

Open Source
MANO

Modeling CNFs with juju-bundles

David García (Canonical)

Squid

- Kubernetes Operator/Charm
- It will act as a firewall and cache
- Important! It will include two primitives:
 - Addurl: add a URL to the allowed urls
 - Deleteurl: remove a URL from the allowed urls

VNFs for Squid

This will be the kdu section

For our Squid KNF.

It states our bundle and the primitives that will be exposed to OSM.

```
kdu:  
- name: squid-kdu  
  juju-bundle: bundle.yaml  
  kdu-configuration:  
    config-primitive:  
      - name: addurl  
        parameter:  
          - name: application-name  
            data-type: STRING  
            default-value: squid  
          - name: url  
            data-type: STRING  
            default-value: ""  
      - name: deleteurl  
        parameter:  
          - name: application-name  
            data-type: STRING  
            default-value: squid  
          - name: url  
            data-type: STRING  
            default-value: ""
```



Open Source
MANO

Hands on

Deploying a Kubernetes Operator

1. Login to the AWS instance

2. Add a model in Microk8s

```
$ juju add-model squid microk8s
```

3. Deploy squid charm

```
$ juju deploy cs:~charmed-osm/squid
```

4. Run addurl action

```
$ juju run-action squid/0 addurl --string-args url=etsi.org
```

5. Run deleteurl action

```
$ juju run-action squid/0 deleteurl --string-args url=etsi.org
```

6. Change the configuration

```
$ juju config squid port=9999
```

Creating our first Kubernetes operator

1. Install charmcraft

```
$ sudo snap install charmcraft --channel beta
```

2. Create basic project

```
$ charmcraft init --name basic --project-dir basic-operator
```

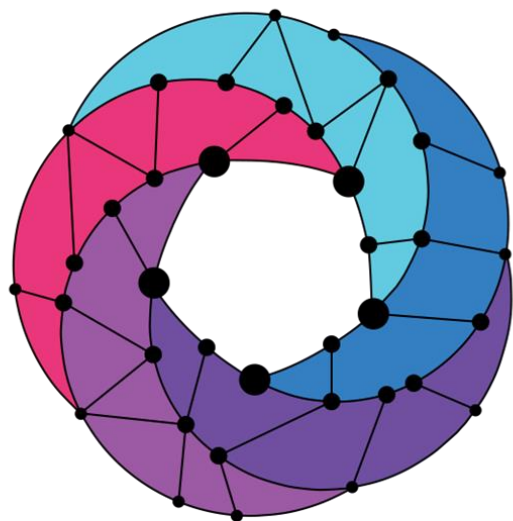
3. Edit the charm (follow the instructor)

4. Build the charm

```
$ charmcraft build
```

5. Deploy the charm

```
$ juju deploy ./basic.charm
```



Open Source MANO

Find us at:

osm.etsi.org
osm.etsi.org/wikipub