:5701] nection{alive=1, connection id=2, remote endpoint=Address[172.17.0.5:5701], l v] [5.2.0] Authenticated with server Address[172.17.0.4:5701] 0/05/2023 10:59:29.519 INFO: [140039128888896] hz.client 1 ast_read_time=2023-05-30 10:59:30.994, last_write_time=2023-05-30 10:59:30.99 :b9242311-7072-493f-9d0b-44815c7945a6, server version: 5.2.2, [dev] [5.2.0] Authenticated with server Address[172.17.0.4 1, closedTime=never, connected server version=5.2.2} local address: Address[172.17.0.1:42240]. Connection{alive=1, 30/05/2023 10:59:30.994 INFO: [140585552025152] hz.client_1[dev] [5.2.0] Tryi connection id=3, remote endpoint=Address[172.17.0.4:5701], las :5701]:b9242311-7072-493f-9d0b-44815c7945a6, server version ng to connect to Address[172.17.0.4:5701]. _read_time=2023-05-30 10:59:32.998, last_write_time=2023-05-3 5.2.2, local address: Address[172.17.0.1:42222]. Connecti on{alive=1, connection id=3, remote endpoint=Address[172.17 30/05/2023 10:59:30.997 INFO: [140585552025152] hz.client_1[dev] [5.2.0] Auth 10:59:32.995, closedTime=never, connected server version=5.2

0.4:5701], last read time=2023-05-30 10:59:29.519, last wr enticated with server Address[172.17.0.4:5701]:b9242311-7072-493f-9d0b-44815 ite time=2023-05-30 10:59:29.517, closedTime=never, connect c7945a6, server version: 5.2.2, local address: Address[172.17.0.1:42238]. Con 2023-05-30 10:59:33.018] [info] Register a resource nection{alive=1, connection id=3, remote endpoint=Address[172.17.0.4:5701], l [2023-05-30 10:59:33.018] [info] Start server ed server version=5.2.2} ast read time=2023-05-30 10:59:30.997, last write time=2023-05-30 10:59:30.99 2023-05-30 11:02:44.678] [info] Message service took new msg [2023-05-30 10:59:29.524] [info] Creating HazelcastLoggingS 4, closedTime=never, connected server version=5.2.2} from queue: "msq1" [2023-05-30 10:59:31.017] [info] Register a resource 2023-05-30 10:59:29.544] [info] Register a resource 2023-05-30 10:59:31.017] [info] Start server [2023-05-30 10:59:29.544] [info] Start server from queue: "msq2" [2023-05-30 11:03:48.036] [info] Received POST request by L

[2023-05-30 11:03:37.007] [info] Message service took new msg [2023-05-30 11:03:44.941] [info] Message service took new msg from queue: "msg4" 2023-05-30 11:03:48.036] [info] Add message to HazelcastLo [2023-05-30 11:03:48.036] [info] Message service took new msg from queue: "ms [2023-05-30 11:03:50.869] [info] Message service took new msg ggingService: uuid = d3937340-f469-42e6-8050-e6072494a639, from queue: "msq6" [2023-05-30 11:03:53.571] [info] Message service took new msg from queue: "ms [2023-05-30 11:03:56.751] [info] Message service took new msg

text = "msa5" [2023-05-30 11:03:48.039] [info] Message was added from queue: "msq8" [2023-05-30 11:03:48.039] [info] All content was added to a [2023-05-30 11:03:59.719] [info] Message service took new msg from queue: "ms [2023-05-30 11:04:03.139] [info] Message service took new msg from queue: "msg10"

Logging-service-8081: msg3, msg8, msg9

Logging-service-8082: msg1, msg2, msg4, msg6, msg7, msg10

Logging-service-8083: msg5

Messages-service-8084: msg3, msg5, msg7, msg9

Messages-service-8085: msg1, msg2, msg4, msg6, msg8, msg10

3 якими повідомленнями працював кожен із logging або messages cepвісів:

Робимо GET запит (спроба 1)

```
GET http://127.0.0.1:8080/facade-service
    Accept: text/html
GET http://127.0.0.1:8080/facade-service
HTTP/1.1 200 OK
Date: Tue, 30 May 2023 15:11:05 GMT
Content-Type: text/plain
Content-Length: 102
"msg7" "msg1" "msg10" "msg6" "msg5" "msg9" "msg2" "msg3" "msg4" "msg8" : "msg3" "msg5" "msg7" "msg9"
Response code: 200 (OK); Time: 53ms (53 ms); Content length: 102 bytes (102 B)
```

Запит був опрацьований logging-service-8082 і messages-service-8084

```
karvna@karvna: ~/Documents/APZ lab5/APZ labs
          karyna@karyna: ~/Documents/APZ lab5/APZ labs 60x28
                                                                                    karyna@karyna: ~/Documents/APZ lab5/APZ labs 79x28
                                                                                                                                                             karyna@karyna: ~/Documents/APZ lab5/APZ labs 59x28
2023-05-30 11:04:03.140] [info] Sending POST request to cho
                                                               ime=never, connected server version=5.2.2}
                                                                                                                                                  [2023-05-30 11:11:05.146] [info] Getting logs from Hazelcas
en logging service: url = http://localhost:8082/logging-ser
                                                               30/05/2023 10:59:26.325 INFO: [139933358896704] hz.client 1[dev] [5.2.0] Trying
iceservice = http://localhost:8082/logging-service
                                                               to connect to Address[172.17.0.4:5701].
                                                                                                                                                  [2023-05-30 11:11:05.193] [info] Got log: uuid = 62c5c2f0-8
2023-05-30 11:04:03.141] [info] Response of logging service
                                                              30/05/2023 10:59:26.326 INFO: [139933358896704] hz.client_1[dev] [5.2.0] Authen
                                                                                                                                                  pa7-4157-b660-064df1a31977, text = "msg7"
                                                               ticated with server Address[172.17.0.4:5701]:b9242311-7072-493f-9d0b-44815c794
                                                                                                                                                  2023-05-30 11:11:05.193] [info] Got log: uuid = 243c936b-d
2023-05-30 11:04:03.141] [info] Sending a response:
                                                               5a6, server version: 5.2.2, local address: Address[172.17.0.1:42204]. Connectio
2023-05-30 11:11:05.142] [info] Received GET request by Fac
                                                               n{alive=1, connection id=3, remote endpoint=Address[172.17.0.4:5701], last_read
                                                                                                                                                  [2023-05-30 11:11:05.193] [info] Got log: uuid = 019a89c0-9
                                                               time=2023-05-30 10:59:26.326, last write time=2023-05-30 10:59:26.325, closedT
2023-05-30 11:11:05.142] [info] Getting messages
                                                               ime=never, connected server version=5.2.2}
                                                                                                                                                  2023-05-30 11:11:05.193] [info] Got log: uuid = 1ec7cc15-b
2023-05-30 11:11:05.142] [info] Getting messages from messa
                                                               [2023-05-30 10:59:26.330] [info] Creating HazelcastLoggingService
                                                                                                                                                   5d-4e49-aa30-fb161d9c14d1, text = "msg6'
                                                               2023-05-30 10:59:26.3421 [info] Register a resource
                                                                                                                                                   2023-05-30 11:11:05.193] [info] Got log: uuid = d3937340-f
2023-05-30 11:11:05.143] [info] Sending GET request to chos
                                                               [2023-05-30 10:59:26.342] [info] Start server
                                                                                                                                                  169-42e6-8050-e6072494a639, text = "msg5"
                                                               [2023-05-30 11:03:40.734] [info] Received POST request by LoggingController
en messages service: url = http://localhost:8084/messages-se
                                                               [2023-05-30 11:03:40.734] [info] Add message to HazelcastLoggingService: uuid
                                                                                                                                                  Be5-4eae-9a51-ff233157df2c, text = "msg9"
2023-05-30 11:11:05.144] [info] Response of messages servic
                                                                                                                                                  [2023-05-30 11:11:05.193] [info] Got log: uuid = 6e6fa45e-0
 "msg3" "msg5" "msg7" "msg9"
                                                               [2023-05-30 11:03:40.735] [info] Message was added
                                                                                                                                                  31a-4026-843e-d0b23c082a2a, text = "msg2"
2023-05-30 11:11:05.144] [info] Getting messages from loggi
                                                               [2023-05-30 11:03:40.735] [info] All content was added to a map
                                                                                                                                                  2023-05-30 11:11:05.193] [info] Got log: uuid = d63fe41f-0
                                                                2023-05-30 11:03:56.752] [info] Received POST request by LoggingController
                                                                                                                                                  d1-4f8a-98ed-92539a53ac13, text = "msq3"
2023-05-30 11:11:05.146] [info] Sending GET request to chos
                                                               [2023-05-30 11:03:56.752] [info] Add message to HazelcastLoggingService: uuid
                                                                                                                                                  [2023-05-30 11:11:05.193] [info] Got log: uuid = cdf9b832-5
n logging service: url = http://localhost:8082/logging-serv
                                                               4d81a4c9-6054-42c2-93d5-60aadae42d32, text = "msg8"
                                                                                                                                                  c1d-415a-a9b3-c634cbe2d419, text = "msq4"
                                                               [2023-05-30 11:03:56.753] [info] Message was added
                                                                                                                                                  [2023-05-30 11:11:05.193] [info] Got log: uuid = 4d81a4c9-6
2023-05-30 11:11:05.193] [info] Response of logging service
                                                               [2023-05-30 11:03:56.753] [info] All content was added to a map
                                                                                                                                                   54-42c2-93d5-60aadae42d32, text = "msg8"
                                                               [2023-05-30 11:03:59.720] [info] Received POST request by LoggingController
                                                                                                                                                  2023-05-30 11:11:05.193] [info] All content was added to a
                                                               [2023-05-30 11:03:59.720] [info] Add message to HazelcastLoggingService: uuid =
                                                                                                                                                   output string
2023-05-30 11:11:05.193] [info] Sending a response: "msg7"
                                                                                                                                                  [2023-05-30 11:11:05.193] [info] Sending a response: "msg7"
                                                               [2023-05-30 11:03:59.722] [info] Message was added
                                                               [2023-05-30 11:03:59.722] [info] All content was added to a map
         karyna@karyna: ~/Documents/APZ_lab5/APZ_labs 59x25
                                                                                 karyna@karyna: ~/Documents/APZ_lab5/APZ_labs 77x25
ed server version=5.2.2}
                                                                                                                                                0/05/2023 10:59:32.995 INFO: [140174579914304] hz.client_1[de
0/05/2023 10:59:29.517 INFO: [140039128888896] hz.client
                                                              ection{alive=1, connection id=3, remote endpoint=Address[172.17.0.4:5701], l
                                                                                                                                                 [5.2.0] Trying to connect to Address[172.17.0.4:5701].
dev] [5.2.0] Trying to connect to Address[172.17.0.4:5701]
                                                              ast_read_time=2023-05-30 10:59:30.997, last_write_time=2023-05-30 10:59:30.99
                                                                                                                                                0/05/2023 10:59:32.998 INFO: [140174579914304] hz.client 1[de
                                                              4, closedTime=never, connected server version=5.2.2}
                                                                                                                                                 [5.2.0] Authenticated with server Address[172.17.0.4:5701]
30/05/2023 10:59:29.519 INFO: [140039128888896] hz.client
                                                              [2023-05-30 10:59:31.017] [info] Register a resource
                                                                                                                                                b9242311-7072-493f-9d0b-44815c7945a6, server version: 5.2.2,
dev] [5.2.0] Authenticated with server Address[172.17.0.4
                                                                                                                                                ocal address: Address[172.17.0.1:42240]. Connection{alive=1,
5701]:b9242311-7072-493f-9d0b-44815c7945a6, server version
                                                              [2023-05-30 11:03:40.733] [info] Message service took new msg from queue: "ms
                                                                                                                                                onnection id=3, remote endpoint=Address[172.17.0.4:5701], las
5.2.2, local address: Address[172.17.0.1:42222]. Connect
                                                                                                                                                _read_time=2023-05-30 10:59:32.998, last_write_time=2023-05-3
n{alive=1, connection id=3, remote endpoint=Address[172.17
                                                              [2023-05-30 11:03:48.036] [info] Message service took new msg from queue: "ms
                                                                                                                                                10:59:32.995, closedTime=never, connected server version=5.2
0.4:5701], last_read_time=2023-05-30 10:59:29.519, last_w
te time=2023-05-30 10:59:29.517, closedTime=never, connect
                                                              2023-05-30 11:03:53.571] [info] Message service took new msg from queue: "ms
                                                                                                                                                2023-05-30 10:59:33.018] [info] Register a resource
ed server version=5.2.2}
                                                                                                                                                2023-05-30 10:59:33.018] [info] Start server
[2023-05-30 10:59:29.524] [info] Creating HazelcastLoggingS
                                                              2023-05-30 11:03:59.719] [info] Message service took new msg from queue: "ms
                                                                                                                                                2023-05-30 11:02:44.678] [info] Message service took new msg
2023-05-30 10:59:29.544] [info] Register a resource
                                                              2023-05-30 11:11:05.144] [info] Received GET request by MessagesController
                                                                                                                                                2023-05-30 11:03:37.007] [info] Message service took new msg
2023-05-30 10:59:29.544] [info] Start server
                                                              2023-05-30 11:11:05.144] [info] Creating an output string
                                                                                                                                                rom queue: "msg2"
2023-05-30 11:03:48.036] [info] Received POST request by I
                                                              [2023-05-30 11:11:05.144] [info] Getting saved messages from MessagesService
                                                                                                                                                2023-05-30 11:03:44.941] [info] Message service took new msg
                                                              [2023-05-30 11:11:05.144] [info] Got saved msg: "msg3"
                                                                                                                                                rom queue: "msq4"
2023-05-30 11:03:48.036] [info] Add message to HazelcastLo
                                                              [2023-05-30 11:11:05.144] [info] Got saved msg: "msg5"
                                                                                                                                                2023-05-30 11:03:50.869] [info] Message service took new msg
gingService: uuid = d3937340-f469-42e6-8050-e6072494a639,
                                                              [2023-05-30 11:11:05.144] [info] Got saved msg: "msg7'
                                                                                                                                                rom queue: "msg6'
                                                              [2023-05-30 11:11:05.144] [info] Got saved msg: "msg9"
                                                                                                                                                2023-05-30 11:03:56.751] [info] Message service took new msg
2023-05-30 11:03:48.039] [info] Message was added
                                                              [2023-05-30 11:11:05.144] [info] All content was added to an output string
                                                                                                                                                rom queue: "msg8'
2023-05-30 11:03:48.039] [info] All content was added to a
                                                              [2023-05-30 11:11:05.144] [info] Sending a response: "msq3" "msq5" "msq7" "ms
                                                                                                                                                2023-05-30 11:04:03.139] [info] Message service took new msg
                                                                                                                                                rom queue: "msg10"
```

Робимо GET запит (спроба 2 – результат як при спробі 1)

```
GET http://127.0.0.1:8080/facade-service

Accept: text/html

###

GET http://127.0.0.1:8080/facade-service
```

```
GET http://127.0.0.1:8080/facade-service
HTTP/1.1 200 OK
Date: Tue, 30 May 2023 15:15:05 GMT
Content-Type: text/plain
Content-Length: 102
"msg7" "msg1" "msg10" "msg6" "msg5" "msg9" "msg2" "msg3" "msg4" "msg8" : "msg3" "msg5" "msg7" "msg9"
Response code: 200 (OK); Time: 16ms (16 ms); Content Length: 102 bytes (102 B)
```

Робимо GET запит (спроба 3 – результат відмінний від спроб 1 і 2)

```
Description | De
```

```
6ET http://127.0.0.1:8080/facade-service
Show Request

HTTP/1.1 200 OK
Date: Tue, 30 May 2023 15:16:04 GMT
Content-Type: text/plain
Content-Length: 117

"msg7" "msg1" "msg10" "msg6" "msg5" "msg9" "msg2" "msg3" "msg4" "msg8" : "msg1" "msg2" "msg4" "msg6" "msg8" "msg10"

Response code: 200 (OK); Time: 16ms (16 ms); Content length: 117 bytes (117 B)
```

Запит був опрацьований logging-service-8082 і messages-service-8085

```
karvna@karvna: ~/Documents/APZ lab5/APZ labs
           karyna@karyna: ~/Documents/APZ lab5/APZ labs 60x28
                                                                                    karyna@karyna: ~/Documents/APZ lab5/APZ labs 79x28
                                                                                                                                                             karyna@karyna: ~/Documents/APZ lab5/APZ labs 59x28
2023-05-30 11:15:05.647] [info] Response of logging service
                                                                ime=never, connected server version=5.2.2}
                                                                                                                                                   [2023-05-30 11:16:04.950] [info] Getting logs from Hazelcas
                                                                30/05/2023 10:59:26.325 INFO: [139933358896704] hz.client_1[dev] [5.2.0] Trying
                                                                                                                                                   [2023-05-30 11:16:04.959] [info] Got log: uuid = 62c5c2f0-
isa4" "msa8"
                                                                to connect to Address[172.17.0.4:5701].
[2023-05-30 11:15:05.647] [info] Sending a response: "msq7"
                                                               30/05/2023 10:59:26.326 INFO: [139933358896704] hz.client 1[dev] [5.2.0] Authe
                                                                                                                                                  ba7-4157-b660-064df1a31977, text = "msq7"
                                                               ticated with server Address[172.17.0.4:5701]:b9242311-7072-493f-9d0b-44815c79
                                                                                                                                                   [2023-05-30 11:16:04.959] [info] Got log: uuid = 243c936b-
   : "msg3" "msg5" "msg7" "msg9"
                                                                5a6, server version: 5.2.2, local address: Address[172.17.0.1:42204]. Connection
                                                                                                                                                  1ab-4484-a587-0bd8a0667f9c, text = "msg1"
2023-05-30 11:16:04.946] [info] Received GET request by Fac
                                                                n{alive=1, connection id=3, remote endpoint=Address[172.17.0.4:5701], last rea
                                                                                                                                                  134-4550-80ec-aed251071bff, text = "msg10"
                                                                time=2023-05-30 10:59:26.326, last_write_time=2023-05-30 10:59:26.325, closed
2023-05-30 11:16:04.946] [info] Getting messages
                                                                                                                                                  [2023-05-30 11:16:04.959] [info] Got log: uuid = 1ec7cc15-
                                                                ime=never, connected server version=5.2.2}
2023-05-30 11:16:04.946] [info] Getting messages from messa
                                                               [2023-05-30 10:59:26.330] [info] Creating HazelcastLoggingService
                                                                [2023-05-30 10:59:26.342] [info] Register a resource
                                                                                                                                                   [2023-05-30 11:16:04.959] [info] Got log: uuid = d3937340-
                                                               [2023-05-30 10:59:26.342] [info] Start server
2023-05-30 11:16:04.947] [info] Sending GET request to chos
                                                                                                                                                  469-42e6-8050-e6072494a639, text = "msg5"
en messages service: url = http://localhost:8085/messages-se
                                                               [2023-05-30 11:03:40.734] [info] Received POST request by LoggingController
                                                                                                                                                   [2023-05-30 11:16:04.959] [info] Got log: uuid = ea74fc26-
                                                                2023-05-30 11:03:40.734] [info] Add message to HazelcastLoggingService: uuid
                                                                                                                                                   8e5-4eae-9a51-ff233157df2c, text = "msq9"
[2023-05-30 11:16:04.948] [info] Response of messages servic
                                                               d63fe41f-09d1-4f8a-98ed-92539a53ac13, text = "msg3"
                                                                                                                                                   [2023-05-30 11:16:04.959] [info] Got log: uuid = 6e6fa45e-
                                                                [2023-05-30 11:03:40.735] [info] Message was added
                                                                                                                                                  31a-4026-843e-d0b23c082a2a, text = "msg2'
2023-05-30 11:16:04.948] [info] Getting messages from loggi
                                                                [2023-05-30 11:03:40.735] [info] All content was added to a map
                                                                                                                                                   [2023-05-30 11:16:04.959] [info] Got log: uuid = d63fe41f-
                                                                2023-05-30 11:03:56.752] [info] Received POST request by LoggingController
                                                                                                                                                  9d1-4f8a-98ed-92539a53ac13, text = "msg3"
2023-05-30 11:16:04.950] [info] Sending GET request to chos
                                                               [2023-05-30 11:03:56.752] [info] Add message to HazelcastLoggingService: uuid
                                                                                                                                                   [2023-05-30 11:16:04.959] [info] Got log: uuid = cdf9b832-
                                                               4d81a4c9-6054-42c2-93d5-60aadae42d32, text = "msq8"
en logging service: url = http://localhost:8082/logging-serv
                                                                                                                                                   c1d-415a-a9b3-c634cbe2d419. text = "msq4"
                                                                2023-05-30 11:03:56.753] [info] Message was added
                                                                                                                                                   [2023-05-30 11:16:04.959] [info] Got log: uuid = 4d81a4c9-
2023-05-30 11:16:04.959] [info] Response of logging service
                                                               [2023-05-30 11:03:56.753] [info] All content was added to a map
                                                                                                                                                  054-42c2-93d5-60aadae42d32, text = "msq8'
                                                                [2023-05-30 11:03:59.720] [info] Received POST request by LoggingController
                                                                                                                                                   [2023-05-30 11:16:04.959] [info] All content was added to
                                                                [2023-05-30 11:03:59.720] [info] Add message to HazelcastLoggingService: uuid
                                                                                                                                                   output string
2023-05-30 11:16:04.959] [info] Sending a response: "msg7"
                                                                ea74fc26-f8e5-4eae-9a51-ff233157df2c, text = "msq9"
                                                                                                                                                   [2023-05-30 11:16:04.959] [info] Sending a response: "msg7"
msg1" "msg10" "msg6" "msg5" "msg9" "msg2" "msg3" "msg4" "ms
                                                               [2023-05-30 11:03:59.722] [info] Message was added
                                                                [2023-05-30 11:03:59.722] [info] All content was added to a map
   : "msq1" "msq2" "msq4" "msq6" "msq8" "msq10"
          karyna@karyna: ~/Documents/APZ_lab5/APZ_labs 59x25
                                                                                  karvna@karvna: ~/Documents/APZ lab5/APZ labs 77x25
d server version=5.2.2}
                                                              [2023-05-30 11:03:53.571] [info] Message service took new msg from queue: "ms
                                                                                                                                                 rom queue: "msg2'
0/05/2023 10:59:29.517 INFO: [140039128888896] hz.client 1
                                                                                                                                                 2023-05-30 11:03:44.941] [info] Message service took new msg
dev] [5.2.0] Trying to connect to Address[172.17.0.4:5701]
                                                              [2023-05-30 11:03:59.719] [info] Message service took new msg from queue: "ms
                                                                                                                                                 rom queue: "msq4"
                                                                                                                                                 2023-05-30 11:03:50.869] [info] Message service took new msg
0/05/2023 10:59:29.519 INFO: [140039128888896] hz.client 1
                                                              [2023-05-30 11:11:05.144] [info] Received GET request by MessagesController
                                                                                                                                                 rom queue: "msg6"
[dev] [5.2.0] Authenticated with server Address[172.17.0.4
                                                              [2023-05-30 11:11:05.144] [info] Creating an output string
                                                                                                                                                 2023-05-30 11:03:56.751] [info] Message service took new msg
5701]:b9242311-7072-493f-9d0b-44815c7945a6, server version
                                                              [2023-05-30 11:11:05.144] [info] Getting saved messages from MessagesService
                                                                                                                                                 rom queue: "msq8'
                                                              [2023-05-30 11:11:05.144] [info] Got saved msg: "msg3"
5.2.2, local address: Address[172.17.0.1:42222]. Connecti
                                                                                                                                                 2023-05-30 11:04:03.139] [info] Message service took new msg
on{alive=1, connection id=3, remote endpoint=Address[172.17
                                                              [2023-05-30 11:11:05.144] [info] Got saved msg: "msg5"
                                                                                                                                                 rom queue: "msq10"
                                                              [2023-05-30 11:11:05.144] [info] Got saved msg: "msg7"
0.4:5701], last read time=2023-05-30 10:59:29.519, last wr
                                                                                                                                                 2023-05-30 11:16:04.948] [info] Received GET request by Messa
ite time=2023-05-30 10:59:29.517, closedTime=never, connect
                                                              [2023-05-30 11:11:05.144] [info] Got saved msg: "msg9"
                                                                                                                                                 esController
ed server version=5.2.2}
                                                               2023-05-30 11:11:05.144] [info] All content was added to an output string
                                                                                                                                                 2023-05-30 11:16:04.948] [info] Creating an output string
                                                              2023-05-30 11:11:05.144] [info] Sending a response: "msg3" "msg5" "msg7" "ms
[2023-05-30 10:59:29.524] [info] Creating HazelcastLoggingS
                                                                                                                                                2023-05-30 11:16:04.948] [info] Getting saved messages from M
2023-05-30 10:59:29.544] [info] Register a resource
                                                               2023-05-30 11:15:05.635] [info] Received GET request by MessagesController
                                                                                                                                                 2023-05-30 11:16:04.948] [info] Got saved msg: "msg1"
2023-05-30 10:59:29.5441 [info] Start server
                                                              2023-05-30 11:15:05.635] [info] Creating an output string
                                                                                                                                                 2023-05-30 11:16:04.948] [info] Got saved msg: "msg2"
2023-05-30 11:03:48.036] [info] Received POST request by L
                                                              [2023-05-30 11:15:05.635] [info] Getting saved messages from MessagesService
                                                                                                                                                 2023-05-30 11:16:04.948] [info] Got saved msg: "msg4"
                                                                                                                                                 2023-05-30 11:16:04.948] [info] Got saved msg: "msg6"
                                                              [2023-05-30 11:15:05.635] [info] Got saved msg: "msg3"
2023-05-30 11:03:48.036] [info] Add message to HazelcastLo
                                                              2023-05-30 11:15:05.635] [info] Got saved msg: "msg5"
                                                                                                                                                 2023-05-30 11:16:04.948] [info] Got saved msg: "msg8"
                                                                                                                                                 2023-05-30 11:16:04.948] [info] Got saved msg: "msg10"
gingService: uuid = d3937340-f469-42e6-8050-e6072494a639,
                                                               2023-05-30 11:15:05.635] [info] Got saved msg: "msg7"
                                                              2023-05-30 11:15:05.635] [info] Got saved msg: "msg9"
                                                                                                                                                 2023-05-30 11:16:04.948] [info] All content was added to an o
2023-05-30 11:03:48.039] [info] Message was added
                                                              [2023-05-30 11:15:05.635] [info] All content was added to an output string
                                                                                                                                                 tout string
2023-05-30 11:03:48.039] [info] All content was added to a
                                                              2023-05-30 11:15:05.635] [info] Sending a response: "msg3" "msg5" "msg7" "ms
                                                                                                                                                 2023-05-30 11:16:04.948] [info] Sending a response: "msg1" "m
                                                                                                                                                 2" "msq4" "msq6" "msq8" "msq10"
```

Щоб переконатися, що запити не опрацьовуються тільки logging-service-8082, запустила ще раз. На цей раз запит опрацьовувався за допомогою logging-service-8081 (бо по логах минулих запусків використовувався тільки

```
logging-service-8082)
                                                                                                           karyna@karyna: ~/Documents/APZ_lab5/APZ_labs
                                                                                                            karyna@karyna: ~/Documents/APZ lab5/APZ labs 79x28
                                                                                                                                                                                    karyna@karyna: ~/Documents/APZ_lab5/APZ_labs 59x28
                        2023-05-30 11:16:04.959] [info] Response of logging service
                                                                                        [2023-05-30 11:03:59.722] [info] All content was added to a map
                                                                                                                                                                          [2023-05-30 11:16:04.950] [info] Getting logs from Hazelcas
                                                                                        [2023-05-30 11:18:33.487] [info] Received GET request by LoggingController
                                                                                                                                                                          tLoggingService
                                                                                        [2023-05-30 11:18:33.487] [info] Creating an output string
                                                                                                                                                                          [2023-05-30 11:16:04.959] [info] Got log: uuid = 62c5c2f0-8
                        2023-05-30 11:16:04.959] [info] Sending a response: "msg7'
                                                                                        [2023-05-30 11:18:33.487] [info] Getting logs from HazelcastLoggingService
                                                                                                                                                                          ba7-4157-b660-064df1a31977, text = "msg7"
                                                                                        [2023-05-30 11:18:33.491] [info] Got log: uuid = 62c5c2f0-8ba7-4157-b660-064df1
                                                                                                                                                                          [2023-05-30 11:16:04.959] [info] Got log: uuid = 243c936b-d
                                                                                                                                                                           lab-4484-a587-0bd8a0667f9c, text = "msq1
                        2023-05-30 11:18:33.483] [info] Received GET request by Fac
                                                                                        [2023-05-30 11:18:33.491] [info] Got log: uuid = 243c936b-d1ab-4484-a587-0bd8a0
                                                                                                                                                                          134-4550-80ec-aed251071bff, text = "msg10"
                        2023-05-30 11:18:33.483] [info] Getting messages
                                                                                                                                                                          [2023-05-30 11:16:04.959] [info] Got log: uuid = 1ec7cc15-b
                                                                                        [2023-05-30 11:18:33.491] [info] Got log: uuid = 019a89c0-9134-4550-80ec-aed251
                                                                                                                                                                          d5d-4e49-aa30-fb161d9c14d1, text = "msq6
                                                                                                                                                                          [2023-05-30 11:16:04.959] [info] Got log: uuid = d3937340-f
                                                                                        [2023-05-30 11:18:33.491] [info] Got log: uuid = 1ec7cc15-bd5d-4e49-aa30-fb161d
                        [2023-05-30 11:18:33.484] [info] Sending GET request to chos
                                                                                        9c14d1. text = "msa6"
                        en messages service: url = http://localhost:8084/messages-se
                                                                                        [2023-05-30 11:18:33.491] [info] Got log: uuid = d3937340-f469-42e6-8050-e60724
                                                                                                                                                                          [2023-05-30 11:16:04.959] [info] Got log: uuid = ea74fc26-f
                                                                                        94a639, text = "msq5"
                        [2023-05-30 11:18:33.485] [info] Response of messages servic
                                                                                        [2023-05-30 11:18:33.491] [info] Got log: uuid = ea74fc26-f8e5-4eae-9a51-ff2331
                                                                                                                                                                          [2023-05-30 11:16:04.959] [info] Got log: uuid = 6e6fa45e-0
                                                                                                                                                                          31a-4026-843e-d0b23c082a2a, text = "msq2"
                        2023-05-30 11:18:33.485] [info] Getting messages from loggi
                                                                                        [2023-05-30 11:18:33.491] [info] Got log: uuid = 6e6fa45e-031a-4026-843e-d0b23c
                                                                                                                                                                          [2023-05-30 11:16:04.959] [info] Got log: uuid = d63fe41f-0
                                                                                        082a2a, text = "msg2'
                                                                                                                                                                          9d1-4f8a-98ed-92539a53ac13, text = "msg3'
                        2023-05-30 11:18:33.486] [info] Sending GET request to chos
                                                                                                                                                                          [2023-05-30 11:16:04.959] [info] Got log: uuid = cdf9b832-5
                                                                                        [2023-05-30 11:18:33.491] [info] Got log: uuid = d63fe41f-09d1-4f8a-98ed-92539a
                        en logging service: url = http://localhost:8081/logging-serv
                                                                                        [2023-05-30 11:18:33.491] [info] Got log: uuid = cdf9b832-5c1d-415a-a9b3-c634cb
                        [2023-05-30 11:18:33.491] [info] Response of logging service
                                                                                                                                                                          054-42c2-93d5-60aadae42d32, text = "msg8'
                                                                                        e2d419, text = "msg4"
                                                                                        [2023-05-30 11:18:33.491] [info] Got log: uuid = 4d81a4c9-6054-42c2-93d5-60aada
                                                                                                                                                                          [2023-05-30 11:16:04.959] [info] All content was added to a
                                                                                        e42d32, text = "msg8"
                                                                                                                                                                          n output string
                        2023-05-30 11:18:33.491] [info] Sending a response: "msg7'
                        msg1" "msg10" "msg6" "msg9" "msg9" "msg2" "msg3" "msg4" "ms
8" : "msg3" "msg5" "msg7" "msg9"
                                                                                        .
[2023-05-30 11:18:33.491] [info] Sending a response: "msg7" "msg1" "msg10" "msg
                                  karyna@karyna: ~/Documents/APZ labs/APZ labs 59x25
                                                                                                                                                                                   karyna@karyna: ~/Documents/APZ_lab5/APZ_labs 62x25
                        d server version=5.2.2}
                                                                                       2023-05-30 11:11:05.144] [info] Got saved msg: "msg9"
                                                                                                                                                                        rom queue: "msg2
                                                                                       2023-05-30 11:11:05.144] [info] All content was added to an output string
                        0/05/2023 10:59:29.517 INFO: [140039128888896] hz.client 1
                                                                                                                                                                        2023-05-30 11:03:44.941] [info] Message service took new msg
                        dev] [5.2.0] Trying to connect to Address[172.17.0.4:5701]
                                                                                                                                                                       from queue: "msq4"
                                                                                                                                                                       2023-05-30 11:03:50.869] [info] Message service took new msg
                        30/05/2023 10:59:29.519 INFO: [140039128888896] hz.client 1
                                                                                       rom queue: "msg6"
                        dev] [5.2.0] Authenticated with server Address[172.17.0.4
                                                                                       2023-05-30 11:15:05.635] [info] Creating an output string
                                                                                                                                                                       2023-05-30 11:03:56.751] [info] Message service took new msg
                        :5701]:b9242311-7072-493f-9d0b-44815c7945a6, server version
                                                                                       2023-05-30 11:15:05.635] [info] Getting saved messages from MessagesService
                                                                                                                                                                       from queue: "msg8"
                                                                                      [2023-05-30 11:15:05.635] [info] Got saved msg: "msg3"
                         5.2.2, local address: Address[172.17.0.1:42222]. Connecti
                                                                                                                                                                       [2023-05-30 11:04:03.139] [info] Message service took new msg
                                                                                      [2023-05-30 11:15:05.635] [info] Got saved msg: "msg5"
                        on{alive=1, connection id=3, remote endpoint=Address[172.17
                                                                                                                                                                       from queue: "msg10"
                        .0.4:5701], last read time=2023-05-30 10:59:29.519, last wr
                                                                                      [2023-05-30 11:15:05.635] [info] Got saved msg: "msg7"
                                                                                                                                                                        2023-05-30 11:16:04.948] [info] Received GET request by Messa
                                                                                      [2023-05-30 11:15:05.635] [info] Got saved msg: "msg9"
                        te time=2023-05-30 10:59:29.517, closedTime=never, connect
                        ed server version=5.2.2}
                                                                                                                                                                        2023-05-30 11:16:04.948] [info] Creating an output string
                        2023-05-30 10:59:29.524] [info] Creating HazelcastLoggingS
                                                                                       2023-05-30 11:15:05.635] [info] Sending a response: "msg3" "msg5" "msg7" "ms
                                                                                                                                                                       [2023-05-30 11:16:04.948] [info] Getting saved messages from M
                        [2023-05-30 10:59:29.544] [info] Register a resource
                                                                                       [2023-05-30 11:18:33.485] [info] Received GET request by MessagesController
                                                                                                                                                                       2023-05-30 11:16:04.948] [info] Got saved msg: "msg1"
                        2023-05-30 10:59:29.544] [info] Start server
                                                                                       2023-05-30 11:18:33.485] [info] Creating an output string
                                                                                                                                                                       2023-05-30 11:16:04.948] [info] Got saved msg: "msg2"
                        2023-05-30 11:03:48.036] [info] Received POST request by L
                                                                                      [2023-05-30 11:18:33.485] [info] Getting saved messages from MessagesService
                                                                                                                                                                       2023-05-30 11:16:04.948] [info] Got saved msg: "msg4"
                                                                                       2023-05-30 11:18:33.485] [info] Got saved msg: "msg3'
                                                                                                                                                                        2023-05-30 11:16:04.948] [info] Got saved msg: "msg6"
                        2023-05-30 11:03:48.036] [info] Add message to HazelcastLo
                                                                                                                 info] Got saved msg: "msg5'
                                                                                      [2023-05-30 11:18:33.485]
                                                                                                                                                                       [2023-05-30 11:16:04.948] [info] Got saved msg: "msg8"
                                                                                      [2023-05-30 11:18:33.485] [info] Got saved msg: "msg7'
                                                                                                                                                                       2023-05-30 11:16:04.948] [info] Got saved msg: "msg10"
                                                                                       2023-05-30 11:18:33.485] [info] Got saved msg: "msg9'
                                                                                                                                                                       [2023-05-30 11:16:04.948] [info] All content was added to an o
                        2023-05-30 11:03:48.039] [info] Message was added
                                                                                      [2023-05-30 11:18:33.485] [info] All content was added to an output string
                        2023-05-30 11:03:48.039] [info] All content was added to a
                                                                                      [2023-05-30 11:18:33.485] [info] Sending a response: "msg3" "msg5" "msg7" "ms
                                                                                                                                                                      [2023-05-30 11:16:04.948] [info] Sending a response: "msg1" "
```

Щоб зробити deregister для мікросервісу, запускаємо скрипт, якому передаємо іd сервісу

```
#!/bin/bash

C@NSUL_NAME=services-manager

docker exec -it "${CONSUL_NAME}" consul services deregister -id="${1}"

karyna@karyna:~/Documents/APZ_lab5/APZ_labs/bash_scripts$ ./service_deregistraton_by_id.sh messages-service-8084

Deregistered service: messages-service-8084

karyna@karyna:~/Documents/APZ_lab5/APZ_labs/bash_scripts$
```

Вивід у consul:

```
2023-05-30T14:46:56.966Z [INFO]
                                 agent: Synced node info
                                 agent: Synced service: service=facade-service-8080
2023-05-30T14:59:24.236Z [INFO]
2023-05-30T14:59:26.339Z [INFO]
                                 agent: Synced service: service=logging-service-8081
                                 agent: Synced service: service=logging-service-8082
2023-05-30T14:59:27.787Z [INFO]
2023-05-30T14:59:29.541Z [INFO]
                                 agent: Synced service: service=logging-service-8083
                                 agent: Synced service: service=messages-service-8084
2023-05-30T14:59:31.014Z [INFO]
                                 agent: Synced service: service=messages-service-8085
2023-05-30T14:59:33.014Z [INFO]
2023-05-30T15:24:36.171Z [INFO]
                                 agent: Deregistered service: service=messages-service-8084
```

Тепер всі GET запити не будуть повертати повідомлення з messages-service-8084, всі повідомлення з messages services повертаються тільки з messages-service-8085:

```
GET http://127.0.0.1:8080/facade-service

Show Request

HTTP/1.1 200 OK

Date: Tue, 30 May 2023 15:26:04 GMT

Content-Type: text/plain

Content-Length: 117

"msg7" "msg1" "msg10" "msg6" "msg5" "msg9" "msg2" "msg3" "msg4" "msg8" : "msg1" "msg2" "msg4" "msg6" "msg8" "msg10"

Response code: 200 (OK); Time: 7ms (7 ms); Content length: 117 bytes (117 B)
```

| [2023-05-30 | 11:26:01.350] | [info] | Got saved msg: "msg4" | |
|-------------|---------------|--------|--|---------------|
| [2023-05-30 | 11:26:01.350] | [info] | Got saved msg: "msg6" | |
| | | | Got saved msg: "msg8" | |
| [2023-05-30 | 11:26:01.350] | [info] | Got saved msg: "msg10" | |
| | | | All content was added to an output string | |
| [2023-05-30 | 11:26:01.350] | [info] | Sending a response: "msg1" "msg2" "msg4" "msg6" "r | nsg8" "msg10" |
| [2023-05-30 | 11:26:02.206] | [info] | Received GET request by MessagesController | |
| [2023-05-30 | 11:26:02.206] | [info] | Creating an output string | |
| [2023-05-30 | 11:26:02.206] | [info] | Getting saved messages from MessagesService | |
| [2023-05-30 | 11:26:02.206] | [info] | Got saved msg: "msg1" | |
| [2023-05-30 | 11:26:02.206] | [info] | Got saved msg: "msg2" | |
| [2023-05-30 | 11:26:02.206] | [info] | Got saved msg: "msg4" | |
| [2023-05-30 | 11:26:02.206] | [info] | Got saved msg: "msg6" | |
| | | | Got saved msg: "msg8" | |
| [2023-05-30 | 11:26:02.206] | [info] | Got saved msg: "msg10" | |
| [2023-05-30 | 11:26:02.206] | [info] | All content was added to an output string | |
| [2023-05-30 | 11:26:02.206] | [info] | Sending a response: "msg1" "msg2" "msg4" "msg6" "r | nsg8" "msg10" |
| [2023-05-30 | 11:26:02.813] | [info] | Received GET request by MessagesController | |
| [2023-05-30 | 11:26:02.813] | [info] | Creating an output string | |
| [2023-05-30 | 11:26:02.813] | [info] | Getting saved messages from MessagesService | |
| [2023-05-30 | 11:26:02.813] | [info] | Got saved msq: "msq1" | |
| [2023-05-30 | 11:26:02.813] | [info] | Got saved msg: "msg2" | |
| | | | Got saved msg: "msg4" | |
| | | | Got saved msg: "msg6" | |
| | | | Got saved msg: "msg8" | |
| [2023-05-30 | 11:26:02.813] | [info] | Got saved msg: "msg10" | |
| [2023-05-30 | 11:26:02.813] | [info] | All content was added to an output string | |
| [2023-05-30 | 11:26:02.813] | [info] | Sending a response: "msg1" "msg2" "msg4" "msg6" "r | nsg8" "msg10" |
| [2023-05-30 | 11:26:03.491] | [info] | Received GET request by MessagesController | |
| [2023-05-30 | 11:26:03.491] | [info] | Creating an output string | |
| [2023-05-30 | 11:26:03.491] | [info] | Getting saved messages from MessagesService | |
| | | | Got saved msg: "msg1" | |
| [2023-05-30 | 11:26:03.491] | [info] | Got saved msg: "msg2" | |
| | | | Got saved msg: "msg4" | |
| [2023-05-30 | 11:26:03.491] | [info] | Got saved msg: "msg6" | |
| [2023-05-30 | 11:26:03.491] | [info] | Got saved msg: "msg8" | |
| [2023-05-30 | 11:26:03.491] | [info] | Got saved msg: "msg10" | |
| [2023-05-30 | 11:26:03.491] | [info] | All content was added to an output string | |
| 2023-05-30 | 11:26:03.491] | [info] | Sending a response: "msg1" "msg2" "msg4" "msg6" "r | nsg8" "msg10" |
| [2023-05-30 | 11:26:04.118] | [info] | Received GET request by MessagesController | |
| [2023-05-30 | 11:26:04.118] | [info] | Creating an output string | |
| [2023-05-30 | 11:26:04.118] | [info] | Getting saved messages from MessagesService | |
| [2023-05-30 | 11:26:04.118] | [info] | Got saved msg: "msg1" | |
| | | | Got saved msg: "msg2" | |
| [2023-05-30 | 11:26:04.118] | [info] | Got saved msg: "msg4" | |
| | | | Got saved msg: "msg6" | |
| | | | Got saved msg: "msg8" | |
| [2023-05-30 | 11:26:04.118] | [info] | Got saved msg: "msg10" | |
| [2023-05-30 | 11:26:04.118] | [info] | All content was added to an output string | |
| | | | Sending a response: "msg1" "msg2" "msg4" "msg6" "r | nsg8" "msg10" |
| | | | | |
| | | | | |

Логи з messages-service-8085