### Canonical in OSM community

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Advisor</td>
<td>Mark Shuttleworth</td>
</tr>
<tr>
<td>TSC Member</td>
<td>Mark Beierl</td>
</tr>
<tr>
<td>N2VC Module Lead</td>
<td>David García</td>
</tr>
<tr>
<td>RO Module Lead</td>
<td>Eduardo Sousa</td>
</tr>
<tr>
<td>VNF Onboarding TF Chair</td>
<td>Maciej Mazur</td>
</tr>
<tr>
<td>OSM MARCOM TF Chair</td>
<td>Wajeeha Hamid</td>
</tr>
</tbody>
</table>
Juju and Charms

- Juju: Model-driven Operator Lifecycle Manager
- Charms:
  - Python Operators
  - Custom day-2 operations
  - Integration

Juju (OLM) action: get-admin-password

Prometheus Operator Charm

Grafana Operator Charm
Juju and Charms in OSM

Charm

Lifecycle
install, config-changed, upgrade-charm

Action
backup, restore, ...

Integration
relation-joined
relation-changed

Network Function

Network Function

Network Function
Charmed OSM

- ro
- pla
- ng-ui
- nbi
- mysql
- lcm
- kafka
- mongo
- prometheus
- zookeeper
- pol
- mon
- grafana
- keystone
“Open source, carrier-grade, model-driven OSM, with enterprise support and long term security updates, for the community, partners, and telcos.”
Debug Mode

What is it?
- Option in OSM charms to make them debuggable.
- Available in nbi, ro, lcm, mon, and pol.

Objective
- Deeper analysis in less time.
- Minimize the time for making and testing bug fixes.

Benefits
- Simple, simple, simple.
- Fast debugging - minimal setup.
Minimal setup

```
juju config nbi debug_mode=True
juju config lcm debug_mode=True
juju config ro debug_mode=True
juju config mon debug_mode=True
juju config pol debug_mode=True
```
Flexibility: local or remote
VsCode ready
No more docker build
How does it work?
How does it work?

$ juju config nbi debug_mode=True$

$
How does it work?

$ juju config nbi debug_mode=True
$ juju config nbi debug_pubkey="`cat id_rsa.pub`"
$
How does it work?

$ juju config nbi debug_mode=True

$ juju config nbi debug_pubkey="`cat id_rsa.pub`"

- SSH enabled
- VsCode workspace added
How does it work?

$ juju config nbi debug_mode=True
$ juju config nbi debug_pubkey="`cat id_rsa.pub`"
$
How does it work?

$ juju config nbi debug_mode=True
$ juju config nbi debug_pubkey="`cat id_rsa.pub`"
$ juju config nbi debug_nbi_local_path="$HOME/osm/NBI"
$
Thank you!