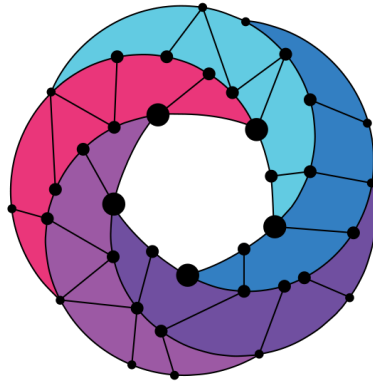




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OSM Hackfest

VNF and NS package generation from CLI

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- Wiki page:
 - https://osm.etsi.org/wikipub/index.php/Creating_your_own_VNF_package
- OSM Information Model
 - https://osm.etsi.org/wikipub/index.php/OSM_Information_Model

Installation of OSM IM package

- Update your `/etc/apt/sources.list` with the following line:
 - `deb [arch=amd64] http://osm-download.etsi.org/repository/osm/debian/ReleaseFOUR stable devops osmclient IM`
- `sudo apt-get update`
- `sudo apt-get install python-osm-im`

Creating VNF package skeleton, writing VNFD and adding artifacts

- Create a skeleton folder with all the files required for a single-VM VNF package:
 - `/usr/share/osm-devops/descriptor-packages/tools/generate_descriptor_pkg.sh -t vnfd --image <IMAGE_NAME> -c <VNF_NAME>`
- Go to the `VNF_NAME_vnfd` folder and edit the descriptor:
 - Use the IM tree representation of VNFD as a reference:
 - <http://osm-download.etsi.org/ftp/osm-doc/vnfd.html>
 - Descriptor language is YAML:
 - Indentation is part of the markup
 - Use always the same indentation characters (TAB, 4 spaces, 2 spaces)
 - Recommendation: spaces preferred over tab
- Add artifacts (charms, icons, cloud-init files, etc.)

Validating the VNF descriptor

- A descriptor can be validated against the IM using this command:
 - `/usr/share/osm-devops/descriptor-packages/tools/validate_descriptor.py`
`<DESCRIPTOR_FILE>`

Generating the VNF package

- Finally, you can generate the tar.gz VNF package with the command:
 - `/usr/share/osm-devops/descriptor-packages/tools/generate_descriptor_pkg.sh -t vnfd -N <VNF_NAME>_vnfd`

Note: the argument -N is optional, but recommended in order to keep the package files after creating the package

Creating NS package skeleton and writing NSD



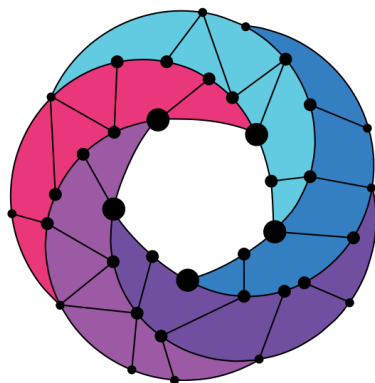
- Create a skeleton folder with all the files required for a single-VM VNF package:
 - `/usr/share/osm-devops/descriptor-packages/tools/generate_descriptor_pkg.sh -t nsd -c <NS_NAME>`
- Go to the `NS_NAME_nsd` folder and edit the descriptor:
 - Use the IM tree representation of NSD as a reference:
 - <http://osm-download.etsi.org/ftp/osm-doc/nsd.html>

Validating the NS descriptor

- A descriptor can be validated against the IM using this command:
 - `/usr/share/osm-devops/descriptor-packages/tools/validate_descriptor.py`
`<DESCRIPTOR_FILE>`

Generating the NS package

- Finally, you can generate the tar.gz VNF package with the command:
 - `/usr/share/osm-devops/descriptor-packages/tools/generate_descriptor_pkg.sh -t nsd -N <NS_NAME>_vnfd`
Note: the argument -N is optional, but recommended in order to keep the package files after creating the package
- The tool `generate_descriptor_pkg.sh`, jointly with `validate_descriptor.py` and other tools, will be distributed in future releases in a package 'osm-tools'.



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