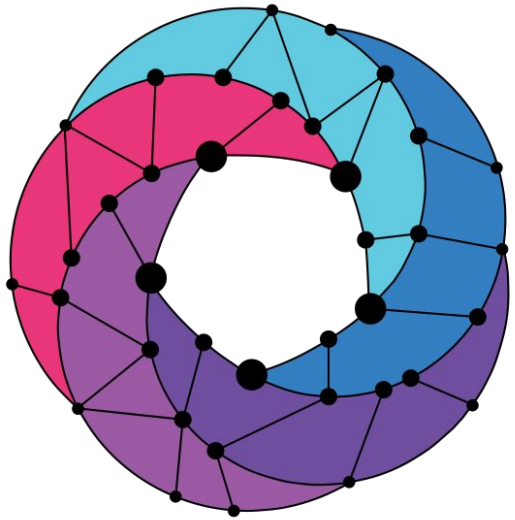

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Managing VNF Packages with new OSM Repositories

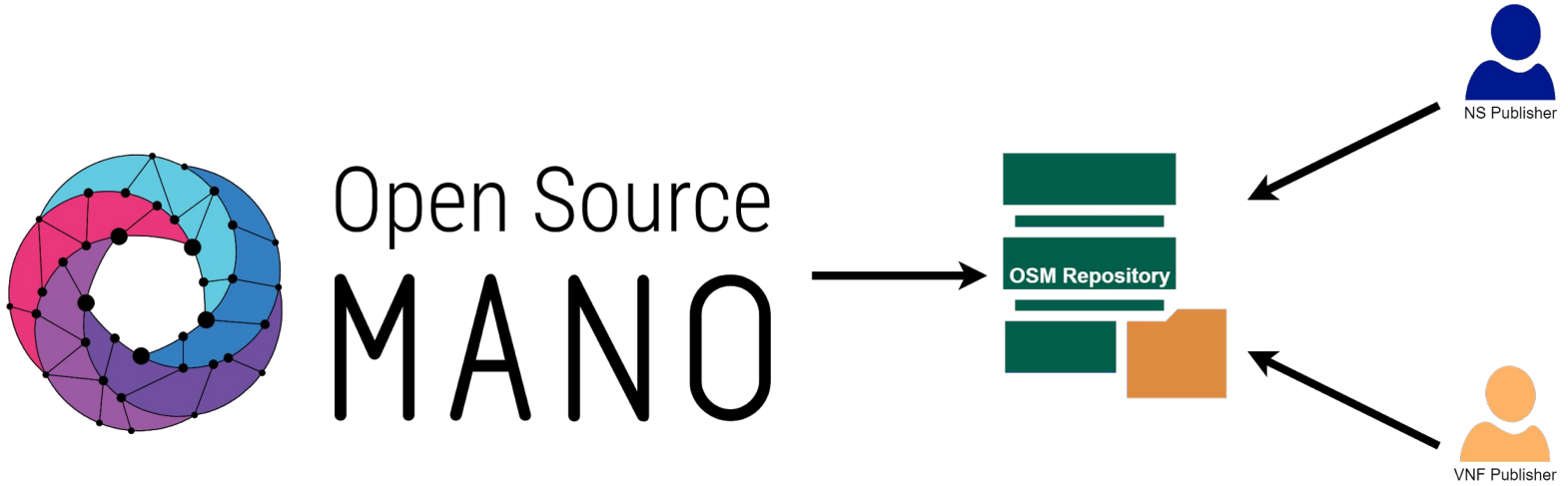
Felipe Vicens (ATOS)

ETSI

Description

OSM Repository is a set of NSs & VNFs related artifacts and metadata, organized with a predefined structure, aimed to exposed them to OSM users, by using **HTTP** or **HTTPS**.

- It exposes:
  - The VNF Artifacts
  - The NS Artifacts
  - The Repository index

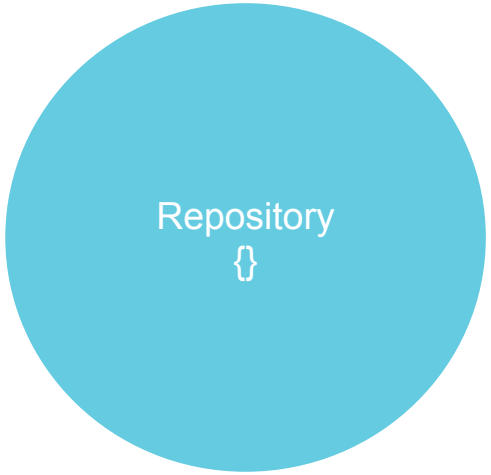


Server Side commands

- Repository server side:
  - One line repository creation and indexing
    - `osm repo-index --origin packages --destination repository`

```
├── index.yaml
├── ns
│   ├── fb_magma_ns
│   │   └── 1.0
│   │       ├── fb_magma_ns-1.0.tar.gz
│   │       └── metadata.yaml
└── vnf
    └── fb_magma_knf
        └── 1.0
            ├── fb_magma_knf-1.0.tar.gz
            └── metadata.yaml
```

Graphical Representation



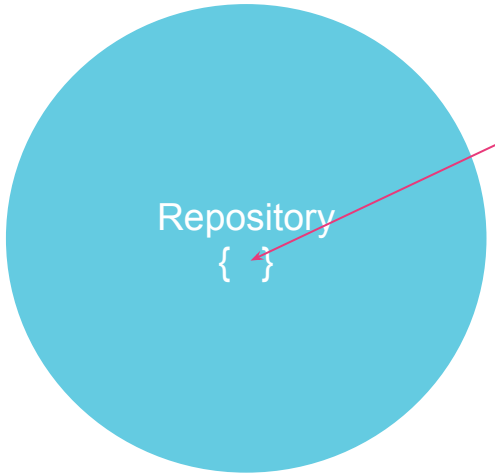
Repository Structure

- Repositories can be local (exposed in the local filesystem) or remote, both exposed by HTTP
- In both cases, the repository will have a structure like this:
  - A index.yaml file which is in charge of indexing the packages
  - A folders structure (trying to be self-explanatory)
  - One artifact's version and its metadata per folder

https://osm-download.etsi.org/ftp/vnf-catalog/

```
repository/
   ├── index.yaml
   ├── ns/
   │    └── <ns_name>/
   │         └── <ns_version>/
   │              ├── metadata.yaml
   │              └── <ns_name>-<ns_version>.tar.gz
   └── vnf/
        └── <vnf_name>/
             └── <vnf_version>/
                  ├── metadata.yaml
                  └── <vnf_name>-<vnf_version>.tar.gz
```

Graphical Representation



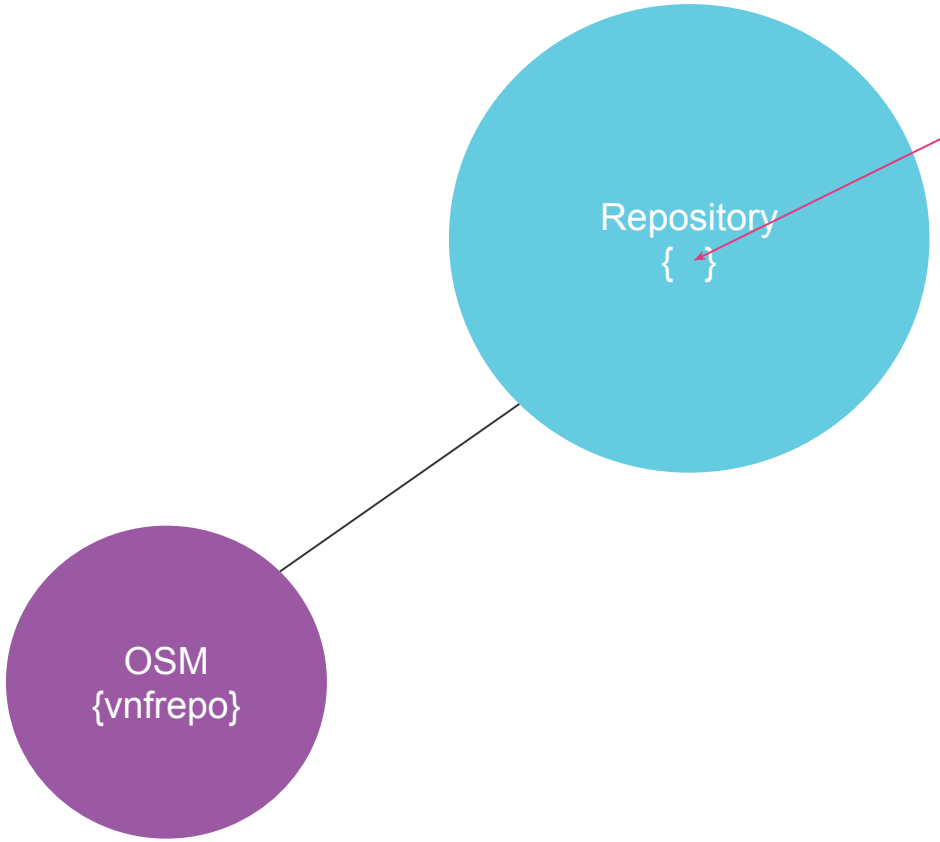
https://osm-download.etsi.org/ftp/vnf-catalog/

```
repository/
├── index.yaml
├── ns/
│   └── <ns_id>/
│       └── <ns_version>/
│           ├── metadata.yaml
│           └── <ns_id>-<ns_version>.tar.gz
└── vnf/
    └── <vnf_id>/
        └── <vnf_version>/
            ├── metadata.yaml
            └── <vnf_id>-<vnf_version>.tar.gz
```

Client Side commands

- Add an OSM Repository
  - `osm repo-add --description “my vnf repository” vnfrepo https://osm-download.etsi.org/ftp/vnf-catalog/`
- List repositories
  - `osm repo-list`
- Delete a repository
  - `osm repo-delete vnfrepo`

Graphical Representation



https://osm-download.etsi.org/ftp/vnf-catalog/

```
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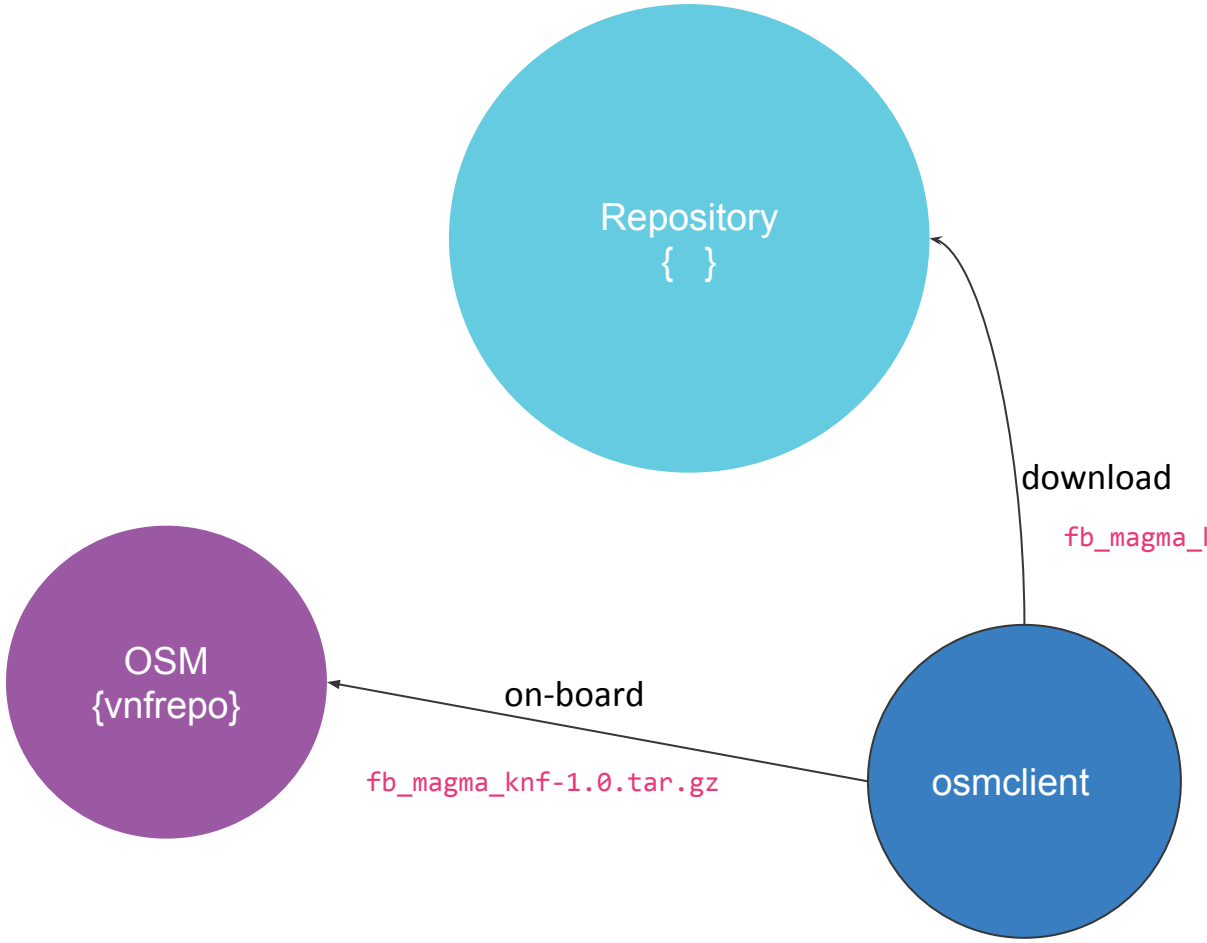
├── index.yaml
├── ns/
│   └── <ns_id>/
│       └── <ns_version>/
│           ├── metadata.yaml
│           └── <ns_id>-<ns_version>.tar.gz
└── vnf/
    └── <vnf_id>/
        └── <vnf_version>/
            ├── metadata.yaml
            └── <vnf_id>-<vnf_version>.tar.gz
```

Graphical Representation



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├── index.yaml
├── ns
│   ├── fb_magma_ns
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│   │       └── metadata.yaml
└── vnf
    └── fb_magma_knf
        └── 1.0
            ├── fb_magma_knf-1.0.tar.gz
            └── metadata.yaml
```

```
osm nfpkg-create --repo vnfrepo fb_magma_knf
```

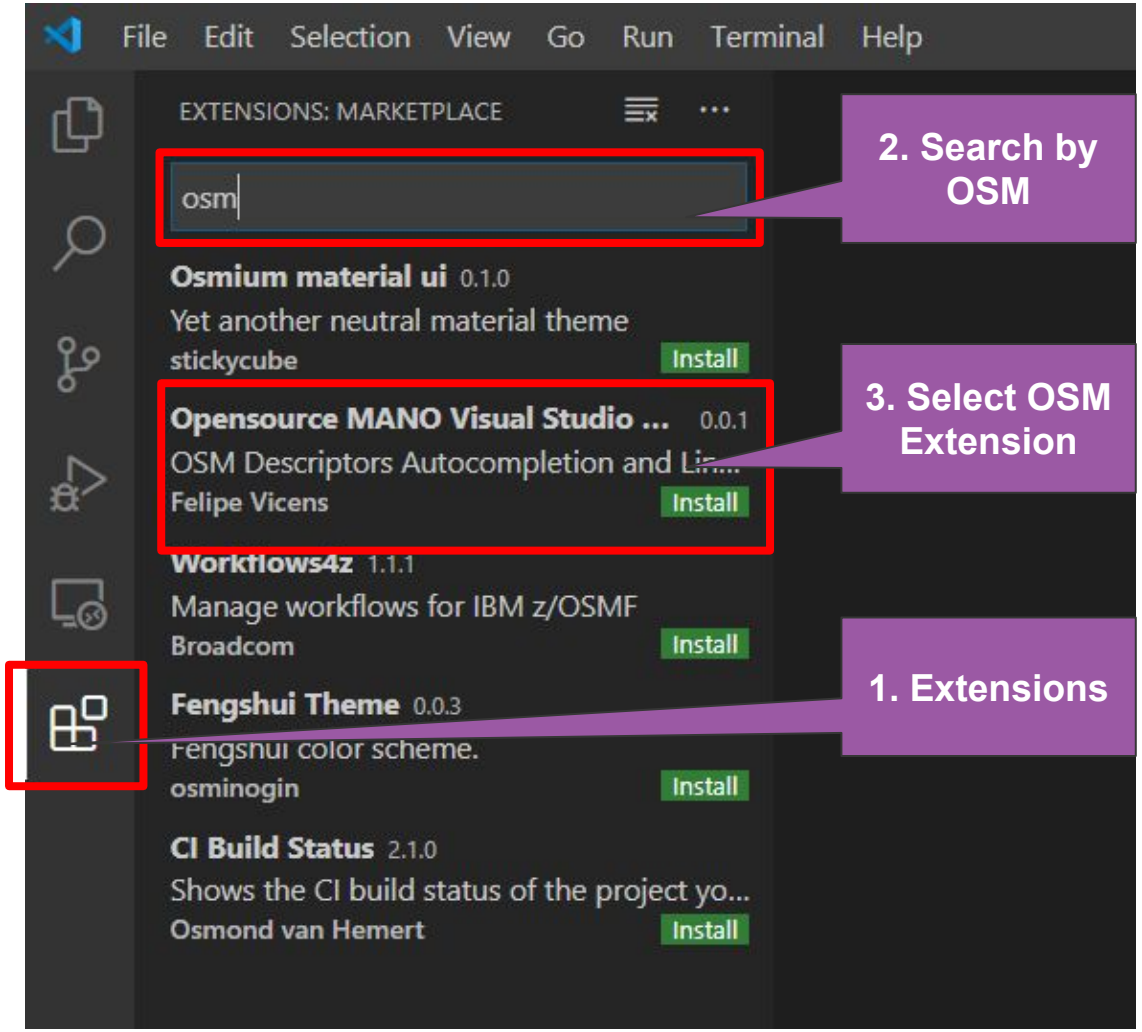
Client Side commands

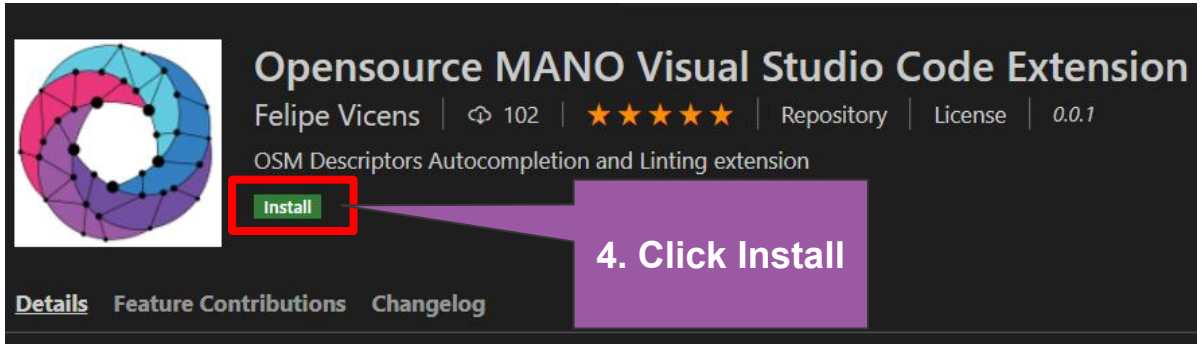
- List package inside a repository
  - `osm nfpkg-repo-list`
  - `osm nspkg-repo-list`

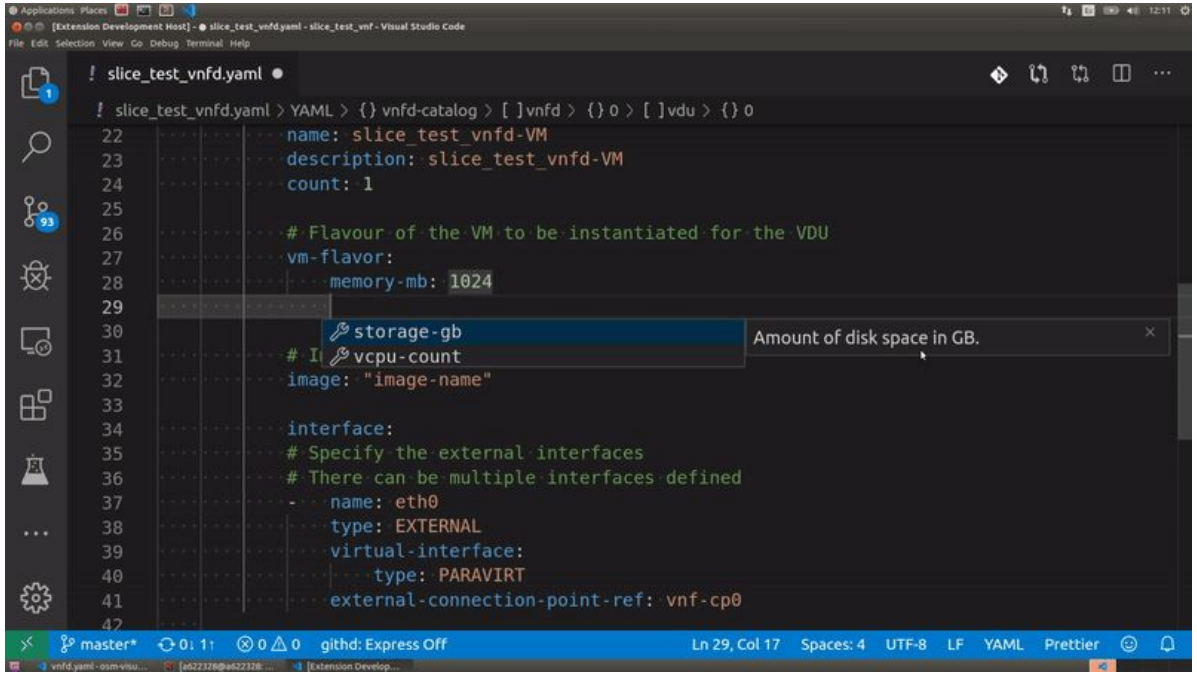
- On-board a package from a repository to OSM
  - `osm nfpkg-create --repo vnfrepo fb_magma_knf`
  - `osm nspkg-create --repo vnfrepo fb_magma_ns`

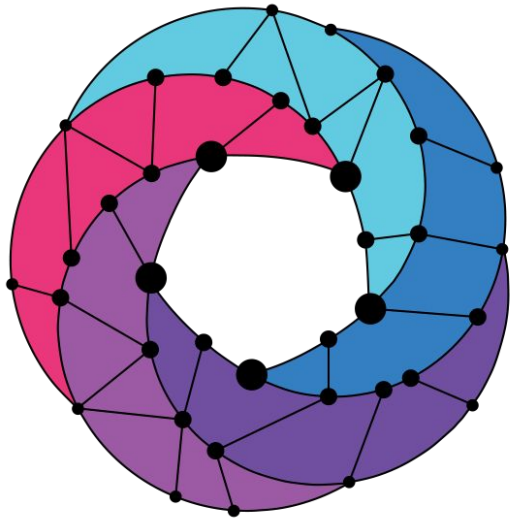
- Show packages in a repository
  - `osm nfpkg-repo-show --repo vnfrepo fb_magma_knf`
  - `osm nspkg-repo-show --repo vnfrepo fb_magma_ns`

Installing VS Code plugin for OSM Descriptors design









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