Charmed OSM

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“Open source, carrier-grade, hardened OSM, with enterprise support and long term security updates, for the community, partners, and telcos.”
Open source
Carrier-grade
Hardened OSM
Full enterprise support
Long term security updates
For the community, partners, and telcos
Why choose Charmed OSM?

- Partner program for GSIs and NEPs
- High availability
- Automated operations

Canonical’s business is to support Ubuntu at scale in telco and other sectors. Successful MANO drives NFV transformation and adoption of Ubuntu. We invest in OSM for the industry, and are happy to partner.
Canonical in the OSM community

TSC Member
N2VC Lead
DevOps Lead
Charmed OSM Lead
VNF Configuration Adapter
“The Operator Pattern”

Use software to drive software.

Juju is a universal operator lifecycle manager.
Universal Operators - VM, Cloud, Metal & CAAS

Operators for both new containerized and legacy estate

Kubernetes

VM / Cloud

Bare metal
Exactly the same operator at many companies
OSM manages VNFs
A charm is an operator package

Lifecycle
- install
- config
- update
- remove
- scale

Workflows / Operations / Actions
- "action: backup"
- "action: restore"
- "action: scan-viruses"
- "action: health-check"
- "action: add-repo"
- "action: ...
- "action: ...
- "action: ...

Integration
- relate-mysql
- relate-ldap
- relate-proxy
- relate-...
Exactly the same charm in many topologies
Charmhub - the open operator collection
MON osm-charmers
OSM Monitoring component in charge of metrics collection.

Prometheus prometheus-charmers
A systems and service monitoring system that collects metrics.

NBI osm-charmers
OSM North Bound Interface component. ETSI SOL005 compliant.

N2VC osm-charmers
OSM component in charge of VNF installation, configuration & integration.

LCM osm-charmers
OSM component in charge of lifecycle management for VNFs and indicators.

Bash
bash
A command interpreter and shell for Unix-like operating systems.

Grafana llama-charmers
Multi-platform analytics, monitoring and interactive dashboard.
$ ./install_osm.sh --charmed
    --k8s=...
    --lxd=...
    --vca=...
Charmed OSM - ecosystem

- Any Kubernetes
- Flexible VIM options
- Charmed applications

Base OS: Ubuntu
Charmed OSM:
Key features and Benefits

- High availability
- Streamlined lifecycle operations
- Python operator framework
- Operator ecosystem
- Unified approach from dev to prod
- FIPS compliance & CIS hardening
- CVE patching of containers
- Long-term enterprise support
- Production-grade SLAs
- Application delivery service
OSM partner programmes

Canonical partner programmes

At Canonical, we provide the services our partners need to ensure their hardware and software works optimally with the Ubuntu platform. This means working with technology leaders large and small, to provide the software, services, support and certification they need to complement their core competencies. For technology customers, this has created a thriving market of suppliers with Ubuntu expertise.

Are you an existing partner? Login to the partner portal ☛
NEP VNF onboarding and certification

Use universal operators for your VNFs and leverage Canonical’s expertise.

- Operators for VNF and infrastructure management
- Reusable operations code embedding business intent
- CVE patching of containers
- Hardened infrastructure
Own-brand charmed OSM Partners

For partners who offer OSM under their own brand.

- Branding and customisation
- Differentiated OSM offering
- Access to pre-certified VNFs
- FIPS, CIS, container CVE patching
- Predictable release cadence
Embedded charmed OSM

Integrate upstream charmed OSM with support from Canonical.

- Long-term enterprise support
- Production-grade SLAs
- Rapid deployment
- Integration with logging, monitoring and alerting stack
Thank you. Questions?

https://charmed-osm.com