
Tacker-Horizon Documentation

Release 9.0.1.dev1

OpenStack Developers

Aug 30, 2024

Contents

1	Installation Guide	1
1.1	Manual Installation	1
1.2	Install via Devstack	2
2	Configuration	2
3	User Guide	2
3.1	Support APIs	2
4	Contributor Guide	8
4.1	Contributor License Agreement	8
4.2	LaunchPad Project	9
4.3	Project Info	9

1 Installation Guide

1.1 Manual Installation

Note: The paths we are using for configuration files in these steps are with reference to Ubuntu Operating System. The paths may vary for other Operating Systems.

The `branch_name` which is used in commands, specify the `branch_name` as `stable/<branch>` for any stable branch installation. For eg: `stable/queens`. If unspecified the default will be master branch.

1. Clone tacker-horizon repository.

```
cd ~/
git clone https://opendev.org/openstack/tacker-horizon -b <branch_
↩name>
```

2. Install horizon module.

```
cd tacker-horizon
sudo python3 setup.py install
```

3. Enable tacker horizon in dashboard.

```
sudo cp tacker_horizon/enabled/* \
/opt/stack/horizon/openstack_dashboard/enabled/
```

4. Collect and compress static files.

```
./manage.py collectstatic --noinput
echo yes | ./manage.py compress
```

5. Restart Apache server.

```
sudo systemctl restart apache2
```

1.2 Install via Devstack

The tacker-horizon is automatically enabled when tacker server is installed.

See also

<https://docs.openstack.org/tacker/latest/install/devstack.html>

2 Configuration

Tacker-horizon does not need special configuration.

For more configurations, see [Configuration Guide](#) in the Horizon documentation.

3 User Guide

Reference: <https://docs.openstack.org/tacker/latest/user/index.html>

3.1 Support APIs

Tacker Horizon supports the following APIs:

Supported Legacy APIs

Table 1: VIM Management

API name	Method & URI	ETSI Version	NFV-SOL
Register VIM	POST /v1.0/vims	None	
List VIMs	GET /v1.0/vims	None	
Delete VIM	Delete /v1.0/vims/{vim_id}	None	

Warning

Some Legacy API functions other than VIM Management are displayed, but those APIs have been removed and cannot be used.

Supported v1 APIs

Table 2: VNF Package Management

API name	Method & URI	ETSI Version	NFV-SOL
Create VNF Package	POST /vnfpkgm/v1/vnf_packages	ETSI 2.6.1	NFV-SOL004 ETSI NFV-SOL005 2.6.1
List VNF Packages	GET /vnfpkgm/v1/vnf_packages	ETSI 2.6.1	NFV-SOL004 ETSI NFV-SOL005 2.6.1
Show VNF Package	GET /vnfpkgm/v1/vnf_packages/{vnf_package_id}	ETSI 2.6.1	NFV-SOL004 ETSI NFV-SOL005 2.6.1
Delete VNF Package	Delete /vnfpkgm/v1/vnf_packages/{vnf_package_id}	ETSI 2.6.1	NFV-SOL004 ETSI NFV-SOL005 2.6.1
Upload VNF Package from content	PUT /vnfpkgm/v1/vnf_packages/{vnf_package_id}/package_content	ETSI 2.6.1	NFV-SOL004 ETSI NFV-SOL005 2.6.1
Upload VNF Package from uri	POST /vnfpkgm/v1/vnf_packages/{vnf_package_id}/package_content/upload_from_uri	ETSI 2.6.1	NFV-SOL004 ETSI NFV-SOL005 2.6.1
Update VNF Package Information	PATCH /vnfpkgm/v1/vnf_packages/{vnf_package_id}	ETSI 2.6.1	NFV-SOL004 ETSI NFV-SOL005 2.6.1
Fetch an on-boarded VNF package with HTTP_RANGE	GET /vnfpkgm/v1/vnf_packages/{vnf_package_id}/package_content	ETSI 2.6.1	NFV-SOL004 ETSI NFV-SOL005 2.6.1

Note

v1 VNF Lifecycle Management is not supported.

Please note that when *Create VNF Identifier* is executed from VNF Package v1, v2 VNF Instance is created instead of v1 VNF Instance.

Supported v2 APIs

Table 3: v2 VNF Lifecycle Management

API name	Method & URI	ETSI Version	NFV-SOL
Create a new VNF instance resource (v2)	POST /vnflcm/v2/vnf_instances	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Instantiate a VNF instance (v2)	POST /vnflcm/v2/vnf_instances/{vnfInstanceId}/instantiate	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Terminate a VNF instance (v2)	POST /vnflcm/v2/vnf_instances/{vnfInstanceId}/terminate	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Heal a VNF instance (v2)	POST /vnflcm/v2/vnf_instances/{vnfInstanceId}/heal	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Delete a VNF instance (v2)	DELETE /vnflcm/v2/vnf_instances/{vnfInstanceId}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Show VNF instance (v2)	GET /vnflcm/v2/vnf_instances/{vnfInstanceId}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
List VNF instance (v2)	GET /vnflcm/v2/vnf_instances	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Scale a VNF instance (v2)	POST /vnflcm/v2/vnf_instances/{vnfInstanceId}/scale	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Update a VNF instance (v2)	PATCH /vnflcm/v2/vnf_instances/{vnfInstanceId}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Change External VNF Connectivity (v2)	POST /vnflcm/v2/vnf_instances/{vnfInstanceId}/changeExternalConnectivity	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Change Current VNF Package (v2)	POST /vnflcm/v2/vnf_instances/{vnfInstanceId}/changeCurrentPackage	ETSI 3.3.1 (*1)	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Show VNF LCM operation occurrence (v2)	GET /vnflcm/v2/vnf_lcm_op_occs/{vnfLcmOpOcc}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
List VNF LCM operation occurrence (v2)	GET /vnflcm/v2/vnf_lcm_op_occs	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI

(*1)The functionality related to VNF LCM Coordination in Change current VNF package complies with ETSI NFV-SOL002 3.6.1.

(*2)OAUTH2_CLIENT_CERT in SubscriptionAuthentication is compliant with ETSI NFV-SOL013 3.5.1.

Table 4: VNF Performance Management

API name	Method & URI	ETSI Version	NFV-SOL
Create a PM job (v2)	POST /vnfpm/v2/pm_jobs	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1 (*1)
Get for PM jobs (v2)	GET /vnfpm/v2/pm_jobs	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1
Get a PM job (v2)	GET /vnfpm/v2/pm_jobs/{pmJobId}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1
Modify a PM job(v2)	PATCH /vnfpm/v2/pm_jobs/{pmJobId}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1
Delete a PM job (v2)	DELETE /vnfpm/v2/pm_jobs/{pmJobId}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1
Get individual performance report (v2)	GET /vnfpm/v2/pm_jobs/{pmJobId}/reports/{reportId}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1
Create a PM threshold (v2)	POST /vnfpm/v2/thresholds	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1 (*1)
Get for PM thresholds (v2)	GET /vnfpm/v2/thresholds	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1
Get a PM threshold (v2)	GET /vnfpm/v2/thresholds/{thresholdId}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1
Modify a PM threshold(v2)	PATCH /vnfpm/v2/thresholds/{thresholdId}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1
Delete a PM threshold (v2)	DELETE /vnfpm/v2/thresholds/{thresholdId}	ETSI 3.3.1	NFV-SOL002 3.3.1 ETSI NFV-SOL013 3.4.1

(*1)OAUTH2_CLIENT_CERT in SubscriptionAuthentication is compliant with ETSI NFV-SOL013 3.5.1.

Table 5: VNF Fault Management

API name	Method & URI	ETSI NFV-SOL Version
Get all alarms (v1)	GET /vnffm/v1/alarms	ETSI NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Get the individual alarm (v1)	GET /vnffm/v1/alarms/{alarmId}	ETSI NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Modify the confirmation status (v1)	PATCH /vnffm/v1/alarms/{alarmId}	ETSI NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Create a subscription (v1)	POST /vnffm/v1/subscriptions	ETSI NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1 (*1)
Get all subscriptions (v1)	GET /vnffm/v1/subscriptions	ETSI NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Get a subscription (v1)	GET /vnffm/v1/subscriptions/{subscriptionId}	ETSI NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1
Delete a subscription (v1)	DELETE /vnffm/v1/subscriptions/{subscriptionId}	ETSI NFV-SOL002 3.3.1 ETSI NFV-SOL003 3.3.1 ETSI NFV-SOL013 3.4.1

(*1)OAUTH2_CLIENT_CERT in SubscriptionAuthentication is compliant with ETSI NFV-SOL013 3.5.1.

4 Contributor Guide

4.1 Contributor License Agreement

In order to contribute to the Tacker-Horizon project, you need to have signed OpenStacks contributors agreement. You can find the details of how to contribute as the link below.

See also

- <http://docs.openstack.org/infra/manual/developers.html>
- <http://wiki.openstack.org/CLA>

4.2 LaunchPad Project

Most of the tools used for OpenStack depend on a launchpad.net ID for authentication.

See also

- <https://launchpad.net>
- <https://launchpad.net/tacker>

4.3 Project Info

- Free software: under the Apache license
- Tacker service: <https://opendev.org/openstack/tacker>
- Tacker-horizon library: <https://opendev.org/openstack/tacker-horizon>
- Bugs tracker: <https://bugs.launchpad.net/tacker>
- Blueprints: <https://blueprints.launchpad.net/tacker>
- Code review: <https://review.opendev.org/#/q/status:open+project:openstack/tacker-horizon,n,z>