Keystone OS-KSCATALOG-admin

API v2.0 (Aug 29, 2011)

DRAFT

openstack™

Keystone OS-KSCATALOG-admin Developer Guide

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-admin 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-admin
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	/OS-KSCATALOG/endpointTemplates? serviceId=*string*	List Endpoint Templates.
POST	/OS-KSCATALOG/endpointTemplates	Add Endpoint Template.
GET	/OS-KSCATALOG/endpointTemplates/ {endpointTemplateId}	Get Endpoint Template.
DELETE	/OS-KSCATALOG/endpointTemplates/ {endpointTemplateId}	Delete a Endpoint Template.
Endpoint Operations		
GET	/tenants/{tenantId}/OS-KSCATALOG/ endpoints	List Endpoints of a Tenant.
POST	/tenants/{tenantId}/OS-KSCATALOG/ endpoints	Add Endpoint to a tenant.
GET	/tenants/{tenantId}/OS-KSCATALOG/ endpoints/{endpointId}	Get Endpoint of a Tenant.
DELETE	/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	/OS-KSCATALOG/endpointTemplates? serviceId=*string*	List Endpoint Templates.
POST	/OS-KSCATALOG/endpointTemplates	Add Endpoint Template.
GET	/OS-KSCATALOG/endpointTemplates/ {endpointTemplateId}	Get Endpoint Template.
DELETE	/OS-KSCATALOG/endpointTemplates/ {endpointTemplateId}	Delete a Endpoint Template.
Endpoint Operations		
GET	/tenants/{tenantId}/OS-KSCATALOG/ endpoints	List Endpoints of a Tenant.
POST	/tenants/{tenantId}/OS-KSCATALOG/ endpoints	Add Endpoint to a tenant.
GET	/tenants/{tenantId}/OS-KSCATALOG/ endpoints/{endpointId}	Get Endpoint of a Tenant.
DELETE	/tenants/{tenantId}/OS-KSCATALOG/ endpoints/{endpointId}	Delete a Endpoint from a Tenant.

2.1.1. Endpoint Template Operations

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

2.1.1.1. List Endpoint Templates

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

List Endpoint Templates.

Table 2.2. 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 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>
```

```
{
```

```
"OS-KSCATALOG:endpointsTemplates": {
    "values": [
        {
            "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
        }
    ],
    "links": []
}
}
```

2.1.1.2. Add Endpoint Template

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

Add Endpoint Template.

Table 2.3. 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 2.2. 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>
```

```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 2.3. Add Endpoint Template Response

```
<?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>
```

```
{
    "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	/OS-KSCATALOG/endpointTemplates/ {endpointTemplateId}	Get Endpoint Template.

Get Endpoint Template.

Table 2.4. Parameters

Name	Style	Description
Request parameters		

Name	Style	Description
X-Auth-Token	header	String. Required.
X-Auth-Token	header	String. Required.
endpointTemplateId		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 2.4. 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>
```

```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	/OS-KSCATALOG/endpointTemplates/ {endpointTemplateId}	Delete a Endpoint Template.

Delete a Endpoint Template.

Table 2.5. Parameters

Name	Style	Description
		Request parameters
X-Auth-Token	header	String. Required.
X-Auth-Token	header	String. Required.
endpointTemplateId	path	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 2.5. Delete Endpoint Template Request

```
This operation does not require a request body.
```

2.1.2. Endpoint Operations

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

2.1.2.1. List Endpoints

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

List Endpoints of a Tenant.

Table 2.6. 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 2.6. List Endponts Response

```
<?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>
```

```
{
    "endpoints":{
        "values":[{
                "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/"
            }
        ],
        "links":[]
    }
}
```

2.1.2.2. Add Endpoint

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

Add Endpoint to a tenant.

Table 2.7. Parameters

Name	Style	Description
		Request parameters

Name	Style	Description
`X-Auth-Token`	header	String. Required.
`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 2.7. Add Endpoint Request

```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>
```

```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/"
  }
}
```

Example 2.8. 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>
```

```
{
  "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	/tenants/{tenantId}/OS-KSCATALOG/ endpoints/{endpointId}	Get Endpoint of a Tenant.

Get Endpoint of a Tenant.

Table 2.8. 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
• badRequest(400)

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

Example 2.9. 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>
```

```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	/tenants/{tenantId}/OS-KSCATALOG/ endpoints/{endpointId}	Delete a Endpoint from a Tenant.

Delete a Endpoint from a Tenant.

Table 2.9. 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 2.10. Delete Endpoint From a Tenant Request

```
This operation does not require a request body.
```