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COEN 241

Homework 2

11/7/21

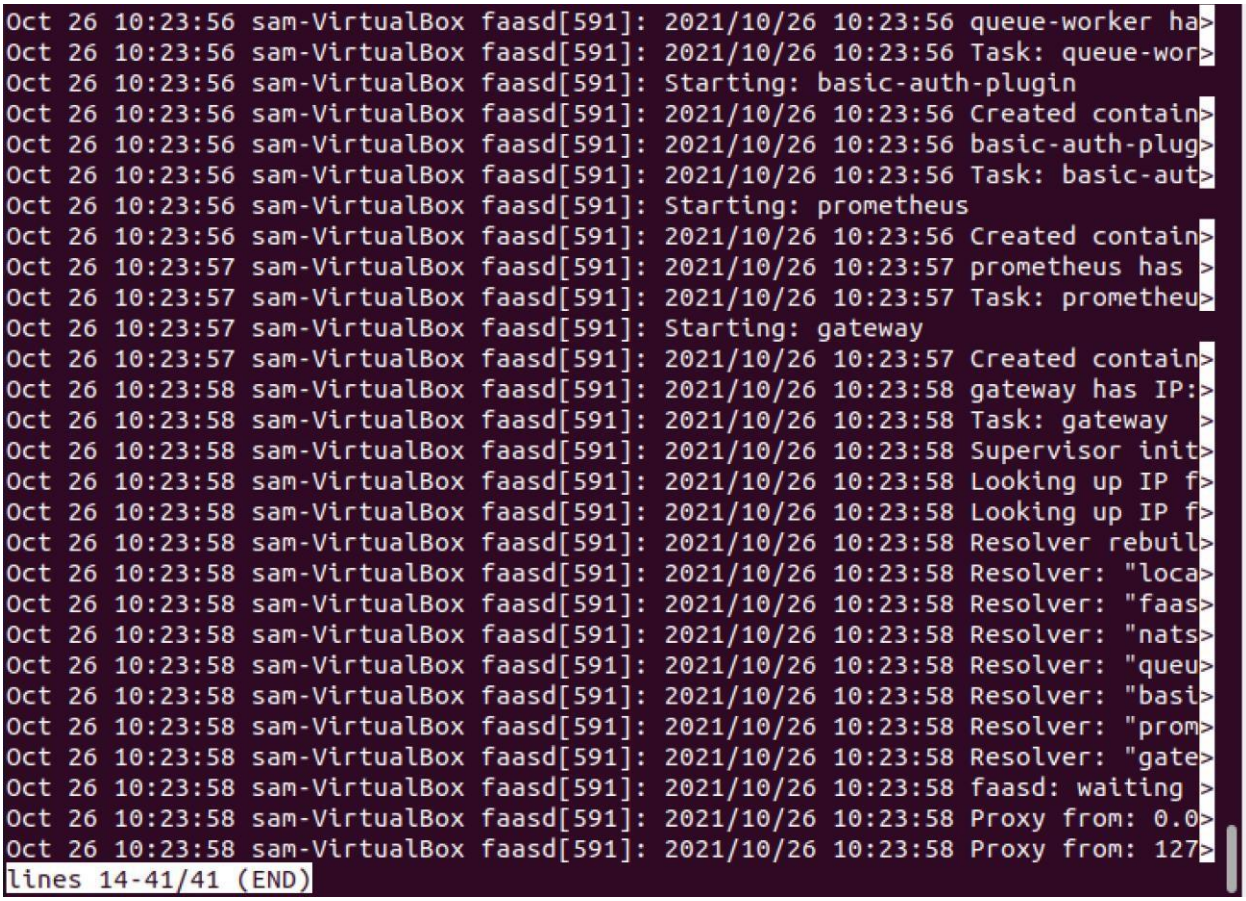
Invoking the figlet function using the input string “Hello There”

```
sam@sam-VirtualBox:~/functions$ curl -d "Hello There" -X POST http://localhost:
8080/function/figlet
 _   _      _ _        _____ _
| | | | ___| | | ___  |_   _| |__   ___ _ __ ___
| |_| |/ _ \ | |/ _ \   | | | '_ \ / _ \ '__/ _ \
|  _  |  __/ | | (_) |  | | | | | |  __/ | |  __/
|_| |_|\___|_|_|\___/   |_| |_| |_|\___|_|  \___|

sam@sam-VirtualBox:~/functions$
```

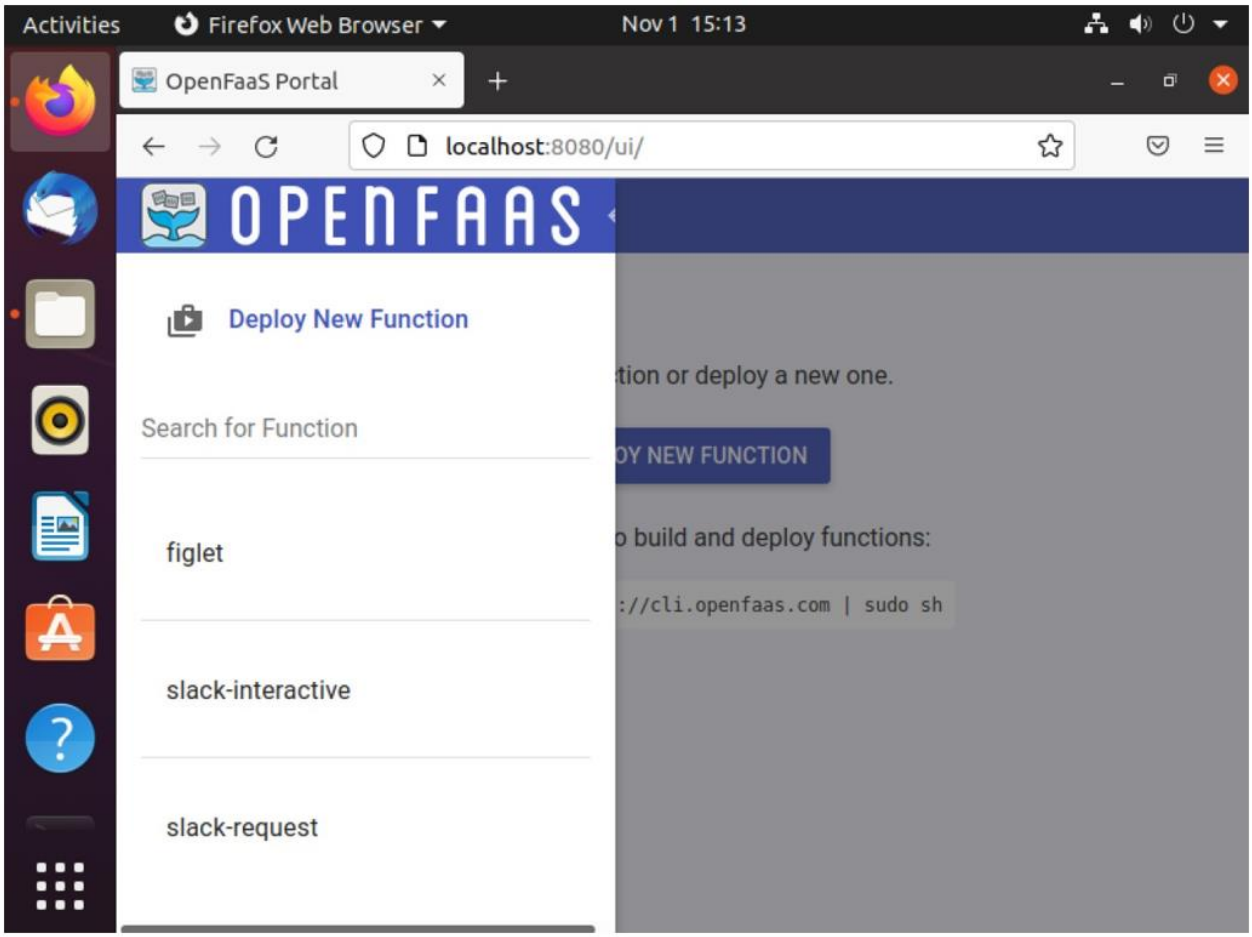
```
sam@sam-VirtualBox:~/functions$ sudo journalctl -u faasd --lines 40
-- Logs begin at Wed 2021-09-29 14:23:04 PDT, end at Mon 2021-11-01 15:09:05 P>
Oct 26 10:23:52 sam-VirtualBox faasd[591]: 2021/10/26 10:23:52 Start-up order:
Oct 26 10:23:52 sam-VirtualBox faasd[591]: 2021/10/26 10:23:52 - nats
Oct 26 10:23:52 sam-VirtualBox faasd[591]: 2021/10/26 10:23:52 - queue-worker
Oct 26 10:23:52 sam-VirtualBox faasd[591]: 2021/10/26 10:23:52 - basic-auth-pl>
Oct 26 10:23:52 sam-VirtualBox faasd[591]: 2021/10/26 10:23:52 - prometheus
Oct 26 10:23:52 sam-VirtualBox faasd[591]: 2021/10/26 10:23:52 - gateway
Oct 26 10:23:52 sam-VirtualBox faasd[591]: Starting: nats
Oct 26 10:23:53 sam-VirtualBox faasd[591]: 2021/10/26 10:23:53 Created contain>
Oct 26 10:23:55 sam-VirtualBox faasd[591]: 2021/10/26 10:23:55 nats has IP: 10>
Oct 26 10:23:55 sam-VirtualBox faasd[591]: 2021/10/26 10:23:55 Task: nats     >
Oct 26 10:23:55 sam-VirtualBox faasd[591]: Starting: queue-worker
Oct 26 10:23:55 sam-VirtualBox faasd[591]: 2021/10/26 10:23:55 Created contain>
Oct 26 10:23:56 sam-VirtualBox faasd[591]: 2021/10/26 10:23:56 queue-worker ha>
Oct 26 10:23:56 sam-VirtualBox faasd[591]: 2021/10/26 10:23:56 Task: queue-wor>
Oct 26 10:23:56 sam-VirtualBox faasd[591]: Starting: basic-auth-plugin
Oct 26 10:23:56 sam-VirtualBox faasd[591]: 2021/10/26 10:23:56 Created contain>
Oct 26 10:23:56 sam-VirtualBox faasd[591]: 2021/10/26 10:23:56 basic-auth-plug>
Oct 26 10:23:56 sam-VirtualBox faasd[591]: 2021/10/26 10:23:56 Task: basic-aut>
Oct 26 10:23:56 sam-VirtualBox faasd[591]: Starting: prometheus
Oct 26 10:23:56 sam-VirtualBox faasd[591]: 2021/10/26 10:23:56 Created contain>
Oct 26 10:23:57 sam-VirtualBox faasd[591]: 2021/10/26 10:23:57 prometheus has >
Oct 26 10:23:57 sam-VirtualBox faasd[591]: 2021/10/26 10:23:57 Task: prometheu>
Oct 26 10:23:57 sam-VirtualBox faasd[591]: Starting: gateway
Oct 26 10:23:57 sam-VirtualBox faasd[591]: 2021/10/26 10:23:57 Created contain>
Oct 26 10:23:58 sam-VirtualBox faasd[591]: 2021/10/26 10:23:58 gateway has IP:>
Oct 26 10:23:58 sam-VirtualBox faasd[591]: 2021/10/26 10:23:58 Task: gateway  >
```

Logs Continued:



The Two images above show the logs from open-faasd shortly after deploying the figlet function.

This image is from the local user interface for Open-faas from the url below, and by logging in with the credentials provided bvy the cli. As we can see, the figlet function, and our slack functions are all deployed.



The image below is the execution of both slack functions using the faas-cli command.

```
sam@sam-VirtualBox:~/functions$ echo "request 1" | faas-cli invoke slack-request
I see request request 1

sam@sam-VirtualBox:~/functions$ echo "request 2" | faas-cli invoke slack-interactive
Recieved: request 2
```

Task 6 Questions:

1. Commands are:
    a. *curl -d "str" -X POST http://localhost:8080/function/slack-request*
        i. str can be any string

b. echo "str" | faas-cli invoke slack-request

i. Without the pipe operator, we can still type the fass-cli command, then type our input. After everything we want to be typed is typed and entered, Control+D gets our result.

ii. str can be any string.

2. As programmed, the output simple returns a string starting with "I see request" then the request string is appended to get a sample output of "I see request *where this part is directly from the user*"
3. Commands are:

a. curl -d "str" -X POST [*http://localhost:8080/function/slack-interactive*](http://localhost:8080/function/slack-interactive)

i. str can be any string

b. echo "str" | faas-cli invoke slack-interactive

i. Without the pipe operator, we can still type the fass-cli command, then type our input. After everything we want to be typed is typed and entered, Control+D gets our result.

ii. str can be any string

4. As programmed, the output simple returns a string starting with "Received: " then the request string is appended to get a sample output of "Received *where this part is directly from the user*"
5. For all these functions, we can pass different inputs by changing entering any arbitrary string into in all placed labled with "str" in the commands above.
6. For the slack-interactive function, we can add logic around the API to interpret the input, then react depending on the input. For example if we want to count characters in a string, then say if it is long or not, we can use the python len() function, then if the length is less than 10 characters, we can say it is short, or long otherwise.