

## List of HW2 Screenshots

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```
jrandleman@jrandlemanserver:~$ faas-cli store deploy figlet
Function figlet already exists, attempting rolling-update.

Deployed. 200 OK.
URL: http://127.0.0.1:8080/function/figlet

jrandleman@jrandlemanserver:~$ echo "Trying out figlet!" | sudo faas-cli invoke figlet

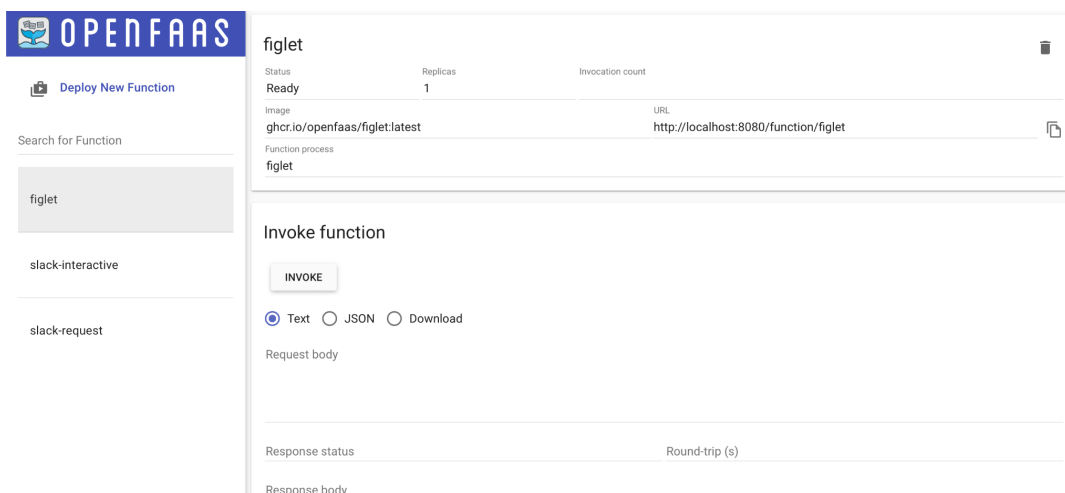
[Tr]y[ing] o[ut] f[ig]l[e]t

jrandleman@jrandlemanserver:~$
```

Picture 1: Invoking the figlet function

```
jrandleman@jrandlemanserver:~$ sudo journalctl -u faasd --lines 40
-- Logs begin at Sun 2023-02-19 01:53:19 UTC, end at Sun 2023-02-19 07:21:17 UTC. --
Feb 19 07:17:52 jrandlemanserver faasd[712]: 2023/02/19 07:17:52 - gateway
Feb 19 07:17:52 jrandlemanserver faasd[712]: 2023/02/19 07:17:52 - queue-worker
Feb 19 07:17:52 jrandlemanserver faasd[712]: Starting: prometheus
Feb 19 07:17:52 jrandlemanserver faasd[712]: Creating local directory: /var/lib/faasd/prometheus
Feb 19 07:17:52 jrandlemanserver faasd[712]: 2023/02/19 07:17:52 Running prometheus with user: "65534"
Feb 19 07:17:52 jrandlemanserver faasd[712]: 2023/02/19 07:17:52 Created container: prometheus
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 prometheus has IP: 10.62.0.2
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Task: prometheus Container: prometheus
Feb 19 07:17:53 jrandlemanserver faasd[712]: Starting: basic-auth-plugin
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Created container: basic-auth-plugin
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 basic-auth-plugin has IP: 10.62.0.3
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Task: basic-auth-plugin Container: basic-auth-plugin
Feb 19 07:17:53 jrandlemanserver faasd[712]: Starting: nats
Feb 19 07:17:53 jrandlemanserver faasd[712]: Creating local directory: /var/lib/faasd/nats
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Running nats with user: "65534"
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Created container: nats
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 nats has IP: 10.62.0.4
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Task: nats Container: nats
Feb 19 07:17:53 jrandlemanserver faasd[712]: Starting: gateway
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Created container: gateway
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 gateway has IP: 10.62.0.5
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Task: gateway Container: gateway
Feb 19 07:17:53 jrandlemanserver faasd[712]: Starting: queue-worker
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Created container: queue-worker
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 queue-worker has IP: 10.62.0.6
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Task: queue-worker Container: queue-worker
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Supervisor init done in: 1 second
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Looking up IP for: "gateway"
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Resolver rebuilding map
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Resolver: "localhost"="127.0.0.1"
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Resolver: "faasd-provider"="10.62.0.1"
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Resolver: "prometheus"="10.62.0.2"
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Resolver: "basic-auth-plugin"="10.62.0.3"
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Resolver: "nats"="10.62.0.4"
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Resolver: "gateway"="10.62.0.5"
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Resolver: "queue-worker"="10.62.0.6"
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Looking up IP for: "prometheus"
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 Proxy from: 127.0.0.1:9090, to: prometheus:9090 (10.62.0.2)
Feb 19 07:17:53 jrandlemanserver faasd[712]: 2023/02/19 07:17:53 faasd: waiting for SIGTERM or SIGINT
Feb 19 07:17:54 jrandlemanserver faasd[712]: 2023/02/19 07:17:54 Proxy from: 0.0.0.0:8080, to: gateway:8080 (10.62.0.5)
jrandleman@jrandlemanserver:~$
```

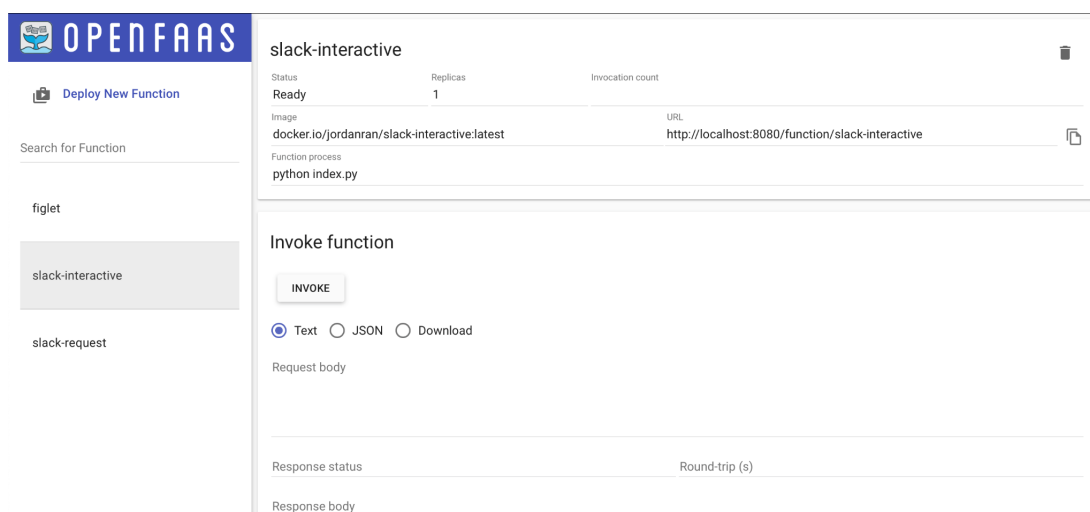
Picture 2: Calling the "sudo journalctl -u faasd --lines 40" command



The screenshot shows the OpenFaaS Gateway interface. On the left, there is a sidebar with the OpenFaaS logo and a 'Deploy New Function' button. Below this is a search bar and a list of functions: 'figlet', 'slack-interactive', and 'slack-request'. The 'figlet' function is selected and highlighted. The main panel displays details for the 'figlet' function:

- Status:** Ready
- Replicas:** 1
- Invocation count:** (empty)
- Image:** ghcr.io/openfaas/figlet:latest
- URL:** http://localhost:8080/function/figlet
- Function process:** figlet

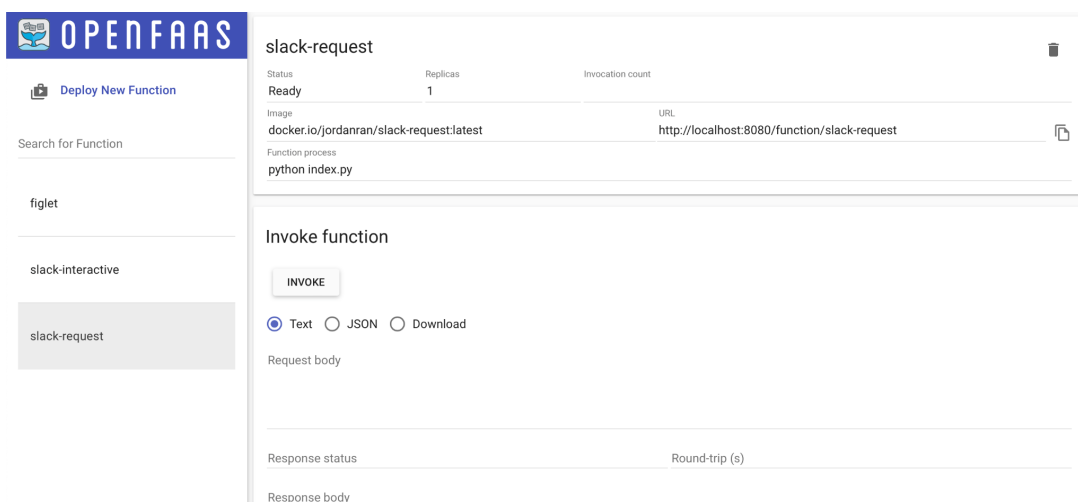
Below the function details is an 'Invoke function' section with an 'INVOKE' button. There are three radio buttons for the request type: 'Text' (selected), 'JSON', and 'Download'. Below these is a 'Request body' input field. At the bottom, there are fields for 'Response status', 'Round-trip (s)', and 'Response body'.

Picture 3.1: OpenFaaS Gateway after deploying the `figlet` function


The screenshot shows the OpenFaaS Gateway interface with the 'slack-interactive' function selected. The main panel displays details for the 'slack-interactive' function:

- Status:** Ready
- Replicas:** 1
- Invocation count:** (empty)
- Image:** docker.io/jordanran/slack-interactive:latest
- URL:** http://localhost:8080/function/slack-interactive
- Function process:** python index.py

The 'Invoke function' section is identical to the previous screenshot, with the 'Text' radio button selected.

Picture 3.2: OpenFaaS Gateway after deploying the `slack-interactive` function


The screenshot shows the OpenFaaS Gateway interface with the 'slack-request' function selected. The main panel displays details for the 'slack-request' function:

- Status:** Ready
- Replicas:** 1
- Invocation count:** (empty)
- Image:** docker.io/jordanran/slack-request:latest
- URL:** http://localhost:8080/function/slack-request
- Function process:** python index.py

The 'Invoke function' section is identical to the previous screenshots, with the 'Text' radio button selected.

Picture 3.3: OpenFaaS Gateway after deploying the `slack-request` function

```
jrandlenan@jrandlemanserver:~/functions$ echo "42" | faas-cli invoke slack-request
{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_icon": "", "image_url": "https://www.scu.edu/media/school-of-engineering/photos/computer-engineering-photos/faculty-and-staff-photo/Sean-Choi-350x350.jpg", "author_name": "Jordan Randleman", "title": "The Awesome world of Cloud Computing| COEN 241", "text": "COEN 241 is the most awesome 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 Definitely!", "type": "button", "name": "definitely", "value": "definitely"}], "callback_id": "response123", "fallback": "Would you recommend COEN 241 to your friends?", "attachment_type": "default"}]}
```

Picture 4.1: Invoking the `slack-request` function

```
jrandlenan@jrandlemanserver:~/functions$ echo "42" | faas-cli invoke slack-interactive
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https://github.com/jrandleman/COEN-241", "color": "#36a64f", "text": "Head over to COEN 241", "title": "COEN 241", "ts": 123456789, "author_name": "", "title_link": "https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/course-descriptions/", "image_url": "https://www.scu.edu/media/offices/umc/scu-brand-guidelines/visual-identity-and-photography/visual-identity-toolkit/logos-and-seals/Mission-Dont3.png", "response_type": "ephemeral", "replace_original": true, "footer_icon": "https://a.slack-edge.com/45901/marketing/img/rebrand/meta/slack_hash_256.png", "pretext": "Ahh yeah! Great choice, COEN 241 is absolutely amazing!", "fallback": "Required plain-text summary of the attachment.", "thumb_url": "https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/course-descriptions/", "author_icon": "https://avatars.githubusercontent.com/u/44122305?s=400&u=792d604516431eacff01c7b42114353a881f70a0&v=4"}]}
```

Picture 4.2: Invoking the `slack-interactive` function