1. Invoking the Figlet Function



I deployed a function called figlet from the OpenFaas store. First, we executed the command *faas-cli store deploy figlet*.

Then, we find the URL for the function using faas-cli store inspect figlet

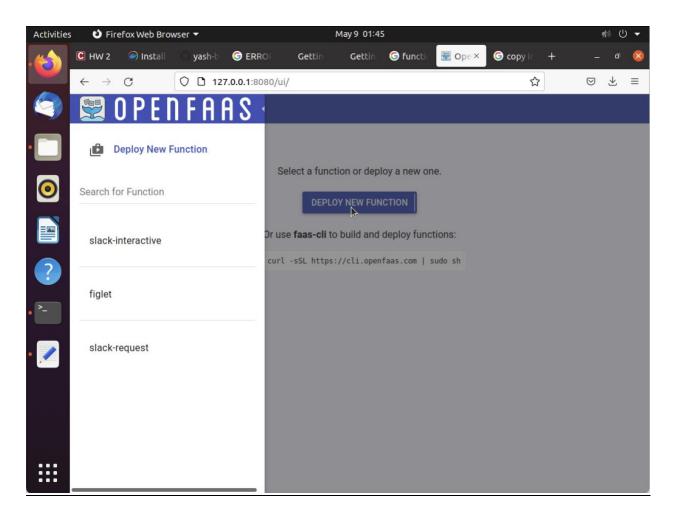
After that, we invoke figlet and print some ASCII characters. echo "Hello, FaaS world" | faas-cli invoke figlet

2. Running sudo journalctl -u faasd -lines 40 command

```
Logs begin at Sun 2022-05-08 20:50:43 UTC, end at Mon 2022-05-09 02:03:28 UTC. --
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 - gateway
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 - queue-worker
May 08 21:03:59 yash faasd[4006]: Starting: basic-auth-plugin
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Created container: basic-auth-plugin
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 basic-auth-plugin has IP: 10.62.0.2
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Task: basic-auth-plugin
                                                                                                                         Container: basic-a>
May 08 21:03:59 yash faasd[4006]: Starting: nats
May 08 21:03:59 yash faasd[4006]: Creating local directory: /var/lib/faasd/nats
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Running nats with user: "65534"
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Created container: nats
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 nats has IP: 10.62.0.3
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Task: nats
                                                                                                       Container: nats
Maý 08 21:03:59 ýash faasd[4006]: Starting: prometheus
May 08 21:03:59 yash faasd[4006]: Creating local directory: /var/lib/faasd/prometheus
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Running prometheus with user: "65534"
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Created container: prometheus
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 prometheus has IP: 10.62.0.4
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Task: prometheus
                                                                                                               Container: prometheus
May 08 21:03:59 yash faasd[4006]: Starting: gateway
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Created container: gateway
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 gateway has IP: 10.62.0.5
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Task: gateway
                                                                                                           Container: gateway
May 08 21:03:59 yash faasd[4006]: Starting: queue-worker
May 08 21:03:59 yash faasd[4006]: 2022/05/08 21:03:59 Created container: queue-worker
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 queue-worker has IP: 10.62.0.6
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Task: queue-worker Container
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Supervisor init done in: 15 seconds
                                                                                                                 Container: queue-worker
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Looking up IP for: "gateway"
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Looking up IP for: "prometheus"
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Resolver rebuilding map
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Resolver: "localhost"="127.0.0.1"
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Resolver: "faasd-provider"="10.62.0.1"
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Resolver: "basic-auth-plugin"="10.62.0.2"
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Resolver: "nats"="10.62.0.3"
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Resolver: "prometheus"="10.62.0.4"
May 08 21:04:00 yash faasd[4006]: 2022/05/08 21:04:00 Resolver: "gateway"="10.62.0.5"
lines 1-37
```

The above command is used to print logs to check whether Faasd is running or not. We are printing 40 lines of the log.

3. OpenFaaS Gateway screenshot AFTER deploying Figlet, slack-handler and slack-interactive functions



The above screenshot verifies that the three functions have been deployed in the cluster.

4. Invoking slack-request function via curl and faas-cli

```
adminyash@yash:~/functions$ faas-cli invoke slack-request
Reading from STDIN - hit (Control + D) to stop.

{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/yash-bhargava18.png", "author_name": "Yash Bhargava", "title": "The A wesome world of Cloud Computing! COEN 241"}, {"text": "COEN 241 is the most awes ome class ever!.", "title": "About COEN 241"}, {"title": "Would you recommend COEN 241 to your friends?", "color": "#3AA3E3", "actions": [{"text": "0f Course!", "type": "button", "name": "recommend", value": "recommend"}, {"text": "Most De finitely!", "type": "button", "name": "definitely", "value": "definitely"]], "ca llback_id": "response123", "fallback": "Would you recommend COEN 241 to your friends?", "attachment_type": "default"]]}
yash@yash:~/functions$ curl -d '{"Hello":"COEN 241"}' http://127.1.0.1:8080/fun ction/slack-request
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://github.com/yash-bhargava18.png", "author_name": "Yash Bhargava", "title": "The A wesome world of Cloud Computing! COEN 241"}, {"text": "COEN 241 is the most awes ome class ever!.", "title": "About COEN 241"}, {"text": "COEN 241 is the most awes ome class ever!.", "title": "About COEN 241"}, {"title": "Would you recommend COEN 241 to your friends?", "color": "#3AA3E3", "actions": [{"text": "Of Course!", "type": "button", "name": "recommend", "value": "recommend"}, {"text": "Most De finitely!", "type": "button", "name": "definitely", "value": "definitely"]], "ca llback_id": "response123", "fallback": "Would you recommend COEN 241 to your friends?", "attachment_type": "default"}]}
yash@yash:~/functions$
```

5. Invoking slack-interactive using curl and faas-cli

```
yash@yash:~/functions$ faas-cli invoke slack-interactive
Reading from STDIN - hit (Control + D) to stop.
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "http
s://github.com/yash-bhargava18/COEN241.git", "color": "#36a64f", "text": "Head o
ver to COEN 241", "title": "COEN 241", "ts": 123456789, "author_name": "", "titl
e_link": "https://www.scu.edu/engineering/academic-programs/department-of-comput
er-engineering/graduate/course-descriptions/", "image_url": "https://www.scu.edu
/media/offices/umc/scu-brand-guidelines/visual-identity-amp-photography/visual-i
dentity-toolkit/logos-amp-seals/Mission-Dont3.png", "response_type": "ephemeral", "replace_original": true, "footer_icon": "https://a.slack-edge.com/45901/marke ting/img/_rebrand/meta/slack_hash_256.png", "pretext": "Ahh yeah! Great choice, COEN 241 is absolutely amazing!", "fallback": "Required plain-text summary of th
e attachment.", "thumb_url": "https://www.scu.edu/engineering/academic-programs/
department-of-computer-engineering/graduate/course-descriptions/", "author_icon"
: "https://github.com/yash-bhargava18.png"}]}
yash@yash:~/functions$ curl -d '{"Hello":"COEN 241"}' http://127.1.0.1:8080/fun
ction/slack-interactive
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author link": "http
s://github.com/yash-bhargava18/COEN241.git", "color": "#36a64f", "text": "Head o
ver to COEN 241", "title": "COEN 241", "ts": 123456789, "author_name": "", "titl
e link": "https://www.scu.edu/engineering/academic-programs/department-of-comput
er-engineering/graduate/course-descriptions/", "image_url": "https://www.scu.edu
/media/offices/umc/scu-brand-guidelines/visual-identity-amp-photography/visual-i
dentity-toolkit/logos-amp-seals/Mission-Dont3.png", "response_type": "ephemeral"
, "replace_original": true, "footer_icon": "https://a.slack-edge.com/45901/marke
ting/img/_rebrand/meta/slack_hash_256.png", "pretext": "Ahh yeah! Great choice,
COEN 241 is absolutely amazing!", "fallback": "Required plain-text summary of th
e attachment.", "thumb_url": "https://www.scu.edu/engineering/academic-programs/
department-of-computer-engineering/graduate/course-descriptions/", "author_icon"
: "https://github.com/yash-bhargava18.png"}]}
vash@yash:~/functions$
```

i and get the output as shown above.						