OS-KSCATALOG Extension

API v2.0 (Aug 29, 2011)

DRAFT

openstack™

OS-KSCATALOG Extension

API v2.0 (2011-08-29)
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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 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.

Normal Response Code(s): 200, 203

Error Response Code(s): identityFault (400, 500, ...), badRequest (400), unauthorized (401), forbidden (403), badMethod (405), overLimit (413), serviceUnavailable (503), itemNotFound (404)

List Endpoint Templates.

Table 2.2. List Endpoint Templates Request Parameters

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

Example 2.1. List Endpoint 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 Endpoint 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.

Normal Response Code(s): 201

Error Response Code(s): identityFault (400, 500, ...), badRequest (400), unauthorized (401), forbidden (403), badMethod (405), overLimit (413), serviceUnavailable (503), itemNotFound (404), badMediaType (415)

Add Endpoint Template.

Table 2.3. Add Endpoint Template Request Parameters

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

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
<?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

```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.

Normal Response Code(s): 200, 203

Error Response Code(s): identityFault (400, 500, ...), badRequest (400), unauthorized
(401), forbidden (403), badMethod (405), overLimit (413), serviceUnavailable (503),
itemNotFound (404)

Get Endpoint Template.

Table 2.4. Get Endpoint Template Request Parameters

Name	Style	Description
`X-Auth-Token`	header	String. Required.
`X-Auth-Token`	header	String. Required.
`endpointTemplateId`	template	Int.

This operation does not require a request body.

Example 2.7. Get 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 2.8. Get 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
        }
}
```

2.1.1.4. Delete Endpoint Template.

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

Normal Response Code(s): 204

Error Response Code(s): identityFault (400, 500, ...), badRequest (400), unauthorized (401), forbidden (403), badMethod (405), overLimit (413), serviceUnavailable (503), itemNotFound (404)

Delete a Endpoint Template.

Table 2.5. Delete Endpoint Template. Request Parameters

Name	Style	Description
`X-Auth-Token`	header	String. Required.
`X-Auth-Token`	header	String. Required.
`endpointTemplateId`	template	Int.

This operation does not require a request body and does not return a response 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.

Normal Response Code(s): 200, 203

Error Response Code(s): identityFault (400, 500, ...), badRequest (400), unauthorized (401), forbidden (403), badMethod (405), overLimit (413), serviceUnavailable (503), itemNotFound (404)

List Endpoints of a Tenant.

Table 2.6. List Endpoints Request Parameters

Name	Style	Description
`X-Auth-Token`	header	String. Required.
`tenantId`	template	String.

This operation does not require a request body.

Example 2.9. List Endpoints Response: XML

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

<endpoints
    xmlns="http://docs.openstack.org/identity/api/v2.0">
  <endpoint
      id="1"
      tenantId="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"
      tenantId="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"
            tenantId="1"
            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"
            tenantId="1"
    />
        <endpoint
            id="4"
            tenantId="1"
            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"
            tenantId="1"
            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 2.10. List Endpoints Response: JSON

```
{
    "endpoints":[{
                "id":1,
                "tenantId":"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,
```

```
                "tenantId":"1",
                "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,
                "tenantId":"1",
                "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,
                "tenantId":"1",
                "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,
                "tenantId":"1",
                "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.

Normal Response Code(s): 201

Error Response Code(s): identityFault (400, 500, ...), badRequest (400), unauthorized (401), forbidden (403), badMethod (405), overLimit (413), serviceUnavailable (503), itemNotFound (404), badMediaType (415)

Add Endpoint to a tenant.

Table 2.7. Add Endpoint Request Parameters

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

Example 2.11. Add Endpoint Request: XML

```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 2.12. Add Endpoint Request: JSON

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

Example 2.13. Add Endpoint Response: XML

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

<endpoint
            id="1"
            tenantId="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 2.14. Add Endpoint Response: JSON

```
{
  "endpoint": {
  "id": 1,
  "tenantId":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.

Normal Response Code(s): 200, 203

Error Response Code(s): identityFault (400, 500, ...), badRequest (400), unauthorized (401), forbidden (403), badMethod (405), overLimit (413), serviceUnavailable (503), itemNotFound (404)

Get Endpoint of a Tenant.

Table 2.8. Get Endpoint Request Parameters

Name	Style	Description
`X-Auth-Token`	header	String. Required.
`tenantId`	template	String.
`endpointId`	template	String.

This operation does not require a request body.

Example 2.15. Get Endpoint Response: XML

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

<endpoint
            id="1"
            tenantId="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 2.16. Get Endpoint Response: JSON

```
{
  "endpoint": {
  "id": 1,
  "tenantId":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.

Normal Response Code(s): 204

Error Response Code(s): identityFault (400, 500, ...), badRequest (400), unauthorized (401), forbidden (403), badMethod (405), overLimit (413), serviceUnavailable (503), itemNotFound (404)

Delete a Endpoint from a Tenant.

Table 2.9. Delete Endpoint. Request Parameters

Name	Style	Description
`X-Auth-Token`	header	String. Required.
`tenantId`	template	String.
`endpointId`	template	String.

This operation does not require a request body and does not return a response body.