

ESC REST Northbound API Documentation

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Resources managed by ESC REST

- Tenants
- Networks
- Subnets
- Flavors
- Images
- Volumes
- Deployments

Behavior of ESC REST operations

GET operations are synchronous the request/response parameters are described with an example of a request/response

POST, DELETE, and PUT operations are asynchronous. The asynchronous design use the “web hooks” approach using two independent "one-way" invocations - one to start a long-running operation (Client to ESC) and the other one to notify a requester that it is completed (ESC to client)

ESC REST API Headers/Path/Body Parameters

Callbacks

One of the header parameters of the operation request will contain a callback field, whose value is a URI where the client expects a callback. If this field is not present, no callback will be performed.

When the operation has completed (either successfully or unsuccessfully), ESC will perform a POST request to the callback URI, with an entity body containing the resource for this operation. The status will be returned in the HTTP header called `esc-status-code` and the status message will be returned in the HTTP header called `esc-status-message`.

ESC Clients can match a completion report back to the original request by comparing the value of the HTTP header called `esc-transaction-id` to the one returned in the initial status response.

ESC Clients are expected to provide a REST implementation for all the callbacks.

Media Type

All POST, DELETE, and PUT operations that require request and/or response body must provide a header parameter for media type. Note, that ESC is currently tested to accept and return XML.

Internal IDs

In some of the ESC REST API, there is a path parameter called `"*_internal_id"` where the asterisk is replaced by the resource type. ESC Clients must provide an internal id for its resource it wants to create. The internal ids are enforced so the ESC Clients are able to refer to them in future operations such as GET, PUT, or DELETE requests.

It is recommended that the ESC Client generated internal ids within the scope of the ESC.

NOTE: Reusing (recycling) of internal ids is not recommended. This practice can lead to confusion in trouble shooting.

Body

In some of the POST, PUT, and DELETE requests you are required to provide a JSON/XML body. Depending on the resource, you will need to provide certain fields in the body to successfully execute a request. Check the body section for each API (bottom of page) to see what fields are supported.

String Restrictions in Body/Internal IDs

Body

Some string parameters/fields, such as `id`, `name`, are restricted by the underlying cloud provider, such as Openstack. The allowable range for these parameters is included in the Create section for each resource, in this notation: String minimum-length . . maximum length, for example, for Tenant name: String 1 . . 64

Generally, names are either 1..64 (for Tenant/User) or 1..255 (for Network/Subnet/Flavor/Image/VM).

Internal ID

Ids are restricted to 72 characters such as `internal_id 1..72` and `external_id 1..72`.

Internal id naming must conform the standards stated in RFC 3986 Uniform Resource Identifier (URI): Generic Syntax. See sections related to URI encoding, sections 2.2 Reserved Characters and 2.3 Unreserved Characters. ESC will accept an internal id specified in the request URL form the unreserved character set: `unreserved = ALPHA / DIGIT / "-" / "." / "_"`

NOTE: the tilde “~” is not supported in the internal id character set.

The internal id received in a request must be unique within the scope of all the domain resources (tenant, network, subnet, service catalog, deployment) For example, you cannot create 2 networks with the same internal_network_id, even if the networks are created under different tenants.

REST API Security

REST Authentication

Overview

ESC REST API uses http basic access authentication where the ESC client will have to provide a username and password when making ESC REST requests. The user name and password will be encoded with Base64 in transit, but not encrypted or hashed. HTTPS will be used in conjunction with Basic Authentication to provide the encryption.

Setup

By default, the REST authentication is disabled. To enable it the pass the argument --enable-auth to ESC bootvm.py, ESC installation script.

Username and Password

The REST interface has only one default username/password (admin/cisco123).

The REST password can be updated using escadm tool from the ESC VM CLI:

```
$ escadm rest set --username admin --password test123
```

The REST password can be reset using escadm tool from the ESC VM CLI:

```
$ escadm rest set
```

You can also update the password through the REST API:

[http://\[ESCVM_IP\]:8080/ESCManager/v0/authentication/setpassword?
userName=yourUsername&password=yourPassword](http://[ESCVM_IP]:8080/ESCManager/v0/authentication/setpassword?userName=yourUsername&password=yourPassword)

Sending an Authorized Request

To send an authorized request an ESC client should send the request with the following header:

```
Authorization: Basic YWRtaW46Y2lzY28xMjM=
```

where YWRtaW46Y2lzY28xMjM= is the Base64 encoded string of the default username/password (admin:cisco123)

Most libraries and web clients have an interface for simply providing the username/password and the app will encode the username/password and add the HTTP Basic Auth header.

Example using the default admin/cisco123 credentials:

http://[ESCVm_IP]:8080/ESCManager/v0/tenants/

Headers:

Content-Type application/xml
Authorization Basic YWRtaW46Y2lzY28xMjM=

REST Https Support

Overview

ESC supports https communication over port 8443. ESC will generate a self-signed certificate that the client will need to trust to get the https communication going.

Setup

By default, the REST https is disabled and restricted to localhost. To enable it pass the argument --enable-https-rest to ESC bootvm.py, ESC installation script.

HA Considerations

In an HA setup every ESC HA VM will have its own self-signed generated certificate. Upon an HA switchover, ESC north bound client will be required to re-accept the new certificate it will be served.

REST API List

01-Tenants : Manage ESC tenants

GET	/v0/tenants	Get all tenants
<h4>Implementation Notes</h4> <p>All tenants in ESC will be returned as a List</p>		
<h4>Response Class (Status 200)</h4>		
Model	Model Schema	
<pre>[{ "internal_tenant_id": "string", "external_tenant_id": "string", "name": "string", "enabled": false, "vim_mapping": false, "event_type": "CREATE_TENANT", "managed_resource": false }]</pre>		
Response Content Type	application/xml	

DELETE /v0/tenants/{internal_tenant_id}

Delete a tenant from ESC

Implementation Notes

Delete a tenant from ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
internal_tenant_id	<input type="text" value="(required)"/>	Internal tenant ID (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Tenant deletion request accepted		
400	Invalid Request		
404	Invalid Tenant Id		

[Try it out!](#)

GET /v0/tenants/{internal_tenant_id}

Get a tenant by its name

Implementation Notes

Only tenants created using ESC will be checked

Parameters

Parameter	Value	Description	Parameter Type	Data Type
internal_tenant_id	<input type="text" value="(required)"/>	Internal tenant ID (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Get request accepted		

HTTP Status Code	Reason	Response Model	Headers
404	Invalid Request - Invalid Tenant ID		

Try it out!

POST /v0/tenants/{internal_tenant_id}

Create a tenant in ESC

Implementation Notes

Creates a tenant which will be managed by ESC and can be used for creating other resources under it. Example request:

```
POST /v0/tenants/tentest HTTP/1.1
Content-Type: application/xml
Accept: application/xml
Callback: http://127.0.0.1:9010/
Body:
<tenant xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <name>example-tenant</name>
  <managed_resource>true</managed_resource>
</tenant>
```

After the tenant creation operation is done, ECS will send a callback to the client with the result. Example callback:

```
HTTP/1.1 201 OK
Content-Type: application/xml; charset=UTF-8
ESC_TRANSACTION_ID: d53f0047-2315-466c-b7e3-aa78e0a567e8
ESC-Status-Code: 200
ESC-Status-Message: Tenant successfully created
<tenant xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <enabled>true</enabled>
  <event_type>CREATE_TENANT</event_type>
  <external_tenant_id>484c620285ea4f588227ff3396215980</external_tenant_id>
  <internal_tenant_id>tentest</internal_tenant_id>
  <name>example-tenant</name>
  <managed_resource>true</managed_resource>
</tenant>
```

Parameters

Parameter	Value	Description	Parameter Type	Data Type
-----------	-------	-------------	----------------	-----------

Parameter	Value	Description	Parameter Type	Data Type
body	(required) <div style="border: 1px solid #ccc; height: 80px; width: 100%;"></div> Parameter content type: <input type="text" value="application/xml"/>	Tenant configuration payload	body	Model Model Schema <pre>{ "internal_tenant_id": "string", "external_tenant_id": "string", "name": "string", "enabled": false, "vim_mapping": false, "event_type": "CREATE_TENANT", "managed_resource": false }</pre> Click to set as parameter value
Callback	(required) <input type="text"/>	Callback URL for ESC notifications	header	string
internal_tenant_id	(required) <input type="text"/>	Internal tenant ID (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Tenant creation request accepted		
400	Invalid Request		
409	Conflicting Request		

[Try it out!](#)

02-Networks : Manage ESC networks

GET </v0/{internalTenantId}/networks> [Get all networks under a tenant](#)

Implementation Notes

All networks under that tenant in ESC will be returned as a List

Parameters

Parameter	Value	Description	Parameter Type	Data Type
internalTenantId	(required) <input type="text"/>	Internal tenant ID of the network (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		

[Try it out!](#)

DELETE /v0/{internalTenantId}/networks/{internalNetworkId} [Delete a network from an existing tenant in ESC](#)

Implementation Notes

Delete a network from ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
internalNetworkId	<input type="text" value="(required)"/>	Internal network ID (max length 72 characters)	path	string
internalTenantId	<input type="text" value="(required)"/>	Internal tenant ID of the network (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid request		
500	Internal server error		

[Try it out!](#)

GET /v0/{internalTenantId}/networks/{internalNetworkId} [Get a network by its tenant and internal network ID](#)

Implementation Notes

Only networks created using ESC will be checked

Parameters

Parameter	Value	Description	Parameter Type	Data Type
-----------	-------	-------------	----------------	-----------

Parameter	Value	Description	Parameter Type	Data Type
internalTenantId	<input type="text" value="(required)"/>	Internal tenant ID of the network (max length 72 characters)	path	string
internalNetworkId	<input type="text" value="(required)"/>	Internal network ID (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
404	Network Id not found		

[Try it out!](#)

POST `/v0/{internalTenantId}/networks/{internalNetworkId}` Create a network under an existing tenant in ESC

Implementation Notes

Create a network in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
internalTenantId	<input type="text" value="(required)"/>	Internal tenant ID of the network (max length 72 characters)	path	string
internalNetworkId	<input type="text" value="(required)"/>	Internal network ID (max length 72 characters)	path	string

Parameter	Value	Description	Parameter Type	Data Type
body	<div style="border: 1px solid #ccc; padding: 5px; min-height: 100px;"> <p>(required)</p> </div> <p>Parameter content type: <input type="text" value="application/xml"/> </p>	Network configuration payload	body	Model Model Schema <pre> { "internalDeploymentId": "string", "internal_tenant_id": "string", "internal_network_id": "string", "name": "string", "shared": false, "external_tenant_id": "string", "tenant_name": "string", "external_network_id": "string", "subnet": ["string"], "admin_state_up": false, "locators": { "datacenter": "string", "switch_name": "string" }, "event_type": "CREATE_NETWORK", "provider_segmentation_id": "string", "router_external": false, "provider_physical_network": "string", "provider_network_type": "string", "vlan_id": 0, "switch_name": "string", "number_of_ports": 0 } </pre> <p>Click to set as parameter value</p>

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid request		
404	Network Id not found		
409	Conflicting request		
503	Unable to query VIM		

Try it out!

03-Subnets : Manage ESC subnets

GET [/v0/{internalTenantId}/subnets](#) [Get all subnets under a network](#)

Implementation Notes

All subnet under that network in ESC will be returned as a List

Parameters

Parameter	Value	Description	Parameter Type	Data Type
<code>internalNetworkId</code>	<input type="text"/>	Internal network ID of the subnet (max length 72 characters)	header	string
<code>internalTenantId</code>	<input type="text" value="(required)"/>	Internal tenant ID of the subnet (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
404	Not found		

Try it out!

DELETE `/v0/{internalTenantId}/subnets/{internalSubnetId}`

Delete a subnet from an existing tenant in ESC

Implementation Notes

Delete a subnet from ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
<code>Callback</code>	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
<code>internalTenantId</code>	<input type="text" value="(required)"/>	Internal tenant ID of the subnet (max length 72 characters)	path	string
<code>internalSubnetId</code>	<input type="text" value="(required)"/>	Internal subnet ID (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		

HTTP Status Code	Reason	Response Model	Headers
404	Not found		
500	Internal server error		

[Try it out!](#)

GET `/v0/{internalTenantId}/subnets/{internalSubnetId}` [Get a subnet by its tenant and internal subnet ID](#)

Implementation Notes

Only subnets created using ESC will be checked

Parameters

Parameter	Value	Description	Parameter Type	Data Type
internalTenantId	<input type="text" value="(required)"/>	Internal tenant ID of the subnet (max length 72 characters)	path	string
internalSubnetId	<input type="text" value="(required)"/>	Internal subnet ID (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
404	Not found		

[Try it out!](#)

POST `/v0/{internalTenantId}/subnets/{internalSubnetId}` [Create a subnet under an existing tenant in ESC](#)

Implementation Notes

Create a subnet in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string

Parameter	Value	Description	Parameter Type	Data Type
internalTenantId	<input type="text" value="(required)"/>	Internal tenant ID of the subnet (max length 72 characters)	path	string
internalSubnetId	<input type="text" value="(required)"/>	Internal subnet ID (max length 72 characters)	path	string
body	<input type="text" value="(required)"/> Parameter content type: <input type="text" value="application/xml"/>	Subnet configuration payload	body	Model Model Schema <pre> { "internal_tenant_id": "string", "external_tenant_id": "string", "internal_network_id": "string", "external_network_id": "string", "internal_subnet_id": "string", "external_subnet_id": "string", "name": "string", "allocation_pools": [{ "start": "string", "end": "string" }], "gateway_ip": "string", "ip_version": 0, "cidr": "string", "enable_dhcp": false, "event_type": "CREATE_SUBNET" } </pre>

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	Not found		
409	Conflicting Request		
500	Internal server error		

Try it out!

04-Images : Manage ESC images

GET /v0/images

Get all images

Implementation Notes

All images created in ESC will be returned as a List

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		

[Try it out!](#)

DELETE /v0/images/{internalImageId}

Delete an image from ESC

Implementation Notes

Delete an image from ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
internalImageId	<input type="text" value="(required)"/>	Internal image ID (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
500	Internal server error		

[Try it out!](#)

GET /v0/images/{internalImageId}

Get the image by the internal image ID

Implementation Notes

Images not created by ESC will not be checked

Parameters

Parameter	Value	Description	Parameter Type	Data Type
-----------	-------	-------------	----------------	-----------

Parameter	Value	Description	Parameter Type	Data Type
internalImageId	<input type="text" value="(required)"/>	Internal image ID (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	Image Id not found		

[Try it out!](#)

POST /v0/images/{internalImageId}

Create an image in ESC

Implementation Notes

Create an image in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
internalImageId	<input type="text" value="(required)"/>	Internal image ID (max length 72 characters)	path	string
body	<input type="text" value="(required)"/> <div style="border: 1px solid #ccc; height: 80px; width: 100%;"></div>	ESC datamodel with the image to create	body	string

Parameter content type:

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
409	Conflicting Request		

HTTP Status Code	Reason	Response Model	Headers
500	Internal server error		

[Try it out!](#)

05-Flavors : Manage ESC flavors

GET	/v0/flavors	Get all flavors								
<p>Implementation Notes</p> <p>All flavors created in ESC will be returned as a List</p> <p>Response Messages</p> <table border="1"> <thead> <tr> <th>HTTP Status Code</th> <th>Reason</th> <th>Response Model</th> <th>Headers</th> </tr> </thead> <tbody> <tr> <td>200</td> <td>Request accepted</td> <td></td> <td></td> </tr> </tbody> </table> <p>Try it out!</p>			HTTP Status Code	Reason	Response Model	Headers	200	Request accepted		
HTTP Status Code	Reason	Response Model	Headers							
200	Request accepted									

DELETE	/v0/flavors/{internalFlavorId}	Delete a flavor from ESC																															
<p>Implementation Notes</p> <p>Delete a flavor from ESC</p> <p>Parameters</p> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Value</th> <th>Description</th> <th>Parameter Type</th> <th>Data Type</th> </tr> </thead> <tbody> <tr> <td>callback</td> <td><input type="text" value="(required)"/></td> <td>Callback URL for ESC notifications</td> <td>header</td> <td>string</td> </tr> <tr> <td>internalFlavorId</td> <td><input type="text" value="(required)"/></td> <td>Internal flavor ID (max length 72 characters)</td> <td>path</td> <td>string</td> </tr> </tbody> </table> <p>Response Messages</p> <table border="1"> <thead> <tr> <th>HTTP Status Code</th> <th>Reason</th> <th>Response Model</th> <th>Headers</th> </tr> </thead> <tbody> <tr> <td>200</td> <td>Request accepted</td> <td></td> <td></td> </tr> <tr> <td>404</td> <td>Flavor Id not found</td> <td></td> <td></td> </tr> <tr> <td>500</td> <td>Internal server error</td> <td></td> <td></td> </tr> </tbody> </table> <p>Try it out!</p>			Parameter	Value	Description	Parameter Type	Data Type	callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string	internalFlavorId	<input type="text" value="(required)"/>	Internal flavor ID (max length 72 characters)	path	string	HTTP Status Code	Reason	Response Model	Headers	200	Request accepted			404	Flavor Id not found			500	Internal server error		
Parameter	Value	Description	Parameter Type	Data Type																													
callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string																													
internalFlavorId	<input type="text" value="(required)"/>	Internal flavor ID (max length 72 characters)	path	string																													
HTTP Status Code	Reason	Response Model	Headers																														
200	Request accepted																																
404	Flavor Id not found																																
500	Internal server error																																

GET /v0/flavors/{internalFlavorId}

Get the flavor by the internal flavor ID

Implementation Notes

Flavors not created by ESC will not be checked

Parameters

Parameter	Value	Description	Parameter Type	Data Type
internalFlavorId	<input type="text" value="(required)"/>	Internal flavor ID (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
404	Flavor Id not found		
406	Operation not supported on VIM/Flavor part of service registration		

Try it out!

POST /v0/flavors/{internalFlavorId}

Create a flavor in ESC

Implementation Notes

Create a flavor in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
internalFlavorId	<input type="text" value="(required)"/>	Internal flavor ID (max length 72 characters)	path	string
body	<input type="text" value="(required)"/>	ESC datamodel with the flavor to create	body	string

Parameter content type:

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	Flavor Id not found		
406	Operation not supported on VIM/Flavor part of service registration		
409	Conflicting Request		
500	Internal server error		

Try it out!

06-Deployments : Manage ESC deployments

GET /v0/deployments

[Find all deployments](#)

Implementation Notes

All deployments created in ESC will be returned as a List

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		

Try it out!

GET /v0/deployments/config/{internal_deployment_id}

[Find deployment configuration data by its internal ID](#)

Implementation Notes

Deployment configuration data will be returned if found in CDB

Parameters

Parameter	Value	Description	Parameter Type	Data Type
internal_deployment_id	<input type="text" value="(required)"/>	Internal ID of the deployment (max length 1024 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
404	Deployment Id not found		

[Try it out!](#)

DELETE `/v0/deployments/{internal_deployment_id}` Delete a deployment from ESC

Implementation Notes
Delete a deployment from ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
internal_deployment_id	<input type="text" value="(required)"/>	Internal ID of the deployment (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	Deployment Id not found		

[Try it out!](#)

GET `/v0/deployments/{internal_deployment_id}` Find a deployment by its internal ID

Implementation Notes
A deployment will be returned if found in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
internal_deployment_id	<input type="text" value="(required)"/>	Internal ID of the deployment (max length 1024 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
404	Deployment Id not found		

Try it out!


POST /v0/deployments/{internal_deployment_id}

Creates a deployment

Implementation Notes

Create a deployment in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
Callback-ESC-Events	<input type="text" value="(required)"/>	Callback URL for ESC event notifications	header	string
internal_deployment_id	<input type="text" value="(required)"/>	Internal ID of the deployment (max length 72 characters)	path	string
body	<div style="border: 1px solid #ccc; padding: 5px; min-height: 100px;"><input type="text" value="(required)"/></div> <p>Parameter content type: <input type="text" value="application/xml"/> </p>	ESC datamodel to deploy	body	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	An associated resource not found		
406	Not Acceptable		

HTTP Status Code	Reason	Response Model	Headers
409	Conflicting Request		
500	Internal server error		
503	Failed to query VIM		

Try it out!

PUT /v0/deployments/{internal_deployment_id}

Update an existing deployment in ESC

Implementation Notes

Updates an existing deployment. Updates could be addition or removal of VM groups, interfaces, networks, KPIs and Rules, Day 0 config.

After the service update operation is done, ESC will send a callback to the client with the result.

Example request of adding VM group:

```
PUT /v0/deployments/my_dep_id HTTP/1.1
Content-Type: application/xml
Accept: application/xml
Callback: http://127.0.0.1:9010/
Callback-ESC-Events: http://127.0.0.1:9010/
```

Body:

```
<esc_datamodel xmlns:ns2="urn:ietf:params:xml:ns:netconf:notification:1.0" xmlns="http://www.ci
<tenants>
<tenant>
<name>admin</name>
<deployments>
<deployment>
<name>MyDemoDepName</name>
<vm_group>
<name>ASA-1</name>
<bootup_time>300</bootup_time>
<recovery_wait_time>0</recovery_wait_time>
<image>ASA</image>
<interfaces>
<interface>
<nicid>1</nicid>
<network>MgtNetwork</network>
<ip_address>18.0.0.16</ip_address>
</interface>
</interfaces>
<scaling>
<min_active>1</min_active>
<max_active>1</max_active>
<elastic>true</elastic>
```

```
<static_ip_address_pool>
  <network>MgtNetwork</network>
  <ip_address>18.0.0.16</ip_address>
</static_ip_address_pool>
</scaling>
<kpi_data>
  <kpi>
    <event_name>VM_ALIVE</event_name>
    <metric_value>1</metric_value>
    <metric_cond>GT</metric_cond>
    <metric_type>UINT32</metric_type>
    <metric_collector>
      <type>ICMPPing</type>
      <nicid>1</nicid>
      <poll_frequency>3</poll_frequency>
      <polling_unit>seconds</polling_unit>
      <continuous_alarm>>false</continuous_alarm>
    </metric_collector></kpi>
</kpi_data>
<rules>
  <admin_rules>
    <rule>
      <event_name>VM_ALIVE</event_name>
      <action>"ALWAYS log"</action>
      <action>"TRUE esc_vm_alive_notification"</action>
    </rule>
  </admin_rules>
</rules>
<config_data>
  <configuration>
    <dst>day0-config</dst>
    <file>http://MY_FILE_SERVER_IP:/share/images/day0-configASAv</file>
  </configuration>
  <configuration>
    <dst>idtoken</dst>
    <file>http://MY_FILE_SERVER_IP:/share/images/asa-smart.config</file>
  </configuration>
</config_data>
<placement>
  <type>zone_host</type>
  <zone>MY_CLUSTER1</zone>
</placement>
<volumes>
  <volume>
    <name>MY_DATASTORE1</name>
    <valid>1</valid>
  </volume>
</volumes>
</vm_group>
<name>CSR-1</name>
<bootup_time>300</bootup_time>
```

```
<recovery_wait_time>0</recovery_wait_time>
<image>ASA</image>
<interfaces>
<interface>
<nicid>1</nicid>
<network>MgtNetwork</network>
<ip_address>18.0.0.16</ip_address>
</interface>
</interfaces>
<scaling>
  <min_active>1</min_active>
  <max_active>1</max_active>
  <elastic>>true</elastic>
  <static_ip_address_pool>
    <network>MgtNetwork</network>
    <ip_address>18.0.0.16</ip_address>
  </static_ip_address_pool>
</scaling>
<kpi_data>
  <kpi>
    <event_name>VM_ALIVE</event_name>
    <metric_value>1</metric_value>
    <metric_cond>GT</metric_cond>
    <metric_type>UINT32</metric_type>
    <metric_collector>
      <type>ICMPPing</type>
      <nicid>1</nicid>
      <poll_frequency>3</poll_frequency>
      <polling_unit>seconds</polling_unit>
      <continuous_alarm>>false</continuous_alarm>
    </metric_collector></kpi>
</kpi_data>
<rules>
  <admin_rules>
    <rule>
      <event_name>VM_ALIVE</event_name>
      <action>"ALWAYS log"</action>
      <action>"TRUE esc_vm_alive_notification"</action>
    </rule>
  </admin_rules>
</rules>
<config_data>
  <configuration>
    <dst>day0-config</dst>
    <file>http://MY_FILE_SERVER_IP:/share/images/day0-configASAv</file>
  </configuration>
  <configuration>
    <dst>idtoken</dst>
    <file>http://MY_FILE_SERVER_IP:/share/images/asa-smart.config</file>
  </configuration>
</config_data>
```

```

<placement>
  <type>zone_host</type>
  <zone>MY_CLUSTER1</zone>
</placement>
<volumes>
<volume>
  <name>MY_DATASTORE1</name>
  <valid>1</valid>
</volume>
</volumes>

</deployment>
</deployments>
</tenant>
</tenants>
</esc_datamodel>

```

While the Deployment Update operation is being processed successfully, ESC will send a VM_DEPLOYED callback for each VM created on the VIM as part of this update request.

```

HTTP/1.1 201 OK
Content-Type: application/xml; charset=UTF-8
ESC_TRANSACTION_ID: d53f0047-2315-466c-b7e3-aa78e0a567e8
ESC-Status-Code: 200
ESC-Status-Message: VM Deployed

```

```

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<deployment xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
<datacenter><default>>false</default></datacenter>
<deployment_details>
<host_uuid>host-14882</host_uuid>
<host_name>10.85.103.13</host_name>
<vm_uuid>50217d2d-8afb-41c2-cffd-d76b1239f51e</vm_uuid>
<interfaces>
<interface>
<network_uuid>MgtNetwork</network_uuid>
<ip_address>18.0.0.17</ip_address>
<mac_address>00:50:56:a1:6a:13</mac_address>
<nic_id>1</nic_id>
<port_forwarding></port_forwarding>
<port_uuid></port_uuid>
<security_groups></security_groups>
<subnet_uuid></subnet_uuid>
<type>virtual</type>
</interface>
</interfaces>
<vm_group_name>CSR-1</vm_group_name>
<vm_name>Sanity-vmware-de_CSR-1_0_b323effd-7f70-4055-b11e-0ef66f0a758d</vm_name>
<vm_state_machine_state>VM_INERT_STATE</vm_state_machine_state>
</deployment_details>

```



```
<deployment_name>MyDemoDepName</deployment_name>
<deployment_stage>VM_DEPLOYED</deployment_stage>
<external_deployment_id>8d084aab-6a66-4a70-8f47-42b91f7477ad</external_deployment_id>
<external_tenant_id>SystemAdminTenantId</external_tenant_id>
<internal_deployment_id>my_dep_id</internal_deployment_id>
<internal_tenant_id>SystemAdminTenantId</internal_tenant_id>
<service_state_machine_state>SERVICE_DEPLOYING_STATE</service_state_machine_state>
</deployment>
```

While the Deployment Update operation is being processed successfully, ESC will send a VM_ALIVE callback for each monitorable/pingable VM on the VIM created as part of this update request.

```
HTTP/1.1 201 OK
Content-Type: application/xml; charset=UTF-8
ESC_TRANSACTION_ID: d53f0047-2315-466c-b7e3-aa78e0a567e8
ESC-Status-Code: 200
ESC-Status-Message: VM_Alive event received, VM ID: [Sanity-vmware-de_CSR-1_0_b323effd-7f70-4055-b1
```

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<deployment xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <datacenter><default>>false</default></datacenter>
  <deployment_details>
    <host_uuid>host-14882</host_uuid>
    <host_name>10.85.103.13</host_name>
    <vm_uuid>50217d2d-8afb-41c2-cffd-d76b1239f51e</vm_uuid>
    <interfaces>
      <interface>
        <network_uuid>MgtNetwork</network_uuid>
        <ip_address>18.0.0.17</ip_address>
        <mac_address>00:50:56:a1:6a:13</mac_address>
        <nic_id>1</nic_id>
        <port_forwarding></port_forwarding>
        <port_uuid></port_uuid>
        <security_groups></security_groups>
        <subnet_uuid></subnet_uuid>
        <type>virtual</type>
      </interface>
    </interfaces>
    <vm_group_name>CSR-1</vm_group_name>
    <vm_name>Sanity-vmware-de_CSR-1_0_b323effd-7f70-4055-b11e-0ef66f0a758d</vm_name>
    <vm_state_machine_state>VM_ALIVE_STATE</vm_state_machine_state>
  </deployment_details>
  <deployment_name>MyDemoDepName</deployment_name>
  <deployment_stage>VM_ALIVE</deployment_stage>
  <external_deployment_id>8d084aab-6a66-4a70-8f47-42b91f7477ac</external_deployment_id>
  <external_tenant_id>SystemAdminTenantId</external_tenant_id>
  <internal_deployment_id>my_dep_id</internal_deployment_id>
  <internal_tenant_id>SystemAdminTenantId</internal_tenant_id>
  <service_state_machine_state>SERVICE_INERT_STATE</service_state_machine_state>
</deployment>
```

After the Deployment Update operation is done, ESC will send a SERVICE_UPDATED callback to the client with the result.

Example callback:

```
HTTP/1.1 201 OK
Content-Type: application/xml; charset=UTF-8
ESC_TRANSACTION_ID: d53f0047-2315-466c-b7e3-aa78e0a567e8
ESC-Status-Code: 200
ESC-Status-Message: Service group update completed successfully

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<deployment xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <datacenter><default>>false</default></datacenter>
  <deployment_name>MyDemoDepName</deployment_name>
  <deployment_stage>SERVICE_UPDATED</deployment_stage>
  <external_deployment_id>8d084aab-6a66-4a70-8f47-42b91f7477ac</external_deployment_id>
  <external_tenant_id>SystemAdminTenantId</external_tenant_id>
  <internal_deployment_id>my_dep_id</internal_deployment_id>
  <internal_tenant_id>SystemAdminTenantId</internal_tenant_id>
  <service_state_machine_state>SERVICE_ACTIVE_STATE</service_state_machine_state>
</deployment>
```

If a VM specific resource like interface, is updated, then a VM_UPDATED followed by a SERVICE_UPDATED notification is received.

Example callback:

```
HTTP/1.1 201 OK
Content-Type: application/xml; charset=UTF-8
ESC_TRANSACTION_ID: d53f0047-2315-466c-b7e3-aa78e0a567e8
ESC-Status-Code: 200
ESC-Status-Message: VM has been updated successfully. vm: VM ID: [Sanity-vmware-de_CSR-1_0_b323effd

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<deployment xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
  <datacenter><default>>false</default></datacenter>
  <deployment_details>
    <host_uuid>host-14882</host_uuid>
    <host_name>10.85.103.13</host_name>
    <vm_uuid>50217d2d-8afb-41c2-cffd-d76b1239f51e</vm_uuid>
    <interfaces>
      <interface>
        <network_uuid>MgtNetwork</network_uuid>
        <ip_address>18.0.0.17</ip_address>
        <mac_address>00:50:56:a1:6a:13</mac_address>
        <nic_id>1</nic_id>
        <port_forwarding></port_forwarding>
        <port_uuid></port_uuid>
        <security_groups></security_groups>
```


```
<subnet_uuid></subnet_uuid>
<type>virtual</type>
</interface>
<interface>
<network_uuid>MgtNetwork2</network_uuid>
<ip_address>18.0.1.18</ip_address>
<mac_address>00:50:56:a1:6b:14</mac_address>
<nic_id>2</nic_id>
<port_forwarding></port_forwarding>
<port_uuid></port_uuid>
<security_groups></security_groups>
<subnet_uuid></subnet_uuid>
<type>virtual</type>
</interface>
</interfaces>
<vm_group_name>CSR-1</vm_group_name>
<vm_name>Sanity-vmware-de_CSR-1_0_b323effd-7f70-4055-b11e-0ef66f0a758d</vm_name>
<vm_state_machine_state>VM_ALIVE_STATE</vm_state_machine_state>
</deployment_details>
<deployment_name>MyDemoDepName</deployment_name>
<deployment_stage>VM_ALIVE</deployment_stage>
<external_deployment_id>8d084aab-6a66-4a70-8f47-42b91f7477ac</external_deployment_id>
<external_tenant_id>SystemAdminTenantId</external_tenant_id>
<internal_deployment_id>my_dep_id</internal_deployment_id>
<internal_tenant_id>SystemAdminTenantId</internal_tenant_id>
<service_state_machine_state>SERVICE_INERT_STATE</service_state_machine_state>
</deployment>
```

Followed by:

```
HTTP/1.1 201 OK
Content-Type: application/xml; charset=UTF-8
ESC_TRANSACTION_ID: d53f0047-2315-466c-b7e3-aa78e0a567e8
ESC-Status-Code: 200
ESC-Status-Message: Service group update completed successfully
```

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<deployment xmlns="urn:ietf:params:xml:ns:netconf:base:1.0">
<datacenter><default>>false</default></datacenter>
<deployment_name>MyDemoDepName</deployment_name>
<deployment_stage>SERVICE_UPDATED</deployment_stage>
<external_deployment_id>8d084aab-6a66-4a70-8f47-42b91f7477ac</external_deployment_id>
<external_tenant_id>SystemAdminTenantId</external_tenant_id>
<internal_deployment_id>my_dep_id</internal_deployment_id>
<internal_tenant_id>SystemAdminTenantId</internal_tenant_id>
<service_state_machine_state>SERVICE_ACTIVE_STATE</service_state_machine_state>
</deployment>
```

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
Callback-ESC-Events	<input type="text" value="(required)"/>	Callback URL for ESC event notifications	header	string
internal_deployment_id	<input type="text" value="(required)"/>	Internal ID of the deployment (max length 72 characters)	path	string
body			body	string

Parameter content type:

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	An associated resource not found		
406	Not Acceptable		
409	Conflicting Request		
500	Internal server error		

[Try it out!](#)

07-Deployment Operations : Operations to a deployment

POST /v0/{internal_tenant_id}/deployments/service/{internal_deployment_id}

Handle deployment operation request with the operation type as payload

Implementation Notes

deployment_operation_notes

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
Callback-ESC-Events	<input type="text" value="(required)"/>	Callback URL for ESC event notifications	header	string
internal_tenant_id	<input type="text" value="(required)"/>	Internal tenant ID (max length 72 characters)	path	string
internal_deployment_id	<input type="text" value="(required)"/>	Internal deployment ID (max length 72 characters)	path	string
body	<input type="text" value="(required)"/> <div style="border: 1px solid #ccc; height: 100px; width: 100%;"></div> Parameter content type: <input type="text" value="application/xml"/>	Deployment operation payload specifying the type of operation	body	Model Model Schema <pre>{ "operation": "stop" }</pre> Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Deployment operation request accepted		
400	Missing callback or, Deployment operation is not applicable		
404	Deployment or tenant not found		

[Try it out!](#)

08-VM Operations : Operations to a VM

POST /v0/{internal_tenant_id}/deployments/recovery-vm/{vm_name}

Handle recovery VM operation request with the operation type as payload

Parameters

Parameter	Value	Description	Parameter Type	Data Type
internal_tenant_id	<input type="text" value="(required)"/>	Internal tenant ID (max length 72 characters)	path	string
vm_name	<input type="text" value="(required)"/>	VM name	path	string
body	<input type="text" value="(required)"/> <div style="border: 1px solid #ccc; height: 80px; width: 100%;"></div> Parameter content type: <input type="text" value="application/xml"/>	Recovery VM operation payload specifying the type of operation: recovery_do	body	Model Model Schema <pre>{ "operation": "string" }</pre> Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Recovery VM operation request accepted		
400	Recovery VM operation is not applicable		
404	VM or tenant not found		

[Try it out!](#)

POST /v0/{internal_tenant_id}/deployments/snapshot-vm/{vm_name}

Handle VM snapshot operation request with the operation type as payload

Implementation Notes

vm_operation_notes

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for notifications	header	string
Callback-ESC-Events	<input type="text" value="(required)"/>	Callback URL for ESC event notifications	header	string
internal_tenant_id	<input type="text" value="(required)"/>	Internal tenant ID (max length 72 characters)	path	string

Parameter	Value	Description	Parameter Type	Data Type
vm_name	<input type="text" value="(required)"/>	VM name	path	string
body	<input type="text" value="(required)"/> <div style="border: 1px solid #ccc; height: 100px; width: 100%;"></div>	VM operation payload specifying the type of operation	body	Model Model Schema <pre>{ "operation": "snapshot", "name": "string", "metadata": {} }</pre>

Parameter content type:

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	VM snapshot operation request accepted		
400	Missing callback or, VM operation is not applicable		
404	VM or tenant not found		

[Try it out!](#)

POST `/v0/{internal_tenant_id}/deployments/vm/{vm_name}`

Handle VM operation request with the operation type as payload

Implementation Notes

vm_operation_notes

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for notifications	header	string
Callback-ESC-Events	<input type="text" value="(required)"/>	Callback URL for ESC event notifications	header	string
internal_tenant_id	<input type="text" value="(required)"/>	Internal tenant ID (max length 72 characters)	path	string
vm_name	<input type="text" value="(required)"/>	VM name	path	string

Parameter	Value	Description	Parameter Type	Data Type
body	(required)	VM operation payload specifying the type of operation	body	Model Model Schema

```
{
  "operation": "stop"
}
```

Click to set as parameter value

Parameter content type:

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	VM operation request accepted		
400	Missing callback or, VM operation is not applicable		
404	VM or tenant not found		

Try it out!

09-Configuration Parameters

GET /v0/config Retrieve all ESC config parameters

Implementation Notes

Retrieve all ESC config parameters

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Get all parameters request accepted		

Try it out!

GET /v0/config/{category} Retrieve all ESC config parameters under a category

Implementation Notes

Retrieve all ESC config parameters under a category

Parameters

Parameter	Value	Description	Parameter Type	Data Type
-----------	-------	-------------	----------------	-----------

Parameter	Value	Description	Parameter Type	Data Type
category	<input type="text" value="(required)"/>	ESC config parameter category	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Get category request accepted.		
400	Invalid category name provided.		
404	Category not found.		

[Try it out!](#)

GET `/v0/config/{category}/{key}` [Retrieve a ESC config parameters under a category, with a given key](#)

Implementation Notes

Retrieve a ESC config parameters under a category, with a given key

Parameters

Parameter	Value	Description	Parameter Type	Data Type
category	<input type="text" value="(required)"/>	ESC config parameter category	path	string
key	<input type="text" value="(required)"/>	ESC config parameter key	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Get key under category request accepted.		
400	Invalid key or category name provided.		
404	Key or category not found.		

[Try it out!](#)

POST `/v0/config/{category}/{key}` [Create a new key under a category.](#)

Implementation Notes

Create a new key under a catgeory.

Response Class (Status 200)

Model | Model Schema

```
{
  "category": "DEFAULT",
  "key": "MAX_LOGS",
  "value": {},
  "type": "STRING"
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
category	<input type="text" value="(required)"/>	ESC config parameter category	path	string
key	<input type="text" value="(required)"/>	ESC config parameter key	path	string
body	<div style="border: 1px solid #ccc; padding: 5px; min-height: 100px;"><input type="text" value="(required)"/></div> <p>Parameter content type: <input type="text" value="application/json"/></p>	ESC config parameter value	body	string

Try it out!

PUT `/v0/config/{category}/{key}/{value}` Change an ESC config parameter under a category, with a given key

Implementation Notes

Change an ESC config parameter under a category, with a given key.

Format: PUT `/v0/config/{category}/{key}/{value}`

Example request:

curl -X PUT -H "accept: Application/xml" <http://127.0.0.1:8080/ESCManager/v0/config/log/level/debug>

Example response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<esconfigparameter>
  <category>LOG</category>
```

```

<key>LEVEL</key>
<type>STRING</type>
<value xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xs="http://www.w3.org/2001/X
</escconfigparameter>

```

Details of Config Parameters: Please refer to installation and user guide for more details.

Category: DEFAULT Key: VM_RECOVERY_RETRIES_MAX Default Value: 3 Type: Int Description: Number of maximum recovery attempts allowed per VM.

Category: OPENSTACK Key: ENDPOINT Default Value: adminURL Type: String Description: The parameter to set up the keystone endpoint value of ESC. Options : adminURL, publicURL

Category: LOG Key: LEVEL Default Value: INFO Type: String Description: Level of logging of ESCManager. Options: INFO, TRACE, DEBUG.

Category: AFFINITY Key: FILTER Default Value: SameHostFilter Type: String Description: A constant string used to build PolicyEngine and initializing VM policy table. Options: SameHostFilter, ServerGroupAffinity

Category: ANTI-AFFINITY Key: FILTER Default Value: DifferentHostFilter Type: String Description: A constant string used to build PolicyEngine and initializing VM policy table. Options: DifferentHostFilter, ServerGroupAffinity

Parameters

Parameter	Value	Description	Parameter Type	Data Type
category	<input type="text" value="(required)"/>	ESC config parameter category	path	string
key	<input type="text" value="(required)"/>	ESC config parameter key	path	string
value	<input type="text" value="(required)"/>	ESC config parameter value	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Update value request accepted.		
400	Invalid request.		
404	Associated resource not found.		
406	Not acceptable.		
409	Conflicting resource.		
500	Internal server error.		

[Try it out!](#)

10-Volumes

GET /v0/{internalTenantId}/volumes Get all volumes under a tenant

Implementation Notes

All volumes under that tenant in ESC will be returned as a List

Parameters

Parameter	Value	Description	Parameter Type	Data Type
internalTenantId	<input type="text" value="(required)"/>	Internal tenant ID of the volume (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		

[Try it out!](#)

DELETE /v0/{internalTenantId}/volumes/{internalVolumeId} Delete a volume from an existing tenant in ESC

Implementation Notes

Delete a volume from ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
internalVolumeId	<input type="text" value="(required)"/>	Internal volume ID (max length 72 characters)	path	string
internalTenantId	<input type="text" value="(required)"/>	Internal tenant ID of the volume (max length 72 characters)	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid request		

HTTP Status Code	Reason	Response Model	Headers
500	Internal server error		

[Try it out!](#)


GET	/v0/{internalTenantId}/volumes/{internalVolumeId}	Get a volume by its tenant and internal volume ID															
<h3>Implementation Notes</h3> <p>Only volumes created using ESC will be checked</p>																	
<h3>Parameters</h3> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Value</th> <th>Description</th> <th>Parameter Type</th> <th>Data Type</th> </tr> </thead> <tbody> <tr> <td>internalTenantId</td> <td><input type="text" value="(required)"/></td> <td>Internal tenant ID of the volume (max length 72 characters)</td> <td>path</td> <td>string</td> </tr> <tr> <td>internalVolumeId</td> <td><input type="text" value="(required)"/></td> <td>Internal volume ID (max length 72 characters)</td> <td>path</td> <td>string</td> </tr> </tbody> </table>			Parameter	Value	Description	Parameter Type	Data Type	internalTenantId	<input type="text" value="(required)"/>	Internal tenant ID of the volume (max length 72 characters)	path	string	internalVolumeId	<input type="text" value="(required)"/>	Internal volume ID (max length 72 characters)	path	string
Parameter	Value	Description	Parameter Type	Data Type													
internalTenantId	<input type="text" value="(required)"/>	Internal tenant ID of the volume (max length 72 characters)	path	string													
internalVolumeId	<input type="text" value="(required)"/>	Internal volume ID (max length 72 characters)	path	string													
<h3>Response Messages</h3> <table border="1"> <thead> <tr> <th>HTTP Status Code</th> <th>Reason</th> <th>Response Model</th> <th>Headers</th> </tr> </thead> <tbody> <tr> <td>200</td> <td>Request accepted</td> <td></td> <td></td> </tr> <tr> <td>404</td> <td>Volume Id not found</td> <td></td> <td></td> </tr> </tbody> </table> <p>Try it out!</p>			HTTP Status Code	Reason	Response Model	Headers	200	Request accepted			404	Volume Id not found					
HTTP Status Code	Reason	Response Model	Headers														
200	Request accepted																
404	Volume Id not found																

POST	/v0/{internalTenantId}/volumes/{internalVolumeId}	Create a volume under an existing tenant in ESC										
<h3>Implementation Notes</h3> <p>Create a volume in ESC</p>												
<h3>Parameters</h3> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Value</th> <th>Description</th> <th>Parameter Type</th> <th>Data Type</th> </tr> </thead> <tbody> <tr> <td>Callback</td> <td><input type="text" value="(required)"/></td> <td>Callback URL for ESC notifications</td> <td>header</td> <td>string</td> </tr> </tbody> </table>			Parameter	Value	Description	Parameter Type	Data Type	Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
Parameter	Value	Description	Parameter Type	Data Type								
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string								

Parameter	Value	Description	Parameter Type	Data Type
internalTenantId	<input type="text" value="(required)"/>	Internal tenant ID of the volume (max length 72 characters)	path	string
internalVolumeId	<input type="text" value="(required)"/>	Internal volume ID (max length 72 characters)	path	string

body

Parameter content type:



Volume configuration payload

body

Model | Model Schema

```
{
  "external_volume_id": "string",
  "size": "string",
  "sizeunit": "string",
  "bus": "string",
  "type": "string",
  "outOfBand": false,
  "bootIndex": "string",
  "name": "string",
  "external_tenant_id": "string",
  "internal_tenant_id": "string",
  "internal_volume_id": "string",
  "valid": 0,
  "event_type": "CREATE_VOLUME",
  "image": "string"
}
```

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid request		
404	Volume Id not found		
409	Conflicting request		
503	Unable to query VIM		

Try it out!

11-ESC Operation Mode

GET /v0/operationmode

[Get operation mode in ESC](#)

Implementation Notes

Set operation mode in ESC

Response Class (Status 200)

Model | Model Schema

```
{
  "mode": "string"
}
```

Response Content Type

[Try it out!](#)

POST /v0/operationmode/{escOpMode}

Set operation mode in ESC

Implementation Notes

Set operation mode in ESC

Response Class (Status 200)

Model | Model Schema

```
{
  "mode": "string"
}
```

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
escOpMode	<input type="text" value="[MAINTENACE"/>	ESC maintenace mode.	path	string

[Try it out!](#)

12-Host Actions

POST /v0/hosts/{hostName}/disable

Disable a host

Implementation Notes

To disable a host

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback-ESC-Events	<input type="text" value="(required)"/>	Callback URL for host action notifications	header	string

hostName	<input type="text" value="(required)"/>	Target host name	path	string
-----------------	---	-------------------------	------	--------

Response Messages

HTTP Status Code	Reason	Response Model	Headers
default	successful operation		

[Try it out!](#)

POST `/v0/hosts/{hostName}/enable` Enable a host

Implementation Notes

To enable a host

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback-ESC-Events	<input type="text" value="(required)"/>	Callback URL for host action notifications	header	string

hostName	<input type="text" value="(required)"/>	Target host name	path	string
-----------------	---	-------------------------	------	--------

Response Messages

HTTP Status Code	Reason	Response Model	Headers
default	successful operation		

[Try it out!](#)

GET `/v0/hosts/{hostName}/status` Get the current status of the host

Implementation Notes

This is to see if the host can be schedule to deploy instances

Response Class (Status 200)

Response Content Type

Parameters

Parameter	Value	Description	Parameter Type	Data Type
-----------	-------	-------------	----------------	-----------

Parameter	Value	Description	Parameter Type	Data Type
Client-Transaction-Id	<input type="text"/>		header	string
hostName	<input type="text" value="(required)"/>		path	string

[Try it out!](#)

13-ESC VIM Connectors : Manage ESC VIM Connectors

GET /v0/vims

[Get all VIM Connectors](#)

Implementation Notes

All VIM Connectors in ESC will be returned as a List

Response Class (Status 200)

Model | **Model Schema**

```
[
  {
    "id": "string",
    "type": "OPENSTACK",
    "properties": {
      "property": [
        {
          "name": "string",
          "value": "string",
          "encrypted_value": "string"
        }
      ]
    },
    "event_type": "string"
  }
]
```

Response Content Type 

[Try it out!](#)

POST /v0/vims

[Create a VIM connector in ESC](#)

Implementation Notes

Create a VIM connector in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string

body	(required)	VIM Connector configuration payload	body	Model Model Schema
	<div style="border: 1px solid #ccc; height: 100px; width: 100%;"></div>			<pre> { "id": "string", "type": "OPENSTACK", "properties": { "property": [{ "name": "string", "value": "string", "encrypted_value": "string" }] }, "event_type": "string" } </pre>

Parameter content type:

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
500	Internal Server Error		

[Try it out!](#)

GET /v0/vims/default_vim_connector [Get default VIM Connector name](#)

Response Class (Status 200)

Model Model Schema
<pre> { "defaultVimConnectorId": "string", "event_type": "string" } </pre>

Response Content Type

[Try it out!](#)

POST /v0/vims/default_vim_connector [Create a Default VIM connector in ESC](#)

Implementation Notes

Create a Defaukt VIM connector in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
body	<div><input type="text" value="(required)"/> <p>Parameter content type: <input type="text" value="application/xml"/></p></div>	Default VIM Connector configuration payload	body	Model Model Schema <pre>{ "defaultVimConnectorId": "string", "event_type": "string" }</pre> <p>Click to set as parameter value</p>

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
500	Internal Server Error		

Try it out!

DELETE /v0/vims/{vim_id}

Delete a VIM Connector from ESC

Implementation Notes

Delete a VIM Connector from ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
vim_id	<input type="text" value="(required)"/>	VIM ID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

HTTP Status Code	Reason	Response Model	Headers
200	VIM Connector deletion request accepted		
400	Invalid Request		
404	VIM Id not found		
500	Internal Server Error		

[Try it out!](#)

GET `/v0/vims/{vim_id}` [Get a VIM Connector by its id](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
vim_id	<input type="text" value="(required)"/>	VIM ID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Get request accepted		
404	VIM Id not found		

[Try it out!](#)

PUT `/v0/vims/{vim_id}` [Update an existing VIM connector in ESC](#)

Implementation Notes

Update an existing VIM connector in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
vim_id	<input type="text" value="(required)"/>	VIM ID	path	string

Parameter	Value	Description	Parameter Type	Data Type
body	<div style="border: 1px solid #ccc; padding: 5px; min-height: 100px;">(required)</div> <p>Parameter content type: <input type="text" value="application/xml"/></p>	Update VIM Connector configuration payload	body	Model Model Schema <pre style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> { "id": "string", "type": "OPENSTACK", "properties": { "property": [{ "name": "string", "value": "string", "encrypted_value": "string" }] }, "event_type": "string" }</pre> <p>Click to set as parameter value</p>

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
500	Internal Server Error		

Try it out!

14-ESC VIM Users : Manage ESC VIM Users

GET	/v0/vims/{vim_id}/vim_users	Get all VIM Users												
<h3>Implementation Notes</h3> <p>All VIM Users in ESC will be returned as a List</p>														
<h3>Parameters</h3> <table border="1"> <thead> <tr> <th>Parameter</th> <th>Value</th> <th>Description</th> <th>Parameter Type</th> <th>Data Type</th> </tr> </thead> <tbody> <tr> <td>vim_id</td> <td><input type="text" value="(required)"/></td> <td></td> <td>path</td> <td>string</td> </tr> </tbody> </table>			Parameter	Value	Description	Parameter Type	Data Type	vim_id	<input type="text" value="(required)"/>		path	string		
Parameter	Value	Description	Parameter Type	Data Type										
vim_id	<input type="text" value="(required)"/>		path	string										
<h3>Response Messages</h3> <table border="1"> <thead> <tr> <th>HTTP Status Code</th> <th>Reason</th> <th>Response Model</th> <th>Headers</th> </tr> </thead> <tbody> <tr> <td>200</td> <td>Get request accepted</td> <td></td> <td></td> </tr> <tr> <td>404</td> <td>Unknown VIM Id provided</td> <td></td> <td></td> </tr> </tbody> </table>			HTTP Status Code	Reason	Response Model	Headers	200	Get request accepted			404	Unknown VIM Id provided		
HTTP Status Code	Reason	Response Model	Headers											
200	Get request accepted													
404	Unknown VIM Id provided													
<p>Try it out!</p>														

POST /v0/vims/{vim_id}/vim_users

Create a VIM user under an existing VIM in ESC

Implementation Notes

Create a VIM user in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
vim_id	<input type="text" value="(required)"/>	Vim id	path	string
body	<div style="border: 1px solid #ccc; padding: 5px; min-height: 100px;"><p>(required)</p></div> <p>Parameter content type: <input type="text" value="application/xml"/></p>	Vim user configuration payload	body	Model Model Schema

```
{
  "credentials": {
    "properties": {
      "property": [
        {
          "name": "string",
          "value": "string",
          "encrypted_value": "string"
        }
      ]
    }
  },
  "id": "string",
  "vim_id": "string",
  "event_type": "string"
}
```

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
500	Internal Server Error		

[Try it out!](#)

DELETE /v0/vims/{vim_id}/vim_users/{vim_user_id}

Delete a VIM User from ESC

Implementation Notes

Delete a VIM User from ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
vim_id	<input type="text" value="(required)"/>	Vim id	path	string
vim_user_id	<input type="text" value="(required)"/>	Vim user id	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	VIM User Id not found		
500	Internal Server Error		

[Try it out!](#)

GET /v0/vims/{vim_id}/vim_users/{vim_user_id}

[Get a VIM User by its id](#)

Parameters

Parameter	Value	Description	Parameter Type	Data Type
vim_id	<input type="text" value="(required)"/>	Vim id	path	string
vim_user_id	<input type="text" value="(required)"/>	Vim user id	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Get request accepted		
404	VIM User Id not found		

[Try it out!](#)

PUT /v0/vims/{vim_id}/vim_users/{vim_user_id}

[Update a VIM user under an existing VIM in ESC](#)

Implementation Notes

Update a VIM user in ESC

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
vim_id	<input type="text" value="(required)"/>	Vim id	path	string
vim_user_id	<input type="text" value="(required)"/>	Vim user id	path	string
body	<div><input type="text" value="(required)"/> <p>Parameter content type: <input type="text" value="application/xml"/></p></div>	Vim user configuration payload	body	Model Model Schema

```
{
  "credentials": {
    "properties": {
      "property": [
        {
          "name": "string",
          "value": "string",
          "encrypted_value": "string"
        }
      ]
    }
  },
  "id": "string",
  "vim_id": "string",
  "event_type": "string"
}
```

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
500	Internal Server Error		

[Try it out!](#)

15-System States

GET `/v0/systemstate/{name}` [Retrieve system state of a given name](#)

Implementation Notes

Retrieve system state of a given name

Parameters

Parameter	Value	Description	Parameter Type	Data Type
name	<input type="text" value="(required)"/>	System state name	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Get system state of specified name request accepted.		
404	Name not found.		

[Try it out!](#)

POST `/v0/systemstate/{name}/reset`

[Reset system state of a given name](#)

Implementation Notes

Reset system state of a given name

Parameters

Parameter	Value	Description	Parameter Type	Data Type
name	<input type="text" value="(required)"/>	System state name	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Reset system state of specified name request accepted.		
404	Name not found.		

[Try it out!](#)

16-File Servers

GET `/v0/fileserver`

[Get all File Servers](#)

Implementation Notes

All file servers created will be returned as a List

Response Messages

HTTP Status Code	Reason	Response Model	Headers
------------------	--------	----------------	---------

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		

[Try it out!](#)

DELETE `/v0/fileserver/{internalServerId}` [Delete a File Server](#)

Implementation Notes
Delete a File Server

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
internalServerId	<input type="text" value="(required)"/>	File Server ID	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
404	Not found		
500	Internal server error		

[Try it out!](#)

GET `/v0/fileserver/{internalServerId}` [Get specific File Server](#)

Implementation Notes
Matching File server will be returned if exists

Parameters

Parameter	Value	Description	Parameter Type	Data Type
internalServerId	<input type="text" value="(required)"/>	File Server Id	path	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
404	Not found		

[Try it out!](#)

POST /v0/fileserver/{internalServerId}

Create a File Server

Implementation Notes

Create a File Server

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string
internalServerId	<input type="text" value="(required)"/>	File Server ID	path	string
body	<div style="border: 1px solid #ccc; height: 80px; width: 100%;"></div> <p>Parameter content type: <input type="text" value="application/xml"/></p>	ESC datamodel with the file server payload	body	string

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
204	No content		
400	Invalid Request		
409	Conflicting Request		

[Try it out!](#)

PUT /v0/fileserver/{internalServerId}

Update a File Server

Implementation Notes

Update a File Server

Parameters

Parameter	Value	Description	Parameter Type	Data Type
Callback	<input type="text" value="(required)"/>	Callback URL for ESC notifications	header	string

Parameter	Value	Description	Parameter Type	Data Type
internalServerId	<input type="text" value="(required)"/>	File Server ID	path	string
body	<div style="border: 1px solid black; padding: 5px; min-height: 100px;">(required)</div>	ESC datamodel with the file server payload	body	string

Parameter content type:

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
204	No content		
400	Invalid Request		
404	Not Found		

[Try it out!](#)

Appendix-Callback Responses [Model Schemas]

POST /v0/callbacks/samples/deployment

[Deployment Callback Response Payload Schema](#)

Implementation Notes

This model schema displays details of ESC's response for Deployment Operations, ESC sends payload responses at different stages of the deployment to the request header provided Callback URL

Parameters

Parameter	Value	Description	Parameter Type	Data Type
ESC-Transaction-Id	<input type="text"/>		header	string
ESC-Status-Code	<input type="text"/>		header	string
ESC-Status-Message	<input type="text"/>		header	string
body			body	Model Model Schema

```
{
  "deploymentConfig": {
    "childConfigs": {},
  }
}
```

Parameter	Description	Parameter Type	Data Type
<div data-bbox="318 296 529 352">Parameter content type:</div> <div data-bbox="318 359 545 390">application/xml</div>			<pre> "parentConfigs": {}, "referringConfigs": {}, "referredConfigs": {}, "configStatus": "PENDING", "internalId": "string", "tenantConfig": { "childConfigs": {}, "parentConfigs": {}, "referringConfigs": {}, "referredConfigs": {}, "configStatus": "PENDING", "internalId": "string", "name": "string", "isManagedResource": false, "vimMapping": false, "deploymentsConfig": { "deploymentConfigMap": {} }, "networksConfig": { "networkConfigMap": {} }, "volumesConfig": { "volumeConfigMap": {} }, "motype": "TenantDao", "dependencyStatusForDeletion": "READY", "dependencyStatusForCreation": "READY" }, "deploymentName": "string", "policiesConfig": { "externalDependenciesConfig": { "internalId": "string", "motype": "TenantDao", "configId": "string", "name": "string", "classMetadata": { "entityName": "string", "propertyNames": ["string"], "naturalIdentifierProperties": [0], "identifierType": { "anyType": false, "componentType": false, "associationType": false, "collectionType": false, "entityType": false, "mutable": false, "name": "string" }, "identifierPropertyName": "string", "propertyTypes": [{ </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "anyType": false, "componentType": false, "associationType": false, "collectionType": false, "entityType": false, "mutable": false, "name": "string" }], "mutable": false, "versioned": false, "propertyNullability": [true], "versionProperty": 0, "propertyLaziness": [true], "inherited": false }, "cardinality": 0, "id": "string" }, "interVmPlacementConfigMap": {}, "startupPolicyConfigMap": {}, "policyConfigMap": {}, "placementGroupConfigMap": {}, "interVmPlacementConfigList": [{ "targetVMGroupRef": "string", "type": "AFFINITY", "enforcement": "STRICT", "vmgroupRefList": ["string"] }], "placementGroupConfigList": [{ "name": "string", "type": "AFFINITY", "enforcement": "STRICT", "vmGroups": ["string"] }] }, "networksConfig": { "networkConfigMap": {} }, "datacenter": "string", "vmGroupConfigMap": {}, "lcmRulesConfig": { "lcmRulesMap": {} </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> }, "deploymentGroupsConfig": { "antiAffinityGroupList": [{ "name": "string" }] }, "fileLocators": { "fileLocatorsConfigMap": {} }, "motype": "TenantDao", "dependencyStatusForDeletion": "READY", "dependencyStatusForCreation": "READY" }, "dbDatamodel": { "version": "string", "tenants": { "tenant": [{ "name": "string", "tenant_id": "string", "vim_mapping": false, "networks": { "network": [{ "name": "string", "netid": "string", "shared": false, "admin_state": false, "router_external": false, "provider_physical_network": "strir", "provider_network_type": "string", "provider_segmentation_id": 0, "switch_name": "string", "vlan_id": 0, "number_of_ports": 0, "status": "string", "subnets": { "subnet": [{ "name": "string", "subnetid": "string", "cidr": "string", "gateway": "string", "no_gateway": false, "dhcp": false, "ipversion": "string" }] } }] } }] } }, "volumes": { </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "volume": [{ "display_name": "string", "valid": 0, "external_id": "string", "bus": "string", "type": "string", "size": "string", "boot_index": "string", "image": "string" }] }, "deployments": [{ "deployment_name": "string", "deployment_id": "string", "vm_group": [{ "name": "string", "vm_instance": [{ "vm_id": "string", "name": "string", "generated_name": "string", "vim_id": "string", "vim_project": "string", "vim_project_id": "string", "host_id": "string", "hostname": "string", "software_version": "string", "interfaces": { "interface": [{ "nicid": 0, "model": "E_1000", "type": "string", "vim_interface_name": " "port_id": "string", "network": "string", "subnet": "string", "ip_address": "string", "mac_address": "string" "port_security_enabled" "netmask": "string", "gateway": "string", "security_groups": "str "port_forwards": { "port_forward": [{ "port_forwarding_ "port_number": "s }] } }] } }] }] }] </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> }] }, "volumes": { "volume": [{ "display_name": "string", "valid": 0, "external_id": "string", "bus": "string", "type": "string", "size": "string", "boot_index": "string", "image": "string" }] } },], "shared_ip": [{ "nic_id": 0, "shared_ip": "string" }] }], "state_machine": { "state": "SERVICE_UNDEF_STATE", "vm_state_machines": { "vm_state_machine": [{ "vm_name": "string", "state": "VM_UNDEF_STATE" }] } } }] }], }, "networks": { "network": [{ "name": "string", "netid": "string", "shared": false, "admin_state": false, "router_external": false, "provider_physical_network": "string", "provider_network_type": "string", "provider_segmentation_id": 0, "switch_name": "string", </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "vlan_id": 0, "number_of_ports": 0, "status": "string", "subnets": { "subnet": [{ "name": "string", "subnetid": "string", "cidr": "string", "gateway": "string", "no_gateway": false, "dhcp": false, "ipversion": "string" }] } }, "images": { "image": [{ "name": "string", "image_id": "string", "public": false, "image_name": "string", "state": "IMAGE_UNDEF_STATE" }] }, "flavors": { "flavor": [{ "name": "string", "flavor_id": "string", "public": false, "flavor_name": "string", "state": "FLAVOR_UNDEF_STATE" }] }, "file_servers": { "file_server": [{ "id": "string", "base_url": "string", "file_server_user": "string", "file_server_password": "string", "properties": { "property": [{ "name": "string", "value": "string", "encrypted_value": "string" }] } }] } </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre>] } }] }, "opdata": { "status": "string", "stats": { "hostname": "string", "os_name": "string", "os_release": "string", "arch": "string", "uptime": 0, "load": { "loadone": "string", "loadfive": "string", "loadfifteen": "string" }, "cpu": { "sockets": 0, "cores": 0, "threads": 0, "cpu_num": 0, "cpu_wio": "string", "cpu_speed": 0, "cpu_idle": "string", "cpu_user": "string", "cpu_system": "string", "cpu_idle": "string" }, "memory": { "mem_total": "string", "mem_free": "string", "memory_cached": "string", "mem_buffered": "string", "mem_shared": "string", "swap_total": "string", "swap_free": "string" }, "disk": { "disks": [{ "device": "string", "mount": "string", "disk_total": 0, "disk_used": 0 }] }, "netif": { "interfaces": [{ "interface": [{ "nicid": 0, </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "model": "E_1000", "type": "string", "vim_interface_name": "string", "port_id": "string", "network": "string", "subnet": "string", "ip_address": "string", "mac_address": "string", "port_security_enabled": false, "netmask": "string", "gateway": "string", "security_groups": "string", "port_forwards": { "port_forward": [{ "port_forwarding_type": "st "port_number": "string" }] } }] } } } }, "system_config": { "active_vim": "string", "openstack_config": { "os_auth_url": "string", "admin_role": "string", "os_tenant_name": "string", "os_username": "string", "member_role": "string" }, "vmware_config": { "vcenter_ip": "string", "vcenter_port": "string", "vcenter_username": "string" }, "vim_connectors": { "vim_connector": [{ "id": "string", "status": "string", "status_message": "string" }] } }, "default_locators": { "datacenter": "string" }, "networks": { "network": [</pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> { "name": "string", "netid": "string", "shared": false, "admin_state": false, "router_external": false, "provider_physical_network": "string", "provider_network_type": "string", "provider_segmentation_id": 0, "switch_name": "string", "vlan_id": 0, "number_of_ports": 0, "status": "string", "subnets": { "subnet": [{ "name": "string", "subnetid": "string", "cidr": "string", "gateway": "string", "no_gateway": false, "dhcp": false, "ipversion": "string" }] } }, "images": { "image": [{ "name": "string", "image_id": "string", "public": false, "image_name": "string", "state": "IMAGE_UNDEF_STATE" }] }, "flavors": { "flavor": [{ "name": "string", "flavor_id": "string", "public": false, "flavor_name": "string", "state": "FLAVOR_UNDEF_STATE" }] }, "tenants": { "tenant": [{ "name": "string", </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "tenant_id": "string", "vim_mapping": false, "networks": { "network": [{ "name": "string", "netid": "string", "shared": false, "admin_state": false, "router_external": false, "provider_physical_network": "str "provider_network_type": "string" "provider_segmentation_id": 0, "switch_name": "string", "vlan_id": 0, "number_of_ports": 0, "status": "string", "subnets": { "subnet": [{ "name": "string", "subnetid": "string", "cidr": "string", "gateway": "string", "no_gateway": false, "dhcp": false, "ipversion": "string" }] } }] }, "volumes": { "volume": [{ "display_name": "string", "volid": 0, "external_id": "string", "bus": "string", "type": "string", "size": "string", "boot_index": "string", "image": "string" }] }, "deployments": [{ "deployment_name": "string", "deployment_id": "string", "vm_group": [{ "name": "string", "vm_instance": [</pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> { "vm_id": "string", "name": "string", "generated_name": "string", "vim_id": "string", "vim_project": "string", "vim_project_id": "string", "host_id": "string", "hostname": "string", "software_version": "string", "interfaces": { "interface": [{ "nicid": 0, "model": "E_1000", "type": "string", "vim_interface_name": "port_id": "string", "network": "string", "subnet": "string", "ip_address": "string", "mac_address": "string", "port_security_enable "netmask": "string", "gateway": "string", "security_groups": "s "port_forwards": { "port_forward": [{ "port_forwarddir "port_number": }] } }] }, "volumes": { "volume": [{ "display_name": "stri "volid": 0, "external_id": "strir "bus": "string", "type": "string", "size": "string", "boot_index": "string", "image": "string" }] } }], "shared_ip": [{ </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "nic_id": 0, "shared_ip": "string" }] }], "state_machine": { "state": "SERVICE_UNDEF_STATE", "vm_state_machines": { "vm_state_machine": [{ "vm_name": "string", "state": "VM_UNDEF_STATE" }] } } }] } } } }] }] } }, "info": { "product_name": "string", "esc_version": { "major": "string", "minor": "string", "sprint": "string", "release": "string", "yang_model": "string", "timestamp": "string" }, "copyright": { "company": "string", "homepage": "string" } } }, "dbDeployment": { "deploymentId": "string", "deploymentName": "string", "tenantId": "string", "serviceRegistrationId": "string", "eventTime": "string", "eventNotificationContentType": 0, "eventNotificationType": 0, "eventNotificationUrl": "string", "dataModel": "string", "datacenter": "string", "classMetadata": { "entityName": "string", "propertyNames": ["string"], } }, </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> "naturalIdentifierProperties": [0], "identifierType": { "anyType": false, "componentType": false, "associationType": false, "collectionType": false, "entityType": false, "mutable": false, "name": "string" }, "identifierPropertyName": "string", "propertyTypes": [{ "anyType": false, "componentType": false, "associationType": false, "collectionType": false, "entityType": false, "mutable": false, "name": "string" }], "mutable": false, "versioned": false, "propertyNullability": [true], "versionProperty": 0, "propertyLaziness": [true], "inherited": false }, "cardinality": 0, "id": "string" }, "deployment_details": [{ "fixedIpMapForNewInterfaces": {}, "sharedIps": [{ "nic_id": 0, "shared_ip": "string" }], "vm_uuid": "string", "host_uuid": "string", "host_name": "string", "vm_name": "string", "vim_vm_name": "string", "generated_vm_name": "string", "vm_group_name": "string", "volume": [</pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre> { "external_volume_id": "string", "size": "string", "sizeunit": "string", "bus": "string", "type": "string", "outOfBand": false, "bootIndex": "string", "name": "string", "external_tenant_id": "string", "internal_tenant_id": "string", "internal_volume_id": "string", "valid": 0, "event_type": "CREATE_VOLUME", "image": "string" }], "interface": [{ "network_uuid": "string", "subnet_uuid": "string", "ip_address": "string", "mac_address": "string", "security_group": ["string"], "port_uuid": "string", "port_forward": [{ "port_forwarding_type": "string", "port_number": "string" }], "type": "string", "model": "string", "nic_id": 0, "anycast_ip": "string", "shared_ip": "string", "netmask": "string", "gateway": "string", "vim_interface_name": "string", "port_security_enabled": "string" }], "software_version": "string", "vm_state_machine_state": "string", "vim_id": "string", "vim_project": "string", "vim_project_id": "string" }], "internal_tenant_id": "string", "external_tenant_id": "string", "internal_deployment_id": "string", "external_deployment_id": "string", </pre>

Parameter	Value	Description	Parameter Type	Data Type
				<pre>"deployment_stage": "string", "deployment_name": "string", "service_state_machine_state": "string", "locators": { "datacenter": "string", "switch_name": "string" } }</pre>

[Click to set as parameter value](#)

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	An associated resource not found		
406	Not Acceptable		
409	Conflicting Request		
500	Internal server error		
503	Failed to query VIM		

[Try it out!](#)

POST /v0/callbacks/samples/flavor

Flavor Callback Response Payload Schema

Implementation Notes

This model schema displays details of ESC's response for Flavor Operations, ESC sends a payload response to the request header provided Callback URL

Parameters

Parameter	Value	Description	Parameter Type	Data Type
ESC-Transaction-Id	<input type="text"/>		header	string
ESC-Status-Code	<input type="text"/>		header	string
ESC-Status-Message	<input type="text"/>		header	string

Parameter	Value	Description	Parameter Type	Data Type
body	<div style="border: 1px solid #ccc; width: 100px; height: 100px; margin-bottom: 5px;"></div> Parameter content type: <input type="text" value="application/xml"/>		body	Model Model Schema <pre> { "internal_flavor_id": "string", "external_flavor_id": "string", "name": "string", "vcpus": 0, "memory_mb": 0, "root_disk_mb": 0, "ephemeral_disk_mb": 0, "swap_disk_mb": 0, "extra_specs": {}, "service_registration_id": "string", "event_type": "CREATE_FLAVOR" } </pre>

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	Flavor Id not found		
406	Operation not supported on VIM/Flavor part of service registration		
409	Conflicting Request		
500	Internal server error		

Try it out!

POST /v0/callbacks/samples/image

Image Callback Response Payload Schema

Implementation Notes

This model schema displays details of ESC's response for Image Operations, ESC sends a payload response to the request header provided Callback URL

Parameters

Parameter	Value	Description	Parameter Type	Data Type
ESC-Transaction-Id	<input type="text"/>		header	string

Parameter	Value	Description	Parameter Type	Data Type
ESC-Status-Code	<input type="text"/>		header	string
ESC-Status-Message	<input type="text"/>		header	string

body

Parameter content type:

body

Model | Model Schema

```

{
  "imageIsEnabled": false,
  "imageChecksum": "string",
  "serviceRegistrationId": "string",
  "internal_image_id": "string",
  "external_image_id": "string",
  "name": "string",
  "src": "string",
  "disk_format": "string",
  "container_format": "string",
  "e1000_net": false,
  "virtio_net": false,
  "disk_bus": "string",
  "size": 0,
  "sizeunit": "string",
  "visibility": "private",
  "locators": {
    "datacenter": "string",
    "switch_name": "string"
  },
  "event_type": "CREATE_IMAGE"
}

```

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	Image Id not found		
409	Conflicting Request		

Try it out!

POST /v0/callbacks/samples/network

Network Callback Response Payload Schema

Implementation Notes


This model schema displays details of ESC's response for Network Operations, ESC sends a payload response to the request header provided Callback URL

Parameters

Parameter	Value	Description	Parameter Type	Data Type
ESC-Transaction-Id	<input type="text"/>		header	string
ESC-Status-Code	<input type="text"/>		header	string
ESC-Status-Message	<input type="text"/>		header	string

body

Parameter content type:



body

Model | Model Schema

```
{
  "internalDeploymentId": "string",
  "internal_tenant_id": "string",
  "internal_network_id": "string",
  "name": "string",
  "shared": false,
  "external_tenant_id": "string",
  "tenant_name": "string",
  "external_network_id": "string",
  "subnet": [
    "string"
  ],
  "admin_state_up": false,
  "locators": {
    "datacenter": "string",
    "switch_name": "string"
  },
  "event_type": "CREATE_NETWORK",
  "provider_segmentation_id": "string",
  "router_external": false,
  "provider_physical_network": "string",
  "provider_network_type": "string",
  "vlan_id": 0,
  "switch_name": "string",
  "number_of_ports": 0
}
```

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	Network Id not found		
409	Conflicting Request		
500	Internal server error		

HTTP Status Code	Reason	Response Model	Headers
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503 Unable to query VIM

Try it out!

POST /v0/callbacks/samples/subnet

Subnet Callback Response Payload Schema

Implementation Notes

This model schema displays details of ESC's response for Subnet Operations, ESC sends a payload response to the request header provided Callback URL

Parameters

Parameter	Value	Description	Parameter Type	Data Type
ESC-Transaction-Id	<input type="text"/>		header	string
ESC-Status-Code	<input type="text"/>		header	string
ESC-Status-Message	<input type="text"/>		header	string

body

Parameter content type:

body

Model | Model Schema

```

{
  "internal_tenant_id": "string",
  "external_tenant_id": "string",
  "internal_network_id": "string",
  "external_network_id": "string",
  "internal_subnet_id": "string",
  "external_subnet_id": "string",
  "name": "string",
  "allocation_pools": [
    {
      "start": "string",
      "end": "string"
    }
  ],
  "gateway_ip": "string",
  "ip_version": 0,
  "cidr": "string",
  "enable_dhcp": false,
  "event_type": "CREATE_SUBNET"
}

```

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
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HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		
404	Subnet Id not found		
409	Conflicting Request		
500	Internal server error		

Try it out!

POST /v0/callbacks/samples/tenant

Tenant Callback Response Payload Schema

Implementation Notes

This model schema displays details of ESC's response for Tenant Operations. ESC sends a payload response to the request header provided Callback URL

Parameters

Parameter	Value	Description	Parameter Type	Data Type
ESC-Transaction-Id	<input type="text"/>		header	string
ESC-Status-Code	<input type="text"/>		header	string
ESC-Status-Message	<input type="text"/>		header	string

body

Parameter content type:

body

Model | Model Schema

```
{
  "internal_tenant_id": "string",
  "external_tenant_id": "string",
  "name": "string",
  "enabled": false,
  "vim_mapping": false,
  "event_type": "CREATE_TENANT",
  "managed_resource": false
}
```

Click to set as parameter value

Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Request accepted		
400	Invalid Request		

HTTP Status Code	Reason	Response Model	Headers
409	Conflicting Request		

[Try it out!](#)

SSL Management

PUT	/internal/ssl/reload	Reload ESC Truststore from file system	
Implementation Notes Reload ESC Truststore from file system			
Response Messages			
HTTP Status Code	Reason	Response Model	Headers
204	ESC Truststore reloaded successfully		
500	Failed to reload ESC truststore		

[Try it out!](#)

[BASE URL: /ESCManager , API VERSION: 1.0.0]

