

vCPE with Tosca VNF Test Guide

Onboard vnf csar(the csar which onboard to sdc)

	
vgw.csar	vgmux.csar
	
vbnf.csar	vbrgemu.csar
	
infra.csar	

The real VNF csar which upload as VNF artifacts.

For ETSI SOL 2.4.1



vnf_vgw.csar



vnf_vgmux.csar



vnf_vbng.csar



vnf_vbrgrmu.csar



vnf_infra.csar



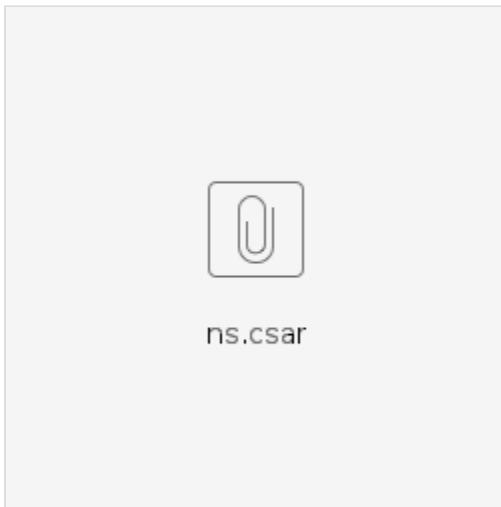
vnf_vgw_251.csar

The VNF csar distributed by SDC

	
resource-Vcpeln...moApp-csar.csar	resource-Vcpeln...moApp-csar.csar
	
resource-Vcpeln...moApp-csar.csar	resource-Vcpeln...moApp-csar.csar
	
resource-Vcpeln...moApp-csar.csar	

The real NS csar which upload as NS artifacts.

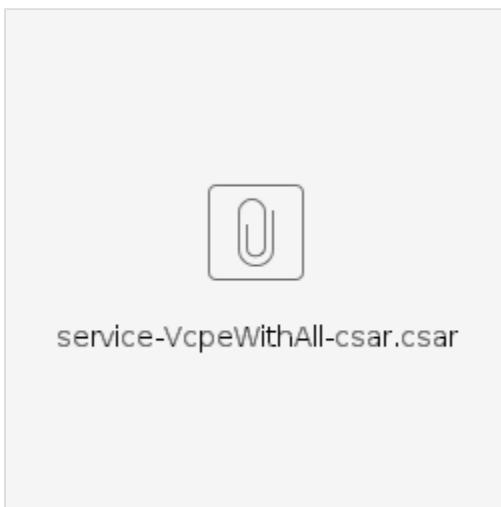
For ETSI SOL 2.4.1



For ETSI 2.5.1



The NS csar distributed by SDC



Video

Design time



Runtime



1. VNF/NS csar package distribute guide

Note:

- 1.1 VNF/NS csar package can be distributed from SDC.
- 1.2 VNF csar package should be distributed first, then NS csar package can be distributed.
- 1.3 The csar package list page showes both the on-boarded/distributed csar package and the package from SDC.
- 1.4 When the package from SDC is distributed, it will be dropped from the list, and the distributed package will be displayed in the list.

The following shows the guide of distributing a NS csar package:

Step 1. Select the SDC NS csar package record(vcpe_ns_201811171343) in csar package list package, and click the distribute button, the SDC NS csar package will be distributed to VF-C:

ID	Name	Version	Created	Disabled	Not In Use
5818e03-bd39-4fab-99d 2-67ecb5cc27e5	vCPE_demo_1120		CREATED	DISABLED	NOT_IN_USE
609:8ba3-9a94-4cc7-b6 7d-2ec0ac1e185	vcpe_ns_201811171343	5.0	ONBOARDED	ENABLED	NOT_IN_USE
e3079<43-l902-4d70-91 77-218fb1245977	vcpe_with_all	3.0	ONBOARDED	ENABLED	NOT_IN_USE
56194e42-7031-479b-82 a2-70f615406661	vcpe_with_three	1.0	ONBOARDED	ENABLED	NOT_IN_USE
ce0b4f64-4314-413a-b5a 4-5-931d9e6396	vcpe_demo_withall_01	1.0	ONBOARDED	ENABLED	NOT_IN_USE

Step 2. When the distribute is completed, the SDC csar record(vcpe_ns_201811171343) is dropped from the list, and the distributed csar info (vcpe) will be displayed in the csar file list:

NO	Name	Version	Onboarding State	Operational State	Usage State	Operation button
5818e03-bd39-4fab-99d 2-67ecb5cc27e5	vCPE_demo_1120		ONBOARDED	ENABLED	NOT_IN_USE	
609:8ba3-9a94-4cc7-b6 7d-2ec0ac1e185	vcpe	1.0.0	ONBOARDED	ENABLED	NOT_IN_USE	
965:fd-3088-458c-81b1 -4d-9d308196a	uuitest	1.0.0	ONBOARDED	ENABLED	NOT_IN_USE	
ae-4-6e5b-0661-4aa3-b56 7-77ca0a8a3d0			CREATED	DISABLED	NOT_IN_USE	
dc7ev-490-74a4-42af-92c 8-473adcb5496b	vsn_ser	1.0.0	ONBOARDED	ENABLED	NOT_IN_USE	

You can also distribute a VNF csar package by click the VNF tab in the csar package list page, then follow the upper two steps.

2. NS Instantiate guide

Note:

2.1 When an NS package is on-boarded or distributed, you can start NS Instantiating.

The following shows the guide of Instantiating NS:

Step 1. Open the service list page, first select Customer and Service Type, then click Create button:

Instances - Titanium Server | https://portal.api.simpledemo.org:30225/ONAPPORTAL/applications/home | Post Attendee - Zoom | 17:08 | 2018/11/27

ONAP

Home Services Services List Onboard VNF/VIM Monitor Network English

Services List

Customer: edwardemo Service Type: CCVPN

NO	Service Instance Id	Name	Type	Status	Action
1	18af983-2a79-40c1-a50e-bd557ce95fb	e2eService11111	E2E Service	processing	0%
2	eed96caf-77ac-4da5-8cc2-992616e757	e2e1123test	E2E Service	processing	0%
3	c9fc196e-362d-42d9-8c55-3a8b9ab3f5b	e2e1123test_2	E2E Service	processing	0%
4	265-0800-bc25-407f-be6b-678ea2e2f64c	VCPE	Network Service	Active	

10/ page < 1 > Goto

Step 2. First select the Service with Network Service, then select the TEMPLATE, then click OK button:

Instances - Titanium Server | https://portal.api.simpledemo.org:30225/ONAPPORTAL/applications/home | Post Attendee - Zoom | 17:09 | 2018/11/27

ONAP

Home Services Services List Onboard VNF/VIM Monitor Network English

Services List

Customer: edwardemo

Create

Status	Action
processing	0%
processing	0%
processing	0%

Service: Network Service
Template: ns-vsn.csar

Cancel OK

10/ page < 1 > Goto

Step 3. First input the NS Name and Description, then select the vf_location of each vnf, then click Create button:

Instances - Titanium Server | https://portal.api.simpledemo.org:30225/ONAPPORTAL/applications/home | Post Attendee - Zoom | 17:10 | 2018/11/27

ONAP

Home Services Services List Onboard VNF/VIM Monitor Network English

Services List

Create Service

Base

Name* VSN
Description* VSN

Create

Template Parameters

template Inputs

vnfs Inputs

id: vnf_vnf
vf_location: CPE-DC

Step 4. A new record will be added to the list package, the Status column will show the Instantiating progress.

The screenshot shows the ONAP Portal Services List page. The left sidebar includes Home, Services (selected), Services List, Onboard VNF/VM, Monitor, and Network. The main content area displays a table titled 'Services List' with columns: NO, Service Instance Id, Name, Type, Status, and Action. A search bar at the top allows filtering by Customer (sdwandemo) and Service Type (CCVPN). The table contains five rows, each representing a different service instance. Row 1 (Service Instance Id: b9e02cc-ead9-4472-be2c-6755c9, Name: VSN, Type: Network Service, Status: Creating) has a progress bar at 0% and a trash icon in the Action column. Rows 2 through 5 (Names: e2eService11111, e2e1123test, e2e1123test_2, VCPE) all show a processing status with 0% completion and icons for edit, delete, and refresh.

Step 5. When NS Instantiating is completed, the Status will updated to completed, and you can refresh the package, the Status will be updated to Active.

This screenshot is identical to the one above, but the status for the first row (VSN) has been updated to 'completed'. The progress bar is now at 100%, and the trash icon in the Action column has been replaced by a refresh icon.

3. NS heal guide

Note:

3.1 VF-C R3 healing only support restart a vm of an VNF.

The following shows the guide of healing an VNF of an Instantiated NS:

Step 1. Click + button of an Instantiated NS, the VNF list of the NS will be displayed:

Instances - Titanium Server | https://portal.api.simpledemo.org:30225/ONAPPORTAL/applications/home | Post Attendee - Zoom | 17:21 2018/11/27

ONAP Portal Manage Support

Home Services

Services List

Customer: sdwandemo Service Type: CCVPN

NO	Service Instance Id	Name	Type	Status	Action
5	265a9800-bc25-407f-be6b-678ea2e2164c	VCPE	Network Service	Active	
74b	99ab643e-59d6-433a-b78b-e12e1d86e74b	vnf	vnf	Active	
	fb124b56-02cf-4a4d-98de-2ee7eda756e3	vnf0fc3543_08ef1ff0d_7351_4ef	vnf	Active	
	f7beef4a-78f8-4292-aafb-623c45d516c	vnfb1bb0ce7_23abbbf2_06c9_482	vnf	Active	
	29392684-2bbf-46e4-854a-291bf630189	vnf0408076_eb91e2bd_a28f_492	vnf	Active	
	b47f6444-6739-4170-adf5-7c59e1296ca	vnfb1bb0ce7_29ab8147d_7732_4bd	vnf	Active	

10/ page Goto

Step 2. Click the heal button of a VNF, select the vm of the VNF, and click OK button:

Instances - Titanium Server | https://portal.api.simpledemo.org:30225/ONAPPORTAL/applications/home | Post Attendee - Zoom | 17:22 2018/11/27

ONAP Portal Manage Support

Home Services

Services List

Customer: sdwandemo

Heal

Are you sure heal this instance?

Instance ID: 99ab643e-59d6-433a-b78b-e12e1d86e74b

cause:

action:

actionvminfo: 3997401c-5a6d-4...

Cancel OK

Status	Action
Active	

10/ page Goto

Step 3. When VNF healing is started, the Status of VNF will shows the progress of healing.

Instances - Titanium Server | https://portal.api.simpledemo.org:30225/ONAPPORTAL/applications/home | Post Attendee - Zoom | 17:22 2018/11/27

ONAP Portal Manage Support

Home Services

Services List

Customer: sdwandemo Service Type: CCVPN

NO	Service Instance Id	Name	Type	Status	Action
5	265a9800-bc25-407f-be6b-678ea2e2164c	VCPE	Network Service	Active	
74b	99ab643e-59d6-433a-b78b-e12e1d86e74b	vnf	vnf	Healing 1%	
	fb124b56-02cf-4a4d-98de-2ee7eda756e3	vnf0fc3543_08ef1ff0d_7351_4ef	vnf	Active	
	f7beef4a-78f8-4292-aafb-623c45d516c	vnfb1bb0ce7_23abbbf2_06c9_482	vnf	Active	
	29392684-2bbf-46e4-854a-291bf630189	vnf0408076_eb91e2bd_a28f_492	vnf	Active	
	b47f6444-6739-4170-adf5-7c59e1296ca	vnfb1bb0ce7_29ab8147d_7732_4bd	vnf	Active	

10/ page Goto

Step 4. When VNF healing is completed, the Status will be updated to completed, you can refresh the page, the Status will be updated to Active again.

NO	Service Instance Id	Name	Type	Status	Action
5	265a9800-bc25-407f-be6b-678ea 2e2f64c	VCPE	Network Service	Active	
	99bb643e-59d6-433a-b780-e1201086e 74b	vnf		completed	
	fb124b56-02cf-4a4d-98de-2ee7eda756 e3	vnf		Active	
	f28ee4a-7878-4292-aafb-623d45d0516 c	vnf		Active	
	29392684-2bbf-46e4-854a-291bfc6301 89	vnf		Active	
	b4716444-6739-4170-adf5-7c59e41296 ca	vnf		Active	

NS delete guide

The following shows the guide of deleting an VNF of an Instantiated NS:

Step 1. Select an Instantiated NS record in the list page, then click the delete button:

NO	Service Instance Id	Name	Type	Status	Action
1	18afa983-2a79-40c1-a50e-bd557c e9a1fb	e2eService11111	E2E Service	processing	0%
2	eee96caf-77ac-4da5-8cc2-99c261 6e7c57	e2e1123test	E2E Service	processing	0%
3	c9fc196e-362d-42d9-8c55-3a8a9a b43d5b	e2e1123Test_2	E2E Service	processing	0%
4	265a9800-bc25-407f-be6b-678ea 2e2f64c	VCPE	Network Service	Active	

Step 2. Select the termination Type and the graceful Termination Timeout, then click OK button:

The screenshot shows the ONAP Portal Services List page. A modal dialog titled "Delete" is open, asking "Are you sure delete this instance?". The instance ID is highlighted in red as "bc9e02cc-ead9-4472-be2c-6755c9770f28". The termination type is set to "graceful". The main table lists several service instances with their status as "processing".

NO	Service Inst		Status	Action
1	18afa983-2e9a1fb	bc9e02cc-ead9-4472-be2c-6755c9770f28	processing	0%
2	eee96caf-76e7c57	gracefulTerminationTimeout: 120	processing	0%
3	bc9e02cc-e770f28		Active	
4	c9fc196e-362d-42d9-8c55-3a8a9ab43d5b	e2e1123Test_2	E2E Service	processing 0%
5	265a9800-bc25-407f-be6b-678ea2e2f64c	VCPE	Network Service	Active

Step 3. When the deleting is started, the Status will be updated to the progress of deleting, when deleting is completed, the Status will be update to completed, and soon it will be drop from the list.

The screenshot shows the ONAP Portal Services List page after the deletion. The instance that was being deleted (row 3) now has a status of "completed". The other instances remain in the "processing" state.

NO	Service Instance Id	Name	Type	Status	Action
1	18afa983-2a79-40c1-a50e-bd557ce9a1fb	e2eService1111	E2E Service	processing 0%	
2	eee96caf-77ac-4da5-8cc2-99c2616e7c57	e2e1123test	E2E Service	processing 0%	
3	bc9e02cc-ead9-4472-be2c-6755c9770f28	VSN	Network Service	completed	
4	c9fc196e-362d-42d9-8c55-3a8a9ab43d5b	e2e1123Test_2	E2E Service	processing 0%	
5	265a9800-bc25-407f-be6b-678ea2e2f64c	VCPE	Network Service	Active	

5. Known Issues and Resolutions

1) VF-C catalog config should be updated with the right SDC URL and user/pwd

Resolution: Disable VFC catalog livenessprobe and update configuration

- edit dev-vfc-catalog deployment
- remove livenessprobe section
- enter into catalog pod and update configuration

kubectl -n onap exec -it dev-vfc-catalog-6978b76c86-87722 /bin/bash
config file location: service/vfc/nfvo/catalog/catalog/pub/config/config.py
Update the SDC configuration as follows:
SDC_BASE_URL = "<http://msb-iag:80/api>"
SDC_USER = "aa"
SDC_PASSWD = "Kp8bJ4SXszM0WXlhak3eHlcse2gAw84vaoGGmJvUy2U"

2) nfvtosca parser bug

nfvtoscaparse has error when parse sdc distribution package.

To ignore that error, we need either apply the patch at <https://jira.opnfv.org/browse/PARSER-187> locally in nfv-toscaparser which VFC uses or wait for nfv-toscaparser got that fixed.

3) grant error patch

<https://gerrit.onap.org/r/#/c/73833/>
<https://gerrit.onap.org/r/#/c/73770/>

4) vnflcm notification error patch

<https://gerrit.onap.org/r/#/c/73852/>
<https://gerrit.onap.org/r/#/c/73870/>