

Запускаємо три екземпляри logging service та записуємо 10 повідомлень:

```
Terminal: Local x Local (2) x Local (3) x Local (4) x Local (5) x Local (6) x + v
-->
(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg1"
mssg1(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg2"
mssg2(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg3"
mssg3(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg4"
mssg4(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg5"
mssg5(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg6"
mssg6(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg7"
mssg7(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg8"
mssg8(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg9"
mssg9(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg10"
(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$
```

Дивимось на вміст консоль логінг сервісів:

```
Terminal: Local x Local (2) x Local (3) x Local (4) x Local (5) x Local (6) x + v
(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ cd logging-service
(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3/logging-service$ python logging_app.py 172.19.0.2:5701 8000
* Serving Flask app 'logging_app' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Running on http://127.0.0.1:8000 (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 106-932-398
mssg7
127.0.0.1 - - [21/May/2022 20:14:00] "POST /logging HTTP/1.1" 200 -
```

```
Terminal: Local x Local (2) x Local (3) x Local (4) x Local (5) x Local (6) x + v
* Debugger is active!
* Debugger PIN: 106-932-398
mssg2
127.0.0.1 - - [21/May/2022 20:13:43] "POST /logging HTTP/1.1" 200 -
mssg4
127.0.0.1 - - [21/May/2022 20:13:50] "POST /logging HTTP/1.1" 200 -
mssg8
127.0.0.1 - - [21/May/2022 20:14:03] "POST /logging HTTP/1.1" 200 -
mssg10
127.0.0.1 - - [21/May/2022 20:14:09] "POST /logging HTTP/1.1" 200 -
```

```
Terminal: Local x Local(2) x Local(3) x Local(4) x Local(5) x Local(6) x + v
* Running on http://127.0.0.1:8002 (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 106-932-398
mssg1

127.0.0.1 - - [21/May/2022 20:13:36] "POST /logging HTTP/1.1" 200 -
mssg3

127.0.0.1 - - [21/May/2022 20:13:47] "POST /logging HTTP/1.1" 200 -
mssg5

127.0.0.1 - - [21/May/2022 20:13:55] "POST /logging HTTP/1.1" 200 -
mssg6

127.0.0.1 - - [21/May/2022 20:13:58] "POST /logging HTTP/1.1" 200 -
mssg9

127.0.0.1 - - [21/May/2022 20:14:06] "POST /logging HTTP/1.1" 200 -

Version Control  TODO  Problems  Terminal  Python Packages  Python Console  Services
Packages installed successfully: Installed packages: 'psutil' (57 minutes ago)
```

Ми можемо бачити що post запити розподіляються між логінг сервісами рандомно. Тепер спробуємо відправити GET запит:

```
Terminal: Local x Local(2) x Local(3) x Local(4) x Local(5) x Local(6) x + v
mssg5(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg6"
mssg6(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg7"
mssg7(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg8"
mssg8(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg9"
mssg9(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X POST http://127.0.0.1:8888/facade -d "mssg10"
(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X GET http://127.0.0.1:8888/facade
Logging-service response:
mssg5
mssg8
mssg7
mssg6
mssg1
mssg9
mssg3
mssg4
mssg2
mssg10
Messages-service response: not implemented yet
(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$

Version Control  TODO  Problems  Terminal  Python Packages  Python Console  Services
Packages installed successfully: Installed packages: 'psutil' (1 hour ago)
```

Запит виконався успішно, ми отримали в розкинутому порядку повідомлення.

Консоль facade service:

```
Terminal: Local x Local (2) x Local (3) x Local (4) x Local (5) x Local (6) x + v
File "/home/zorya/Documents/APZ/LAB3/facade-service/facade_app.py", line 18, in check_port
    result = sock.connect_ex(('127.0.0.1', port))
TypeError: an integer is required (got type str)
* Detected change in '/home/zorya/Documents/APZ/LAB3/facade-service/facade_app.py', reloading
* Restarting with stat
* Debugger is active!
* Debugger PIN: 106-932-398
127.0.0.1 - - [21/May/2022 20:13:36] "POST /facade HTTP/1.1" 200 -
127.0.0.1 - - [21/May/2022 20:13:43] "POST /facade HTTP/1.1" 200 -
127.0.0.1 - - [21/May/2022 20:13:47] "POST /facade HTTP/1.1" 200 -
127.0.0.1 - - [21/May/2022 20:13:50] "POST /facade HTTP/1.1" 200 -
127.0.0.1 - - [21/May/2022 20:13:55] "POST /facade HTTP/1.1" 200 -
127.0.0.1 - - [21/May/2022 20:13:58] "POST /facade HTTP/1.1" 200 -
127.0.0.1 - - [21/May/2022 20:14:00] "POST /facade HTTP/1.1" 200 -
127.0.0.1 - - [21/May/2022 20:14:03] "POST /facade HTTP/1.1" 200 -
127.0.0.1 - - [21/May/2022 20:14:06] "POST /facade HTTP/1.1" 200 -
127.0.0.1 - - [21/May/2022 20:14:09] "POST /facade HTTP/1.1" 200 -
127.0.0.1 - - [21/May/2022 20:21:08] "GET /facade HTTP/1.1" 200 -
Packages installed successfully: Installed packages: 'psutil' (today 19:20)
```

Тепер відключимо одну ноду і ще раз виконаємо GET запит:

```
Terminal: Local x Local (2) x Local (4) x Local (5) x Local (6) x + v
msgg3
msgg4
msgg2
msgg10
Messages-service response: not implemented yet
(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X GET http://127.0.0.1:8888/facade
Logging-service response:
msgg9
msgg5
msgg8
msgg7
msgg6
msgg1
msgg3
msgg4
msgg2
msgg10
Messages-service response: not implemented yet
(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$
```

Як ми бачимо все працює.

Спробуємо відключити ще одну ноду:

```
Terminal: Local x Local (2) x Local (5) x Local (6) x + v
mssg7
mssg6
mssg2
mssg10
Messages-service response: not implemented yet
(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$ curl -X GET http://127.0.0.1:8888/facade
Logging-service response:
mssg1
mssg9
mssg5
mssg3
mssg4
mssg8
mssg7
mssg6
mssg2
mssg10
Messages-service response: not implemented yet
(venv) zorya@zorya-virtual-machine:~/Documents/APZ/LAB3$
```

Version Control | TODO | Problems | Terminal | Python Packages | Python Console | Services

⊞ Packages installed successfully: Installed packages: 'psutil' (today 19:20)

Бачимо що всі повідомлення все ще присутні.

Якщо глянути на management center також видно що все добре:

Map Statistics (In-Memory Format: BINARY)

Now

Member	Entries	Gets	Puts	Removals	Sets	Entry Memory	Backups	Backup Mem...
172.19.0.4:5701	10	0	3	0	0	1.57 kB	0	0 B
TOTAL	10	0	3	0	0	1.57 kB	0	0 B

1 - 1 of 1 Rows 10

Map Throughput Statistics

Last Minute Now

Member	Puts/s	Gets/s	Removes/s	Sets/s	Avg Put Late...	Avg Get Late...	Avg Remove ...	Avg Set Late...
172.19.0.4:5701	0	0	0	0	0ms	0ms	0ms	0ms

1 - 1 of 1 Rows 10