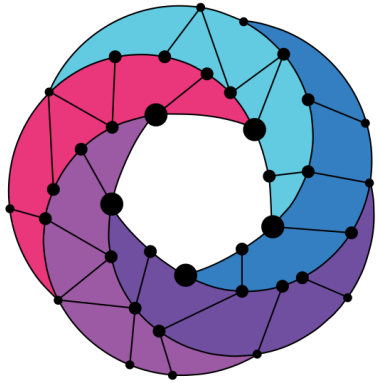

Open Source
MANO

OSM Hackfest – Session 1
Installation and first use

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ETSI

OSM installation

Open Source MANO

Click HERE

Installing OSM

- Using a pre-built vagrant image for Virtualbox
  - Instructions when using remote image:https://osm.etsi.org/wikipub/index.php/How_to_run_OSM_on_Vagrant
  - Instructions when using a downloaded image:
    - Having Vagrant and Virtualbox installed, make sure you install the following plugin:

      vagrant plugin install vagrant-vbguest
    - Initialize the environment:

      vagrant init osm/releasefour --box-version 0
    - Copy the image to the same folder and add as a 'vagrant box':

      vagrant box add osm/releasefour vagrant.box
    - Modify the Vagrantfile with your RAM and exposed ports preferences
    - Start your vagrant VM!

      vagrant up
    - Access your VM

      vagrant ssh

Installing OSM
Common install procedure (not for Hackfest)

Run following commands as a non-root user:

- wget https://osm-download.etsi.org/ftp/osm-4.0-four/install_osm.sh
- chmod +x install_osm.sh
- ./install_osm.sh

After installing OSM

- Test OSM client
  - Add env variables to your .bashrc to use OSM client locally

    export OSM_SOL005=True

    export OSM_HOSTNAME=127.0.0.1

    or the remote IP if using your own OSM client
  - Try ‘osm’

- Test UI:
  - Access UI:

    http://<IP_OSM> # inside VM

    http://<IP_OSM>:8080 # from your PC (if using Vagrant/VBox)

    Credentials are admin/admin

Local OSM instances @ETSI

- osm-demo: 172.21.1.3
- osm-plugtest1: 172.21.1.4
- osm-plugtest2: 172.21.1.5
- osm-hackfest1: 172.21.1.9
- osm-hackfest2: 172.21.1.10

For people using ETSI OSM servers
Install OSM client

- Instructions in this wiki page:
  - https://osm.etsi.org/wikipub/index.php/How_to_install_OSM_client

- Steps:
  - curl http://osm-download.etsi.org/repository/osm/debian/ReleaseFOUR/OSM%20ETSI%20Release%20Key.gpg | sudo apt-key add -
  - sudo add-apt-repository -y "deb [arch=amd64] http://osm-download.etsi.org/repository/osm/debian/ReleaseFOUR stable osmclient"
  - sudo apt-get update
  - sudo apt-get install -y python-osmclient

Adding VIM accounts

- VIMs:

Name	Type	AUTH URL	tenant	user	Password	SDN controller
openstack1	openstack	http://172.21.2.20:5000/v2.0	xxx	xxx	xxx	NO
openstack2-epa	openstack	http://172.21.2.22:5000/v2.0	xxx	xxx	xxx	YES
openstack3	openstack	http://172.22.25.9:5000/v3	xxx	xxx	xxx	NO

- Test VIMs:
  - ping <IP>
  - curl http://<IP>:5000/v2.0 (or v3)
  - Install python-openstackclient
    - sudo apt-get install python-openstackclient

Adding VIM accounts

- Load Openstack credentials and run some commands for testing:
  - export OS_AUTH_URL=xxx
  - export OS_USERNAME=xxx
  - export OS_TENANT_NAME=xxx
  - export OS_PASSWORD=xxx
  - openstack image list
  - openstack network list
  - openstack flavor list
  - openstack server list

Adding VIM accounts

- Add your first VIM ‘openstack1’ with the OSM client:
  - osm vim-create --name openstack1 --account_type openstack \
    --auth_url http://172.21.2.20:5000/v2.0 \
    --user xxx --password xxx --tenant xxx \
    --description "ETSI openstack site 1, with tenant xxx“
  - osm vim-list

Adding VIM accounts

- Add a second VIM ‘openstack3’ with the OSM client:
  - osm vim-create --name openstack3 --account_type openstack \

    --auth_url http://172.22.25.9:5000/v3 \

    --user xxx --password xxx --tenant xxx \

    --description "Windriver ETSI openstack site 3, with tenant osm" \

    --config '{region_name: RegionOne, project_domain_name: Default, user_domain_name: Default}'
  - osm vim-list

Adding images to the VIM

- Image management is not implemented in OSM today. It has to be done independently on each VIM.

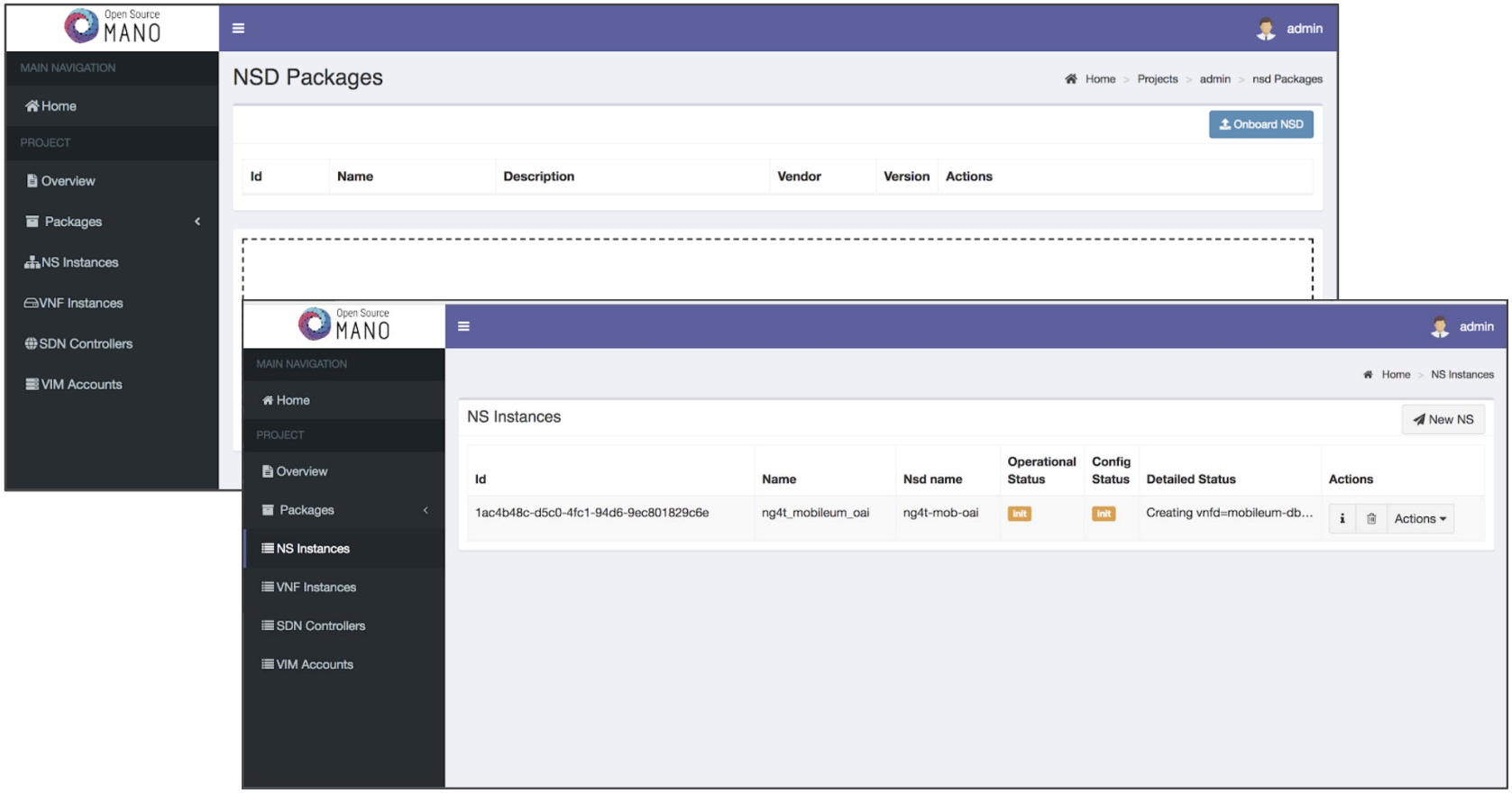
- **IMAGES HAVE BEEN ALREADY ADDED TO THE REMOTE VIMS IN THE HACKFEST**

- Example for Openstack:
  - openstack image create --file="./cirros-0.3.4-x86_64-disk.img" --container-format=bare --disk-format=qcow2 --public cirros034

Adding images to the VIM

Image name in descriptors	Filename
ubuntu1604	xenial-server-cloudimg-amd64-disk1.img (you can get it from https://cloud-images.ubuntu.com/xenial/current/)
US1604	US1604.qcow2
hackfest3-mgmt	hackfest3-mgmt-qcow2
hackfest-pktgen	hackfest-pktgen-qcow2
cirros034	cirros-0.3.4-x86_64-disk.img

Deploying our first NS with OSM UI

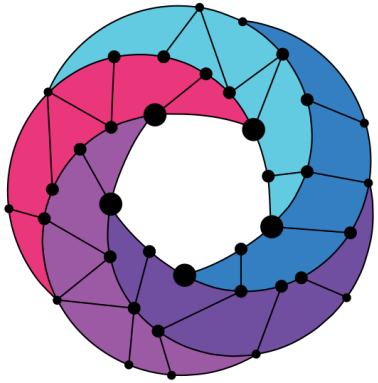


Deploying our first NS with the UI

- Add VNF package
- Add NS package
- Instantiate
- Get VNF record and obtain mgmt IP address
- Access to the VNF via SSH
- Delete NS instance
- Delete NS
- Delete VNF

Deploying our first NS with OSM client

- Add VNF and NS packages
  - osm vnfd-create cirros_vnf.tar.gz
  - osm vnfd-list
  - osm nsd-create cirros_2vnf_ns.tar.gz
  - osm nsd-list
- Instantiate
  - osm ns-create --nsd_name cirros_2vnf_ns --ns_name <ns-instance-name> --vim_account <data-center-name>
  - osm ns-list
- Delete NS instance
  - osm ns-delete <ns-instance-name>
  - osm ns-list
- Delete VNF and NS package
  - osm nsd-delete cirros_2vnf_ns
  - osm nsd-list
  - osm vnfd-delete cirros_vnfd
  - osm vnfd-list



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osm.etsi.org/wikipub

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