

OS-KSCATALOG Extension

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This document includes details on various operations supported by the OS-KSCATALOG extensions on top of core keystone operations.

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1. About This Extension

Name OpenStack KSCATALOG Extension

Namespace http://docs.openstack.org/identity/api/ext/OS-KSCATALOG/v1.0

Alias OS-KSCATALOG

Dependencies Keystone - OpenStack Identity

Doc Link (PDF) https://github.com/openstack/keystone/raw/master/keystone/

content/admin/OS-KSCATALOG-admin-devguide.pdf

Doc Link (WADL) https://raw.github.com/openstack/keystone/master/keystone/

content/admin/OS-KSCATALOG-admin.wadl

Doc Link (XSD) https://raw.github.com/openstack/keystone/master/keystone/

content/common/xsd/OS-KSCATALOG.xsd

Short Description OpenStack KSCATALOG Admin Extension to Keystone v2.0 API

adds the capability to do CRUD on Endpoint Templates and

Endpoints.

1.1. Document Change History

Revision Date	Summary of Changes	
Sep. 09, 2011	Initial release.	

2. Extension Operations

Verb	URI	Description
	Endpoint Temp	late Operations
GET	v2.0/OS-KSCATALOG/ endpointTemplates?serviceId=string	List Endpoint Templates.
POST	v2.0/OS-KSCATALOG/ endpointTemplates	Add Endpoint Template.
GET	v2.0/OS-KSCATALOG/ endpointTemplates/ {endpointTemplateId}	Get Endpoint Template.
DELETE	v2.0/OS-KSCATALOG/ endpointTemplates/ {endpointTemplateId}	Delete a Endpoint Template.
	Endpoint (Operations
GET	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints	List Endpoints of a Tenant.
POST	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints	Add Endpoint to a tenant.
GET	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints/{endpointId}	Get Endpoint of a Tenant.
DELETE	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints/{endpointId}	Delete a Endpoint from a Tenant.

2.1. OS-KSCATALOG Admin Extension

Extension operations.

Table 2.1. Authentication Header

Header Type	Name	Value
HTTP/1.1 Request	X-Auth-Token	txfa8426a08eaf

The following calls are supported by API OS-KSCATALOG Extension on top of Keystone Admin 2.0:

Verb	URI	Description	
	Endpoint Template Operations		
GET	v2.0/OS-KSCATALOG/ endpointTemplates?serviceId=string	List Endpoint Templates.	
POST	v2.0/OS-KSCATALOG/ endpointTemplates	Add Endpoint Template.	
GET	v2.0/OS-KSCATALOG/ endpointTemplates/ {endpointTemplateId}	Get Endpoint Template.	
DELETE	v2.0/OS-KSCATALOG/ endpointTemplates/ {endpointTemplateId}	Delete a Endpoint Template.	
	Endpoint Operations		
GET	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints	List Endpoints of a Tenant.	

Verb	URI	Description
POST	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints	Add Endpoint to a tenant.
GET	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints/{endpointId}	Get Endpoint of a Tenant.
DELETE	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints/{endpointId}	Delete a Endpoint from a Tenant.

Aug 29, 2011

2.1.1. Endpoint Template Operations

Verb	URI	Description
GET	v2.0/OS-KSCATALOG/ endpointTemplates?serviceId=string	List Endpoint Templates.
POST	v2.0/OS-KSCATALOG/ endpointTemplates	Add Endpoint Template.
GET	v2.0/OS-KSCATALOG/ endpointTemplates/ {endpointTemplateId}	Get Endpoint Template.
DELETE	v2.0/OS-KSCATALOG/ endpointTemplates/ {endpointTemplateId}	Delete a Endpoint Template.

2.1.1.1. List Endpoint Templates

Verb	URI	Description
GET	v2.0/OS-KSCATALOG/	List Endpoint Templates.
	endpointTemplates?serviceId=string	

List Endpoint Templates.

Table 2.2. List Endpoint Templates parameters

Name	Style	Description
		Request parameters
X-Auth-Token	header	String. Required.
serviceId	query	String. Optional.

Normal Response Code(s)

• endpointTemplates (200 203)

Error Response Code(s)

- identityFault
- badRequest(400)
- unauthorized(401)
- forbidden(403)
- badMethod(405)
- overLimit(413)
- serviceUnavailable(503)

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Example 2.1. List Endpont Templates Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<endpointTemplates xmlns="http://docs.openstack.org/identity/api/ext/OS-</pre>
KSCATALOG/v1.0">
  <endpointTemplate</pre>
   id="1"
   region="North"
   global="true"
   type="compute"
  name="Compute"
   publicURL="https://compute.north.public.com/v1"
   internalURL="https://compute.north.internal.com/v1"
   enabled="true">
   <version</pre>
     id="1"
     list="https://compute.north.public.com/"
     info="https://compute.north.public.com/v1"/>
  </endpointTemplate>
  <endpointTemplate</pre>
  id="2"
  region="south"
  type="compute"
  name="Compute"
  publicURL="https://service2.public.com/v1"
   internalURL="https://service2.internal.public.com/v1"
   enabled="false">
   <version</pre>
   id="1"
   list="https://service1.public.com/"
    info="https://service1.public.com/v1"/>
  </endpointTemplate>
  <endpointTemplate</pre>
  id="3"
  region="DFW"
  global="true"
   type="ext1:service1"
  name="Compute"
  publicURL="https://service1.public.com/v1"
   enabled="true">
   <version</pre>
    id="1"
    list="https://service1.public.com/"
    info="https://service1.public.com/v1"/>
  </endpointTemplate>
  <endpointTemplate</pre>
   id="4"
  region="ORD"
   type="compute"
  name="Compute"
  publicURL="https://service2.public.com/v1"
   enabled="true">
   <version</pre>
   id="1"
   list="https://service1.public.com/"
    info="https://service1.public.com/v1"/>
  </endpointTemplate>
```

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```

```
<endpointTemplate
  id="5"
  global="true"
  type="compute"
  name="Compute"
  publicURL="https://service3.public.com/v1">
  <version
  id="1"
   list="https://service1.public.com/"
  info="https://service1.public.com/v1"/>
  </endpointTemplate>
</endpointTemplates>
```

Example 2.2. List Endpont Templates Response: JSON

```
"OS-KSCATALOG:endpointsTemplates": [
       {
            "id": 1,
            "region": "North",
            "global": true,
            "type": "compute",
            "publicURL": "https://compute.north.public.com/v1",
            "internalURL": "https://compute.north.internal.com/v1",
            "versionId": "1",
            "versionInfo": "https://compute.north.public.com/v1/",
            "versionList": "https://compute.north.public.com/",
            "enabled": true
           "id": 2,
            "region": "South",
            "type": "compute",
            "publicURL": "https://compute.south.public.com/v1",
            "internalURL": "https://compute.south.internal.com/v1",
            "versionId": "1",
            "versionInfo": "https://compute.south.public.com/v1/",
            "versionList": "https://compute.south.public.com/",
            "enabled": false
           "id": 3,
            "region": "North",
            "global": true,
            "type": "object-store",
            "publicURL": "https://object-store.north.public.com/v1.0",
            "versionId": "1.0",
            "versionInfo": "https://object-store.north.public.com/v1.0/",
            "versionList": "https://object-store.north.public.com/",
            "enabled": true
            "id": 4,
            "region": "South",
            "type": "object-store",
            "publicURL": "https://object-store.south.public.com/v2",
            "versionId": "2",
            "versionInfo": "https://object-store.south.public.com/v2/",
            "versionList": "https://object-store.south.public.com/",
            "enabled": true
```

```
},
{
    "id": 5,
    "global": true,
    "type": "OS-DNS:DNS",
    "publicURL": "https://dns.public.com/v3.2",
    "versionId": "1.0",
    "versionInfo": "https://dns.public.com/v1.0/",
    "versionList": "https://dns.public.com/",
    "enabled": true
}
],
"OS-KSCATALOG:endpointsTemplates_links": []
```

2.1.1.2. Add Endpoint Template

Verb	URI	Description
POST	v2.0/OS-KSCATALOG/ endpointTemplates	Add Endpoint Template.

Add Endpoint Template.

Table 2.3. Add Endpoint Template parameters

Name	Style	Description
Request parameters		
X-Auth-Token header String. Required.		

Normal Response Code(s)

• endpointTemplate (201)

Error Response Code(s)

- identityFault
- badRequest(400)
- unauthorized(401)
- forbidden(403)
- badMethod(405)
- overLimit(413)
- serviceUnavailable(503)
- itemNotFound(404)
- badMediaType(415)

Example 2.3. Add Endpoint Template Request: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<endpointTemplate
  xmlns="http://docs.openstack.org/identity/api/ext/OS-KSCATALOG/v1.0"
  id="1"
  region="North"</pre>
```

```
global="true"
type="compute"
name="Compute"
publicURL="https://service-public.com/v1"
internalURL="https://service-internal.com/v1"
enabled="true">
<version
id="1"
info="https://compute.north.public.com/v1/"
list="https://compute.north.public.com/"
/>
</endpointTemplate>
```

Example 2.4. Add Endpoint Template Request: JSON

```
{
   "OS-KSCATALOG:endpointTemplate":{
        "id":1,
        "region":"North",
        "global":true,
        "type":"compute",
        "publicURL":"https://compute.north.public.com/v1",
        "internalURL":"https://compute.north.internal.com/v1",
        "versionId":"1",
        "versionInfo":"https://compute.north.public.com/v1/",
        "versionList":"https://compute.north.public.com/",
        "enabled":true
   }
}
```

Example 2.5. Add Endpoint Template Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<endpointTemplate</pre>
 xmlns="http://docs.openstack.org/identity/api/ext/OS-KSCATALOG/v1.0"
 id="1"
 region="North"
 global="true"
 type="compute"
 name="Compute"
 publicURL="https://service-public.com/v1"
  internalURL="https://service-internal.com/v1"
  enabled="true">
  <version</pre>
    id="1"
    info="https://compute.north.public.com/v1/"
   list="https://compute.north.public.com/"
</endpointTemplate>
```

Example 2.6. Add Endpoint Template Response: JSON

```
{
   "OS-KSCATALOG:endpointTemplate":{
      "id":1,
      "region":"North",
      "global":true,
      "type":"compute",
```

```
"publicURL":"https://compute.north.public.com/v1",
    "internalURL":"https://compute.north.internal.com/v1",
    "versionId":"1",
    "versionInfo":"https://compute.north.public.com/v1/",
    "versionList":"https://compute.north.public.com/",
    "enabled":true
}
```

2.1.1.3. Get Endpoint Template

Verb	URI	Description
GET	v2.0/OS-KSCATALOG/ endpointTemplates/ {endpointTemplateId}	Get Endpoint Template.

Get Endpoint Template.

Table 2.4. Get Endpoint Template parameters

Name	Style	Description
		Request parameters
X-Auth-Token	header	String. Required.
X-Auth-Token	header	String. Required.
endpointTemplateId	template	Int. Optional.

Normal Response Code(s)

• endpointTemplate (200 203)

Error Response Code(s)

- identityFault
- badRequest(400)
- unauthorized(401)
- forbidden(403)
- badMethod(405)
- overLimit(413)
- serviceUnavailable(503)
- itemNotFound(404)

Example 2.7. Get Endpont Template Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<endpointTemplate
   xmlns="http://docs.openstack.org/identity/api/ext/OS-KSCATALOG/v1.0"
   id="1"
   region="North"
   global="true"
   type="compute"
   name="Compute"</pre>
```

```
publicURL="https://service-public.com/v1"
  internalURL="https://service-internal.com/v1"
  enabled="true">
  <version
    id="1"
    info="https://compute.north.public.com/v1/"
    list="https://compute.north.public.com/"
    />
  </endpointTemplate>
```

Example 2.8. Get Endpont Template Response: JSON

```
{
   "OS-KSCATALOG:endpointTemplate":{
        "id":1,
        "region":"North",
        "global":true,
        "type":"compute",
        "publicURL":"https://compute.north.public.com/v1",
        "internalURL":"https://compute.north.internal.com/v1",
        "versionId":"1",
        "versionInfo":"https://compute.north.public.com/v1/",
        "versionList":"https://compute.north.public.com/",
        "enabled":true
}
```

2.1.1.4. Delete Endpoint Template.

Verb	URI	Description
DELETE	v2.0/OS-KSCATALOG/	Delete a Endpoint Template.
	endpointTemplates/	
	{endpointTemplateId}	

Delete a Endpoint Template.

Table 2.5. Delete Endpoint Template. parameters

Name	Style	Description
		Request parameters
X-Auth-Token	header	String. Required.
X-Auth-Token	header	String. Required.
endpointTemplateId	template	Int. Optional.

Normal Response Code(s)

• (204)

Error Response Code(s)

- identityFault
- badRequest(400)
- unauthorized(401)
- forbidden(403)

- badMethod(405)
- overLimit(413)
- serviceUnavailable(503)
- itemNotFound(404)

Example 2.9. Delete Endpoint Template Request

This operation does not require a request body.

2.1.2. Endpoint Operations

Verb	URI	Description
GET	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints	List Endpoints of a Tenant.
POST	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints	Add Endpoint to a tenant.
GET	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints/{endpointId}	Get Endpoint of a Tenant.
DELETE	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints/{endpointId}	Delete a Endpoint from a Tenant.

2.1.2.1. List Endpoints

Verb	URI	Description
	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints	List Endpoints of a Tenant.

List Endpoints of a Tenant.

Table 2.6. List Endpoints parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	String. Required.
tenantId	template	String. Optional.

Normal Response Code(s)

• endpoints (200 203)

Error Response Code(s)

- identityFault
- badRequest(400)
- unauthorized(401)
- forbidden(403)
- badMethod(405)
- overLimit(413)
- serviceUnavailable(503)

• itemNotFound(404)

Example 2.10. List Endponts Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<endpoints
   xmlns="http://docs.openstack.org/identity/api/v2.0">
  <endpoint
      id="1"
      type="compute"
      name="Compute"
      region="North"
      publicURL="https://compute.north.public.com/v1"
      internalURL="https://compute.north.internal.com/v1"
      adminURL="https://compute.north.internal.com/v1">
      <version</pre>
          id="1"
          info="https://compute.north.public.com/v1/"
          list="https://compute.north.public.com/"
      />
  </endpoint>
  <endpoint
      id="2"
      type="compute"
      name="Compute"
      region="South"
      publicURL="https://compute.north.public.com/v1"
      internalURL="https://compute.north.internal.com/v1"
      adminURL="https://compute.north.internal.com/v1">
      <version</pre>
          id="1"
          info="https://compute.north.public.com/v1/"
          list="https://compute.north.public.com/"
      />
  </endpoint>
  <endpoint
      id="3"
      type="compute"
      name="Compute"
      region="East"
      publicURL="https://compute.north.public.com/v1"
      internalURL="https://compute.north.internal.com/v1"
      adminURL="https://compute.north.internal.com/v1"
  />
  <endpoint
      id="4"
      type="compute"
      name="Compute"
      region="West"
      publicURL="https://compute.north.public.com/v1"
      internalURL="https://compute.north.internal.com/v1"
      adminURL="https://compute.north.internal.com/v1">
      <version</pre>
          id="1"
          info="https://compute.north.public.com/v1/"
          list="https://compute.north.public.com/"
      />
  </endpoint>
  <endpoint
```

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                                                                          API v2.0
      id="5"
      type="compute"
      name="Compute"
      region="Global"
      publicURL="https://compute.north.public.com/v1"
      internalURL="https://compute.north.internal.com/v1"
      adminURL="https://compute.north.internal.com/v1">
      <version</pre>
          id="1"
          info="https://compute.north.public.com/v1/"
          list="https://compute.north.public.com/"
  </endpoint>
</endpoints>
Example 2.11. List Endponts Response: JSON
    "endpoints":[{
                "id":1,
                "region": "North",
                "type": "compute",
                "publicURL": "https://compute.north.public.com/v1",
```

```
"internalURL": "https://compute.north.internal.com/v1",
"versionId": "1",
"versionInfo": "https://compute.north.public.com/v1/",
"versionList": "https://compute.north.public.com/"
"id":2,
"region": "South",
"type": "compute",
"publicURL": "https://compute.north.public.com/v1",
"internalURL": "https://compute.north.internal.com/v1",
"versionId":"1",
"versionInfo": "https://compute.north.public.com/v1/",
"versionList": "https://compute.north.public.com/"
"id":3,
"region": "East",
"type": "compute",
"publicURL": "https://compute.north.public.com/v1",
"internalURL": "https://compute.north.internal.com/v1",
"versionId":"1",
"versionInfo": "https://compute.north.public.com/v1/",
"versionList": "https://compute.north.public.com/"
"id":4,
"region": "West",
"type": "compute",
"publicURL": "https://compute.north.public.com/v1",
"internalURL": "https://compute.north.internal.com/v1",
"versionId":"1",
"versionInfo": "https://compute.north.public.com/v1/",
"versionList": "https://compute.north.public.com/"
"id":5,
```

```
"region":"Global",
    "type":"compute",
    "publicURL":"https://compute.north.public.com/v1",
    "internalURL":"https://compute.north.internal.com/v1",
    "versionId":"1",
    "versionInfo":"https://compute.north.public.com/v1/",
    "versionList":"https://compute.north.public.com/"
    }
    ],
    "endpoints_links":[]
```

2.1.2.2. Add Endpoint

Verb	URI	Description
	v2.0/tenants/{tenantId}/OS-	Add Endpoint to a tenant.
	KSCATALOG/endpoints	

Add Endpoint to a tenant.

Table 2.7. Add Endpoint parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	String. Required.
endpoint	plain	EndpointTemplateWithOnlyId. Optional.
tenantId	template	String. Optional.

Normal Response Code(s)

• endpoint (201)

Error Response Code(s)

- identityFault
- badRequest(400)
- unauthorized(401)
- forbidden(403)
- badMethod(405)
- overLimit(413)
- serviceUnavailable(503)
- itemNotFound(404)
- badMediaType(415)

Example 2.12. Add Endpoint Request: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<endpointTemplate
   xmlns="http://docs.openstack.org/identity/api/ext/OS-KSCATALOG/v1.0"
   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
   xsi:type="EndpointTemplateWithOnlyId"
   id="1"/>
```

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Example 2.13. Add Endpoint Request: JSON

```
{
    "OS-KSCATALOG:endpointTemplate":{
        "id":1,
    }
}
```

Example 2.14. Add Endpoint Response: XML

Example 2.15. Add Endpoint Response: JSON

```
{
  "endpoint": {
  "id": 1,
  "region": "North",
  "type": "compute",
  "publicURL": "https://compute.north.public.com/v1",
  "internalURL": "https://compute.north.internal.com/v1",
  "versionId": "1",
  "versionInfo": "https://compute.north.public.com/v1/",
  "versionList": "https://compute.north.public.com/"
}
```

2.1.2.3. Get Endpoint

Verb	URI	Description
GET	v2.0/tenants/{tenantId}/OS-	Get Endpoint of a Tenant.
	KSCATALOG/endpoints/{endpointId}	

Get Endpoint of a Tenant.

Table 2.8. Get Endpoint parameters

Name	Style	Description
	,	Request parameters
X-Auth-Token	header	String. Required.
tenantId	template	String. Optional.
endpointId	template	String. Optional.

Normal Response Code(s)

• endpoint (200 203)

Error Response Code(s)

identityFault

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- badRequest(400)
- unauthorized(401)
- forbidden(403)
- badMethod(405)
- overLimit(413)
- serviceUnavailable(503)
- itemNotFound(404)

Example 2.16. Get Endpont Response: XML

Example 2.17. Get Endpont Response: JSON

```
{
  "endpoint": {
  "id": 1,
  "region": "North",
  "type": "compute",
  "publicURL": "https://compute.north.public.com/v1",
  "internalURL": "https://compute.north.internal.com/v1",
  "versionId": "1",
  "versionInfo": "https://compute.north.public.com/v1/",
  "versionList": "https://compute.north.public.com/v1/",
  "versionList": "https://compute.north.public.com/"
}
```

2.1.2.4. Delete Endpoint.

Verb	URI	Description
	v2.0/tenants/{tenantId}/OS- KSCATALOG/endpoints/{endpointId}	Delete a Endpoint from a Tenant.

Delete a Endpoint from a Tenant.

Table 2.9. Delete Endpoint. parameters

Name	Style	Description	
Request parameters			
X-Auth-Token	header	String. Required.	
tenantId	template	String. Optional.	
endpointId	template	String. Optional.	

Normal Response Code(s)

• (204)

Error Response Code(s)

- identityFault
- badRequest(400)
- unauthorized(401)
- forbidden(403)
- badMethod(405)
- overLimit(413)
- serviceUnavailable(503)
- itemNotFound(404)

Example 2.18. Delete Endpoint From a Tenant Request

This operation does not require a request body.