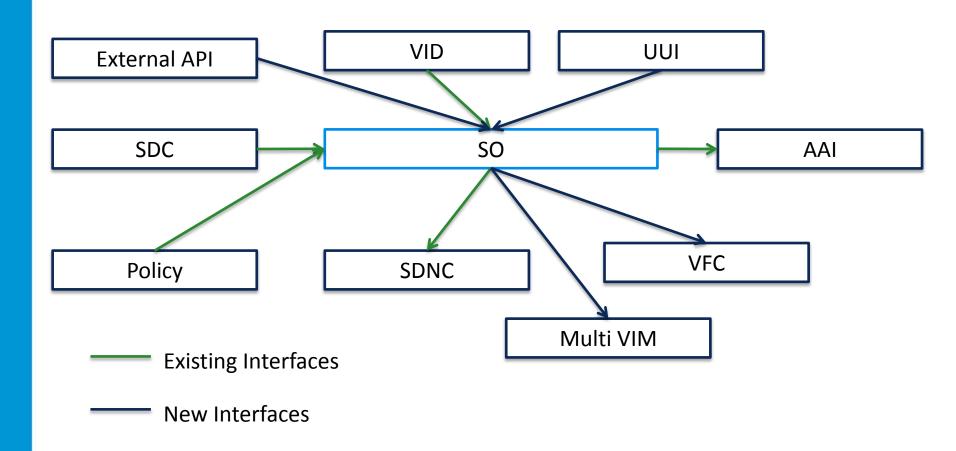
SO APIs



SO – ONAP Module Interactions



THE LINUX FOUNDATION



https://wiki.onap.org/display/DW/MSO+API

VID-MSO Service Instantiation Interface Design

Jan 2017 - version 1.0

Document Attributes

Attribute	Value
Other Attributes	The interfacing application is VID or any NorthBound Application using that interface to trigger MSO.

Revision History

The following table lists the revision history of this document:

I	Author	Date	Version #	Revision Description
ı	MSO dev. team	01/23/2017	1.0	intitial version

SO NBI :UUI-SO

API name/URI	Create Service : http(s)://[hostname][:port]/so/e2eServiceInstances/v2	
Туре	POST	{ "service":{
Direction (incoming/outgoing)	incoming	"name":"so_test1", "description":"so_test1",
Adjacent module(s)		"serviceDefId":"60c3e96e-0970-4871- b6e0-3b6de7561519",
Information expected	Service id, operation id	"templateId":"592f9437-a9c0-4303- b9f6-c445bb7e9814",
Information provided	Service template id, name, description, parameters	"parameters":{ } }
API name/URI	Delete NS: http(s)://[hostname][:port]//so/e2eServiceInstances/v2/{serviceId}	
Туре	DELETE	
Direction (incoming/outgoing)	incoming	
Adjacent module(s)		
Information expected	operation id	
Information provided	Service instance id	
API name/URI	Query Progress:http(s)://[hostname][:port] / so/e2eServiceInstances/v2/{serviceId}/operations/{operationId}	
Туре	GET	
Direction (incoming/outgoing)	incoming	
Adjacent module(s)		
Information expected	Operation progress information	
Information provided	service instance id, operation id	
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SO-VFC

API name/URI	Create NS : http(s)://[hostname][:port]/api/nslcm/v1/ns	
Туре	POST	{ "nsdld":"1",
Direction (incoming/outgoing)	outgoing	"nsName":"vCPE_NJ", "description":"Nanjing _vCPE"
Adjacent module(s)		}
Information expected	NS instance id	
Information provided	Ns template id, name, description	
API name/URI	Instantiate NS: http(s)://[hostname][:port]/api/nslcm/v1/ns/{nsInstanceId }/Instantiate	
Туре	POST	{ "nsInstanceId":"1",
Direction (incoming/outgoing)	outgoing	"LocationConstraints":[
Adjacent module(s)		"vnfProfileId":"zte-CSCF-1.0", "locationConstraints":{
Information expected	Instantiate job id	"vimld":"1" }
Information provided	NS instance id, VNF VIM location, NS parameters	}], "additionalParamForNs":{ "vCPE":"1111" } }
API name/URI	Terminate NS: http(s)://[hostname][:port]/api/nslcm/v1/ns/{ nsInstanceId }/Terminate	
Туре	POST	{ "nsinstanceid":"1",
Direction (incoming/outgoing)	outgoing	"terminationType":"graceful", "gracefulTerminationTimeout":"60"
Adjacent module(s)		}
Information expected	Terminate job id	
Information provided	NS instance id, termination type, timeout	

SO-VFC

API name/URI	Delete NS: http(s)://[hostname][:port]/api/nslcm/v1/ns/{ nsInstanceId}	
Туре	DELETE	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	Delete result	
Information provided	Ns template id	
API name/URI	Query Job: http(s)://[hostname][:port]/api/nslcm/v1/jobs/{jobId}&responseId={ responseId}	
Туре	GET	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	The progress information of the job.	
Information provided	Job id	

NSLCM API Link: https://wiki.onap.org/display/DW/VF-C+R1+Deliverables



SO-AAI

API name/URI	create or update an existing service-instance /business/customers/customer/{global-customer- id}/service-subscriptions/service-subscription/{service- type}/service-instances/service-instance- id}	
Туре	PUT	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	response codes	
Information provided	global-customer-id, service-type, service-instance-id, service-instances	
API name/URI	delete an existing service-instance /business/customers/customer/{global-customer-id}/service- subscriptions/service-subscription/{service-type}/service- instances/service-instance/{service-instance-id}	
Туре	DELETE	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	response codes	
Information provided	global-customer-id, service-type, service-instance-id	

A&AI API Link:

SO-AAI

API name/URI	returns service-instances /business/customers/customer/{global-customer- id}/service-subscriptions/service-subscription/{service- type}/service-instances	
Туре	GET	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	service-instances	
Information provided	global-customer-id; service-type	
API name/URI	returns service-instance /business/customers/customer/{global-customer-id}/service- subscriptions/service-subscription/{service-type}/service- instances/service-instance/{service-instance-id}	
Туре	Get	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	service-instance	
Information provided	global-customer-id, service-type, service-instance-id	

A&AI API Link:

SO-AAI

API name/URI	see node definition for valid relationships /business/customers/customer/{global-customer-id}/service- subscriptions/service-subscription/{service-type}/service- instances/service-instance/{service-instance-id}/relationship- list/relationship	
Туре	PUT	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	response codes	
Information provided	global-customer-id, service-type, service-instance-id, relationship	
API name/URI	delete an existing relationship /business/customers/customer/{global-customer-id}/service- subscriptions/service-subscription/{service-type}/service- instances/service-instance/{service-instance-id}/relationship- list/relationship	
Туре	DELETE	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	response codes	
Information provided	global-customer-id, service-type, service-instance-id	

A&AI API Link:

SO-SDNC

https://wiki.onap.org/display/DW/How+to+use+SLI-API+for+SDNC+Model%2C+Directed+Graph+and+Adapter+prototyping

https://wiki.onap.org/display/DW/Understanding+the+the+GENERIC-RESOURCE-APIs



API name/URI	http://host:port/api/multicloud/v0/{cloud-owner}_{cloud- region}/identity/v3/auth/tokens
Туре	POST
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	token and service endpoints(Check slide 19 and 20)
Information provided	Credentials (Check slide 21)
API name/URI	Create stack: http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/heat/v1/{tenant-id}/stacks
Туре	POST
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api- ref/orchestration/v1/#create-stack
Information provided	Refer to https://developer.openstack.org/api- ref/orchestration/v1/#create-stack

API name/URI	Get Stack: http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/heat/v1/{tenant-id}/stacks/{stack-name}/{stack-id}
Туре	GET
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/orchestration/v1/#show-stack-details
Information provided	Refer to https://developer.openstack.org/api-ref/orchestration/v1/#show-stack-details
API name/URI	Delete Stack: http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/heat/v1/{tenant-id}/stacks/{stack-name}/{stack-id}}
Туре	Delete
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api- ref/orchestration/v1/#delete-stack
Information provided	Refer to https://developer.openstack.org/api-ref/orchestration/v1/#delete-stack

API name/URI	Create Server: http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/nova/v2.1/{tenant_id}/servers
Туре	POST
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/compute/#create-server
Information provided	Refer to https://developer.openstack.org/api-ref/compute/#create-server
API name/URI	Delete server : http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/nova/v2.1/{tenant_id}/servers/{server_id}
Туре	DELETE
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/compute/#delete-server
Information provided	Refer to https://developer.openstack.org/api-ref/compute/#delete-server

API name/URI	Create KeyPair: http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/nova/v2.1/{tenant_id}/os-keypairs
Туре	POST
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/compute/#create-or-import-keypair
Information provided	Refer to https://developer.openstack.org/api-ref/compute/#create-or- import-keypair
API name/URI	Delete KeyPair : http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/nova/v2.1/{tenant_id}/os-keypairs/{keypair-id}
Туре	DELETE
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/compute/#delete- keypair
Information provided	Refer to https://developer.openstack.org/api-ref/compute/#delete- keypair

API name/URI	Create Network: http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/neutron/v2.0/networks
Туре	POST
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/networking/v2/?expanded=create-network-detail#create-network
Information provided	Refer to https://developer.openstack.org/api- ref/networking/v2/?expanded=create-network-detail#create-network
API name/URI	Delete Network : http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/neutron/v2.0/networks/{network-id}
Туре	DELETE
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/networking/v2/?expanded=create-network-detail#delete-network
Information provided	Refer to https://developer.openstack.org/api- ref/networking/v2/?expanded=create-network-detail#delete-network

API name/URI	Create subnet: http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/neutron/v2.0/subnets
Туре	POST
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api- ref/networking/v2/?expanded=create-network-detail,create-subnet- detail#create-subnet
Information provided	Refer to https://developer.openstack.org/api- ref/networking/v2/?expanded=create-network-detail,create-subnet- detail#create-subnet
API name/URI	Delete subnet : http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/neutron/v2.0/subnets/{subnet-id}
Туре	DELETE
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api- ref/networking/v2/?expanded=create-network-detail,delete-subnet- detail#delete-subnet
Information provided	Refer to https://developer.openstack.org/api- ref/networking/v2/?expanded=create-network-detail,delete-subnet- detail#delete-subnet

API name/URI	Create port: http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/neutron/v2.0/ports
Туре	POST
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/networking/v2/#create-port
Information provided	Refer to https://developer.openstack.org/api-ref/networking/v2/#create- port
API name/URI	Delete port : http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/neutron/v2.0/ports/{port-id}
Туре	DELETE
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/networking/v2/#delete- port
Information provided	Refer to https://developer.openstack.org/api-ref/networking/v2/#delete- port

API name/URI	Create Security Group: http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/neutron/v2.0/security-groups
Туре	POST
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/networking/v2/#create-security-group
Information provided	Refer to https://developer.openstack.org/api-ref/networking/v2/#create-security-group
API name/URI	Delete Security Group : http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/neutron/v2.0/security-groups/{security-group-id}
Туре	DELETE
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/networking/v2/#delete-security-group
Information provided	Refer to https://developer.openstack.org/api-ref/networking/v2/#delete-security-group

API name/URI	Create Security Group Rule: http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/neutron/v2.0/security-group-rules
Туре	POST
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/networking/v2/#create-security-group-rule
Information provided	Refer to https://developer.openstack.org/api-ref/networking/v2/#create- security-group-rule
API name/URI	Delete Security Group Rule : http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/neutron/v2.0/security-group-rules/{security-group-rule-id}
Туре	DELETE
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	MultiCloud
Information expected	Refer to https://developer.openstack.org/api-ref/networking/v2/#delete-security-group-rule
Information provided Refer to https://developer.openstack.org/api-ref/networking/v2/security-gr	

```
"token": {
  "methods": [
    "password"
  "roles": [
      "id": "51cc68287d524c759f47c811e6463340",
      "name": "admin"
  expires_at": "2015-11-07T02:58:43.578887Z",
  "project": {
    "domain": {
      "id": "default",
      "name": "Default"
    "id": "a6944d763bf64ee6a275f1263fae0352",
    "name": "admin"
 },
"is_domain": false,
  "catalog": [
      "endpoints": [
           "region_id": "RegionOne",
           "url": "http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/heat/v1/a6944d763bf64ee6a275f1263fae0352",
           "region": "RegionOne",
           "interface": "internal",
           "id": "bf2fe80c2a614e438d3e55b00e85b9ff"
           "region_id": "RegionOne",
           "url": " http://host:port/api/multicloud/v0/{cloud-owner}_{cloud-region}/heat/v1/a6944d763bf64ee6a275f1263fae0352",
           "region": "RegionOne",
           "interface": "admin".
           "id": "bfc9615fc24e4045aaf719f060984bf1"
           "region_id": "RegionOne",
           "url": " http://host:port/api/multicloud/v0/{cloud-owner}_(cloud-region}/heat/v1/a6944d763bf64ee6a275f1263fae0352",
           "region": "RegionOne",
           "interface": "public",
           "id": "c76cf9930b0f4ccea6b1157f80119cfc"
        "type": "orchestration",
        "id": "a5f7070bda40443fa3819fbdf1689af1",
        "name": "heat"
    },
  "extras": {},
  "user": {
    "domain": {
      "id": "default".
      "name": "Default"
    "id": "ee4dfb6e5540447cb3741905149d9b6e",
    "name": "admin",
    "password_expires_at": "2016-11-06T15:32:17.000000"
  "audit_ids": [
    "3T2dc1CGQxyJsHdDu1xkcw"
  "issued at": "2015-11-07T01:58:43.578929Z"
```



SO-SDC

SDC Catalog APIs

v1.1.0

SO-Policy

Find the API at below link

https://wiki.onap.org/display/DW/Policy+API



Thanks



SO-SDNC

API name/URI	http(s)://[hostname][:port]/sdnc/MSORequest	
Туре	POST	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	ack-final-indicator, response-text, response-code	
Information provided	svc-request-id, svc-action, svc-notification-url	
API name/URI	http(s)://[hostname][:port]/v1/sdnc/services	
Туре	POST	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	response codes	
Information provided	msoRequestId, msoServiceInstanceId	
API name/URI	http(s)://[hostname][:port]/SDNCNotify/services	
Туре	POST	
Direction (incoming/outgoing)	outgoing	
Adjacent module(s)		
Information expected	response codes	
Information provided	svc-request-id <u>,</u> response-code	

SO-SDNC

API name/URI	http(s)://[hostname][:port]/SDNCNotify/event
Туре	POST
Direction (incoming/outgoing)	outgoing
Adjacent module(s)	
Information expected	response codes
Information provided	event-type, event-correlator-type, event-correlator