OS-KSCATALOG Extension

API v2.0 (Aug 29, 2011)

DRAFT

openstack™

OS-KSCATALOG Extension

API v2.0 (2011-08-29)
Copyright © 2010, 2011 OpenStack All rights reserved.

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

Table of Contents

List of Tables

List of Examples

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 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.
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.

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/endpointTemplates?serviceId=string`	List Endpoint Templates.

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)

- itemNotFound(404)

Example 2.1. List Endpont Templates Response: XML

```xml
<?xml version="1.0" encoding="UTF-8"?>

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

```
  <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"
```

```
  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
  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
    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"
```

```
  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/ endpointTemplates/ {endpointTemplateId}	Delete a Endpoint Template.

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
GET	`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
<?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
          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
          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
          id="1"
          info="https://compute.north.public.com/v1/"
          list="https://compute.north.public.com/"
      />
  </endpoint>
  <endpoint
```

```
        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
            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
POST	v2.0/tenants/{tenantId}/OS-KSCATALOG/endpoints	Add Endpoint to a tenant.

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"/>
```

Example 2.13. Add Endpoint Request: JSON

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

Example 2.14. Add Endpoint Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>

<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"
            xmlns="http://docs.openstack.org/identity/api/v2.0">
            <version
                        id="1"
                        info="https://compute.north.public.com/v1/"
                        list="https://compute.north.public.com/"
            />
</endpoint>
```

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-KSCATALOG/endpoints/{endpointId}	Get Endpoint of a Tenant.

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.

15

Normal Response Code(s)

• endpoint (200 203)

Error Response Code(s)

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

Example 2.16. Get Endpont Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>

<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"
            xmlns="http://docs.openstack.org/identity/api/v2.0">
            <version
                        id="1"
                        info="https://compute.north.public.com/v1/"
                        list="https://compute.north.public.com/"
            />
</endpoint>
```

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/"
  }
}
```

2.1.2.4. Delete Endpoint.

Verb	URI	Description
DELETE	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.
```