

OS-KSADM-admin Extension

API v2.0 (Aug 29, 2011)

DRAFT



OS-KSADM-admin Extension

API v2.0 (2011-08-29)

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

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1. About This Extension

Name	OpenStack KSADM Extension
Namespace	http://docs.openstack.org/identity/api/ext/OS-KSADM/v1.0
Alias	OS-KSCATALOG-admin
Dependencies	Keystone - OpenStack Identity
Doc Link (PDF)	https://github.com/openstack/keystone/raw/master/keystone/content/admin/OS-KSADM-admin-devguide.pdf
Doc Link (WADL)	https://raw.github.com/openstack/keystone/master/keystone/content/admin/OS-KSADM-admin.wadl
Doc Link (XSD)	https://raw.github.com/openstack/keystone/master/keystone/content/common/xsd/OS-KSADM.xsd
Short Description	OpenStack KSADM Admin Extension to Keystone v2.0 API adds the capability to do CRUD on Users, Tenants, Roles and Services.

1.1. Document Change History

Revision Date	Summary of Changes
Sep. 09, 2011	<ul style="list-style-type: none">• Initial release.

2. Extension Operations

Verb	URI	Description
User Operations		
GET	/users	List users.
POST	/users	Adds a user.
POST	/users/{userId}	Update a user.
DELETE	/users/{userId}	Delete a user.
GET	/users/{userId}/OS-KSADM/roles? serviceId=string	List all the global roles for a user.
PUT	/users/{userId}/OS-KSADM/roles/ {roleId}	Adds a specific global role to a user.
GET	/users/{userId}/OS-KSADM/roles/ {roleId}	Get information about a global role that belongs to a user.
DELETE	/users/{userId}/OS-KSADM/roles/ {roleId}	Deletes a specific global role from a user.
POST	/users/{userId}/OS-KSADM/ credentials	Adds a credential to a user.
GET	/users/{userId}/OS-KSADM/ credentials?marker=string& limit=int	List credentials.
POST	/users/{userId}/OS-KSADM/ credentials/{credential-type}	Update credentials.
POST	/users/{userId}/OS-KSADM/ credentials/{credential-type}	Delete User credentials.
GET	/users/{userId}/OS-KSADM/ credentials/{credential-type}	Get user credentials.
Tenant Operations		
POST	/tenants	Creates a tenant.
POST	/tenants/{tenantId}	Updates a tenant.
DELETE	/tenants/{tenantId}	Deletes a tenant.
GET	/tenants/{tenantId}/OS-KSADM/users ?marker=string&limit=int	Lists all the users for a tenant.
GET	/tenants/{tenantId}/OS-KSADM/users ?roleId=string&marker=string& limit=int	Lists all the users with a specific role for a tenant.
GET	/tenants/{tenantId}/OS-KSADM/roles ?marker=string&limit=int	Lists all the roles for a tenant.
PUT	/tenants/{tenantId}/OS-KSADM/ users/{userId}/roles/{roleId}	Adds a specific role to a user for a tenant.
DELETE	/tenants/{tenantId}/OS-KSADM/ users/{userId}/roles/{roleId}	Deletes a specific role from a user for a tenant.
Role Operations		
GET	/OS-KSADM/roles?serviceId=string& marker=string&limit=int	List roles.
PUT	/OS-KSADM/roles	Add a Role.
GET	/OS-KSADM/roles/{roleId}	Get a role.
DELETE	/OS-KSADM/roles/{roleId}	Delete a role.
Service Operations		

Verb	URI	Description
GET	/OS-KSADM/services? serviceId=string&marker=string& limit=int	List services.
PUT	/OS-KSADM/services	Add a service.
GET	/OS-KSADM/services/{serviceId}	Get a service.
DELETE	/OS-KSADM/services/{serviceId}	Delete a service.

2.1. OS-KSADM Admin Extension API (Service Developer Operations)

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 OS-KSADM-admin Extension:

Verb	URI	Description
User Operations		
GET	/users	List users.
POST	/users	Adds a user.
POST	/users/{userId}	Update a user.
DELETE	/users/{userId}	Delete a user.
GET	/users/{userId}/OS-KSADM/roles? serviceId=string	List all the global roles for a user.
PUT	/users/{userId}/OS-KSADM/roles/ {roleId}	Adds a specific global role to a user.
GET	/users/{userId}/OS-KSADM/roles/ {roleId}	Get information about a global role that belongs to a user.
DELETE	/users/{userId}/OS-KSADM/roles/ {roleId}	Deletes a specific global role from a user.
POST	/users/{userId}/OS-KSADM/ credentials	Adds a credential to a user.
GET	/users/{userId}/OS-KSADM/ credentials?marker=string& limit=int	List credentials.
POST	/users/{userId}/OS-KSADM/ credentials/{credential-type}	Update credentials.
POST	/users/{userId}/OS-KSADM/ credentials/{credential-type}	Delete User credentials.
GET	/users/{userId}/OS-KSADM/ credentials/{credential-type}	Get user credentials.
Tenant Operations		
POST	/tenants	Creates a tenant.
POST	/tenants/{tenantId}	Updates a tenant.
DELETE	/tenants/{tenantId}	Deletes a tenant.

Verb	URI	Description
GET	/tenants/{tenantId}/OS-KSADM/users? marker=string&limit=int	Lists all the users for a tenant.
GET	/tenants/{tenantId}/OS-KSADM/users? roleId=string&marker=string& limit=int	Lists all the users with a specific role for a tenant.
GET	/tenants/{tenantId}/OS-KSADM/roles? marker=string&limit=int	Lists all the roles for a tenant.
PUT	/tenants/{tenantId}/OS-KSADM/ users/{userId}/roles/{roleId}	Adds a specific role to a user for a tenant.
DELETE	/tenants/{tenantId}/OS-KSADM/ users/{userId}/roles/{roleId}	Deletes a specific role from a user for a tenant.
Role Operations		
GET	/OS-KSADM/roles?serviceId=string& marker=string&limit=int	List roles.
PUT	/OS-KSADM/roles	Add a Role.
GET	/OS-KSADM/roles/{roleId}	Get a role.
DELETE	/OS-KSADM/roles/{roleId}	Delete a role.
Service Operations		
GET	/OS-KSADM/services? serviceId=string&marker=string& limit=int	List services.
PUT	/OS-KSADM/services	Add a service.
GET	/OS-KSADM/services/{serviceId}	Get a service.
DELETE	/OS-KSADM/services/{serviceId}	Delete a service.

2.1.1. User Operations

Verb	URI	Description
GET	/users	List users.
POST	/users	Adds a user.
POST	/users/{userId}	Update a user.
DELETE	/users/{userId}	Delete a user.
GET	/users/{userId}/OS-KSADM/roles? serviceId=string	List all the global roles for a user.
PUT	/users/{userId}/OS-KSADM/roles/ {roleId}	Adds a specific global role to a user.
GET	/users/{userId}/OS-KSADM/roles/ {roleId}	Get information about a global role that belongs to a user.
DELETE	/users/{userId}/OS-KSADM/roles/ {roleId}	Deletes a specific global role from a user.
POST	/users/{userId}/OS-KSADM/ credentials	Adds a credential to a user.
GET	/users/{userId}/OS-KSADM/ credentials?marker=string& limit=int	List credentials.
POST	/users/{userId}/OS-KSADM/ credentials/{credential-type}	Update credentials.
POST	/users/{userId}/OS-KSADM/ credentials/{credential-type}	Delete User credentials.
GET	/users/{userId}/OS-KSADM/ credentials/{credential-type}	Get user credentials.

2.1.1.1. List users

Verb	URI	Description
GET	/users	List users.

List users.

Table 2.2. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.

Normal Response Code(s)

- userss (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 Users Response

```
<?xml version="1.0" encoding="UTF-8"?>
<users xmlns="http://docs.openstack.org/identity/api/v2.0">
  <user xmlns="http://docs.openstack.org/identity/api/v2.0"
    enabled="true" email="john.smith@example.org"
    username="jqsmith" id="u1000"/>
  <user xmlns="http://docs.openstack.org/identity/api/v2.0"
    enabled="true" email="john.smith@example.org"
    username="jqsmith" id="u1001"/>
</users>
```

```
{
  "users": [{
    "id": "u1000",
    "username": "jqsmith",
    "email": "john.smith@example.org",
    "enabled": true
  },
  {
    "id": "u1001",
    "username": "jqsmith",
    "email": "john.smith@example.org",
    "enabled": true
  }
]
```

```
    ],  
    "users_links": []  
}
```

2.1.1.2. Add user

Verb	URI	Description
POST	/users	Adds a user.

Adds a user.

Table 2.3. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.

Normal Response Code(s)

- user (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. User Creation Request

```
<?xml version="1.0" encoding="UTF-8"?>  
<user xmlns="http://docs.openstack.org/identity/api/v2.0"  
  enabled="true" email="john.smith@example.org"  
  username="jqsmith"/>
```

```
{  
  "user": {  
    "username": "jqsmith",  
    "email": "john.smith@example.org",  
    "enabled": true  
  }  
}
```

Example 2.3. User Creation Response

```
<?xml version="1.0" encoding="UTF-8"?>  
<user xmlns="http://docs.openstack.org/identity/api/v2.0"
```

```
enabled="true" email="john.smith@example.org"
username="jqsmith" id="u1000"/>
```

```
{
  "user": {
    "id": "u1000",
    "username": "jqsmith",
    "email": "john.smith@example.org",
    "enabled": true
  }
}
```

2.1.1.3. Update user

Verb	URI	Description
POST	/users/{userId}	Update a user.

Update a user.

Table 2.4. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.

Normal Response Code(s)

- user (200)

Error Response Code(s)

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

Example 2.4. User Updation Request

Example 2.5. User Updation Request

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.openstack.org/identity/api/v2.0"
  enabled="true" email="john.smith@example.org"
  username="jqsmith" id="u1000"/>
```

```
{
  "user": {
    "id": "u1000",
```

```
"username": "jqsmith",  
"email": "john.smith@example.org",  
"enabled": true  
}  
}
```

Example 2.6. User Update Response

```
<?xml version="1.0" encoding="UTF-8"?>  
<user xmlns="http://docs.openstack.org/identity/api/v2.0"  
  enabled="true" email="john.smith@example.org"  
  username="jqsmith" id="u1000"/>
```

```
{  
  "user": {  
    "id": "u1000",  
    "username": "jqsmith",  
    "email": "john.smith@example.org",  
    "enabled": true  
  }  
}
```

2.1.1.4. Delete user

Verb	URI	Description
DELETE	/users/{userId}	Delete a user.

Delete a user.

Table 2.5. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.

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 2.7. Delete User Request

This operation does not require a request body.

2.1.1.5. List Global Roles for a User

Verb	URI	Description
GET	/users/{userId}/OS-KSADM/roles? serviceId=string	List all the global roles for a user.

List all the global roles for a user.

Table 2.6. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
serviceId	query	String. Optional.

Normal Response Code(s)

- roles (200 203)

Error Response Code(s)

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

Example 2.8. List Global Roles for User Response

```
<?xml version="1.0" encoding="UTF-8"?>
<roles xmlns="http://docs.openstack.org/identity/api/v2.0">
  <role id="Admin" description="All Access" />
  <role id="Guest" description="Guest Access" />
</roles>
```

```
{
  "roles": [{
    "id": "compute:admin"
  }],
  "roles_links": []
}
```

2.1.1.6. Add Global roles to a user.

Verb	URI	Description
PUT	/users/{userId}/OS-KSADM/roles/ {roleId}	Adds a specific global role to a user.

Adds a specific global role to a user.

Table 2.7. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
roleId	template	Int. Optional.

Normal Response Code(s)

- (200)

Error Response Code(s)

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

Example 2.9. Adds global role to a user request

This operation does not require a request body.

2.1.1.7. Get user Role

Verb	URI	Description
GET	/users/{userId}/OS-KSADM/roles/{roleId}	Get information about a global role that belongs to a user.

Get information about a global role that belongs to a user.

Table 2.8. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
roleId	template	Int. Optional.

Normal Response Code(s)

- role (200 203)

Error Response Code(s)

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

Example 2.10. List Roles for User Response

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

<role xmlns="http://docs.openstack.org/identity/api/v2.0"
  id="Admin"
  description="All Access" />
```

```
{
  "role": {
    "id": "Guest",
    "description": "Guest Access"
  }
}
```

2.1.1.8. Delete Global Roles on User.

Verb	URI	Description
DELETE	/users/{userId}/OS-KSADM/roles/{roleId}	Deletes a specific global role from a user.

Deletes a specific global role from a user.

Table 2.9. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
roleId	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 2.11. Deletes global role from a user

This operation does not require a request body.

2.1.1.9. Add user Credential.

Verb	URI	Description
POST	/users/{userId}/OS-KSADM/credentials	Adds a credential to a user.

Adds a credential to a user.

Table 2.10. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.

Normal Response Code(s)

- credentials (201)

Error Response Code(s)

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

Example 2.12. Add Credentials Request

```
<?xml version="1.0" encoding="UTF-8"?>
<passwordCredentials xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://docs.openstack.org/identity/api/v2.0" username="test_user"
  password="test"/>
```

```
{
  "passwordCredentials": {
    "username": "test_user",
    "password": "mypass"
  }
}
```

Example 2.13. Add Credential Response

```
<?xml version="1.0" encoding="UTF-8"?>
<passwordCredentials xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://docs.openstack.org/identity/api/v2.0" username="test_user"
  password="test"/>
```

```
{
  "passwordCredentials": {
    "username": "test_user",
    "password": "mypass"
  }
}
```

2.1.1.10. List Credentials

Verb	URI	Description
GET	/users/{userId}/OS-KSADM/credentials?marker=string&limit=int	List credentials.

List credentials.

Table 2.11. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
marker	query	String. Optional.
limit	query	Int. Optional.

Normal Response Code(s)

- credentials (200 203)

Error Response Code(s)

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

Example 2.14. List Credentials Response

```
<?xml version="1.0" encoding="UTF-8"?>
<credentials xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://docs.openstack.org/identity/api/v2.0">
  <passwordCredentials username="test_user" password="test"/>
</credentials>
```

```
{
  "credentials": [{
    "passwordCredentials": {
      "username": "test_user",
      "password": "mypass"
    }
  }],
  "credentials_links": []
}
```

2.1.1.11. Update user credential

Verb	URI	Description
POST	/users/{userId}/OS-KSADM/credentials/{credential-type}	Update credentials.

Update credentials.

Table 2.12. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
credential-type	template	ExtensibleCredentialsType. Optional.

Normal Response Code(s)

- credentials (200)

Error Response Code(s)

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

Example 2.15. Update Credential Request

```
<?xml version="1.0" encoding="UTF-8"?>
<passwordCredentials xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://docs.openstack.org/identity/api/v2.0" username="test_user"
  password="test"/>
```

```
{
  "passwordCredentials": {
    "username": "test_user",
```

```
    "password": "mypass"
  }
}
```

Example 2.16. Update Credential Response

```
<?xml version="1.0" encoding="UTF-8"?>
<passwordCredentials xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://docs.openstack.org/identity/api/v2.0" username="test_user"
  password="test"/>
```

```
{
  "passwordCredentials": {
    "username": "test_user",
    "password": "mypass"
  }
}
```

2.1.1.12. Delete user credential

Verb	URI	Description
POST	/users/{userId}/OS-KSADM/credentials/{credential-type}	Delete User credentials.

Delete User credentials.

Table 2.13. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
credential-type	template	ExtensibleCredentialsType. Optional.

Normal Response Code(s)

- (204)

Error Response Code(s)

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

Example 2.17. Delete User Credentials

This operation does not require a request body.

2.1.1.13. Get user Credentials

Verb	URI	Description
GET	/users/{userId}/OS-KSADM/credentials/{credential-type}	Get user credentials.

Get user credentials.

Table 2.14. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
credential-type	template	ExtensibleCredentialsType. Optional.

Normal Response Code(s)

- credentials (200 203)

Error Response Code(s)

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

Example 2.18. Get User Credential Response

```
<?xml version="1.0" encoding="UTF-8"?>
<passwordCredentials xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://docs.openstack.org/identity/api/v2.0" username="test_user"
  password="test"/>
```

```
{
  "passwordCredentials": {
    "username": "test_user",
    "password": "mypass"
  }
}
```

2.1.2. Tenant Operations

Verb	URI	Description
POST	/tenants	Creates a tenant.
POST	/tenants/{tenantId}	Updates a tenant.
DELETE	/tenants/{tenantId}	Deletes a tenant.

Verb	URI	Description
GET	/tenants/{tenantId}/OS-KSADM/users ?marker=string&limit=int	Lists all the users for a tenant.
GET	/tenants/{tenantId}/OS-KSADM/users ?roleId=string&marker=string& limit=int	Lists all the users with a specific role for a tenant.
GET	/tenants/{tenantId}/OS-KSADM/roles ?marker=string&limit=int	Lists all the roles for a tenant.
PUT	/tenants/{tenantId}/OS-KSADM/ users/{userId}/roles/{roleId}	Adds a specific role to a user for a tenant.
DELETE	/tenants/{tenantId}/OS-KSADM/ users/{userId}/roles/{roleId}	Deletes a specific role from a user for a tenant.

2.1.2.1. Add Tenant

Verb	URI	Description
POST	/tenants	Creates a tenant.

This call creates a tenant.

Table 2.15. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.

Normal Response Code(s)

- tenant (201)

Error Response Code(s)

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

Example 2.19. Tenant Creation Request

```
<?xml version="1.0" encoding="UTF-8"?>
<tenant xmlns="http://docs.openstack.org/identity/api/v2.0"
  enabled="true" name="ACME Corp">
  <description>A description...</description>
</tenant>
```

```
{
  "tenant": {
    "name": "ACME corp",
    "description": "A description ...",
```

```
"enabled": true
}
```

Example 2.20. Tenant Creation Response

```
<?xml version="1.0" encoding="UTF-8"?>
<tenant xmlns="http://docs.openstack.org/identity/api/v2.0"
  enabled="true" id="1234" name="ACME Corp">
  <description>A description...</description>
</tenant>
```

```
{
  "tenant": {
    "id": "1234",
    "name": "ACME corp",
    "description": "A description ...",
    "enabled": true
  }
}
```

2.1.2.2. Update Tenant

Verb	URI	Description
POST	/tenants/{tenantId}	Updates a tenant.

This call updates a tenant.

Table 2.16. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
tenantId	template	String. Optional.

Normal Response Code(s)

- tenant (200)

Error Response Code(s)

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

Example 2.21. Tenant Update Request

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



```
<tenant xmlns="http://docs.openstack.org/identity/api/v2.0"
  enabled="true" id="1234" name="ACME Corp">
  <description>A description...</description>
</tenant>
```

```
{
  "tenant": {
    "id": "1234",
    "name": "ACME corp",
    "description": "A description ...",
    "enabled": true
  }
}
```

Example 2.22. Tenant Update Response

```
<?xml version="1.0" encoding="UTF-8"?>
<tenant xmlns="http://docs.openstack.org/identity/api/v2.0"
  enabled="true" id="1234" name="ACME Corp">
  <description>A description...</description>
</tenant>
```

```
{
  "tenant": {
    "id": "1234",
    "name": "ACME corp",
    "description": "A description ...",
    "enabled": true
  }
}
```

2.1.2.3. Delete a Tenant

Verb	URI	Description
DELETE	/tenants/{tenantId}	Deletes a tenant.

This call deletes a tenant.

Table 2.17. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
tenantId	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 2.23. Delete Tenant Request

This operation does not require a request body.

2.1.2.4. List users for a Tenant.

Verb	URI	Description
GET	/tenants/{tenantId}/OS-KSADM/users ?marker=string&limit=int	Lists all the users for a tenant.

Lists all the users for a tenant.

Table 2.18. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
marker	query	String. Optional.
limit	query	Int. Optional.
tenantId	template	String. Optional.

Normal Response Code(s)

- users (200 203)

Error Response Code(s)

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

Example 2.24. List Users for Tenant Response

```
<?xml version="1.0" encoding="UTF-8"?>
<users xmlns="http://docs.openstack.org/identity/api/v2.0">
  <user xmlns="http://docs.openstack.org/identity/api/v2.0"
    enabled="true" email="john.smith@example.org"
    username="jqsmith" id="u1000"/>
  <user xmlns="http://docs.openstack.org/identity/api/v2.0"
    enabled="true" email="john.smith@example.org"
```

```
        username="jqsmith" id="u1001"/>
</users>

{
  "users": [{
    "id": "u1000",
    "username": "jqsmith",
    "email": "john.smith@example.org",
    "enabled": true
  },
  {
    "id": "u1001",
    "username": "jqsmith",
    "email": "john.smith@example.org",
    "enabled": true
  }
],
  "users_links": []
}
```

2.1.2.5. List user with role for tenant.

Verb	URI	Description
GET	/tenants/{tenantId}/OS-KSADM/users ?roleId=string&marker=string& limit=int	Lists all the users with a specific role for a tenant.

Lists all the users with a specific role for a tenant.

Table 2.19. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
roleId	query	String. Required.
marker	query	String. Optional.
limit	query	Int. Optional.
tenantId	template	String. Optional.

Normal Response Code(s)

- users (200 203)

Error Response Code(s)

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

Example 2.25. List Users with a specific role for a Tenant Response

```
<?xml version="1.0" encoding="UTF-8"?>
<users xmlns="http://docs.openstack.org/identity/api/v2.0">
  <user xmlns="http://docs.openstack.org/identity/api/v2.0"
    enabled="true" email="john.smith@example.org"
    username="jqsmith" id="u1000"/>
  <user xmlns="http://docs.openstack.org/identity/api/v2.0"
    enabled="true" email="john.smith@example.org"
    username="jqsmith" id="u1001"/>
</users>
```

```
{
  "users": [{
    "id": "u1000",
    "username": "jqsmith",
    "email": "john.smith@example.org",
    "enabled": true
  },
  {
    "id": "u1001",
    "username": "jqsmith",
    "email": "john.smith@example.org",
    "enabled": true
  }
],
  "users_links": []
}
```

2.1.2.6. List roles for a Tenant.

Verb	URI	Description
GET	/tenants/{tenantId}/OS-KSADM/roles ?marker=string&limit=int	Lists all the roles for a tenant.

Lists all the roles for a tenant.

Table 2.20. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
marker	query	String. Optional.
limit	query	Int. Optional.
tenantId	template	String. Optional.

Normal Response Code(s)

- roles (200 203)

Error Response Code(s)

- identityFault
- badRequest(400)

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

Example 2.26. List Roles for Tenant Response

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

<roles xmlns="http://docs.openstack.org/identity/api/v2.0">
  <role id="Admin" description="All Access" />
  <role id="Guest" description="Guest Access" />
</roles>
```

```
{
  "roles": [{
    "id": "compute:admin"
  }],
  "roles_links": []
}
```

2.1.2.7. Add roles on a tenant.

Verb	URI	Description
PUT	/tenants/{tenantId}/OS-KSADM/users/{userId}/roles/{roleId}	Adds a specific role to a user for a tenant.

Adds a specific role to a user for a tenant.

Table 2.21. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
tenantId	template	String. Optional.
userId	template	String. Optional.

Normal Response Code(s)

- (200)

Error Response Code(s)

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

- serviceUnavailable(503)
- badMediaType(415)
- itemNotFound(404)

Example 2.27. Add role to a user for a Tenant Request

This operation does not require a request body.

2.1.2.8. Delete roles on tenant.

Verb	URI	Description
DELETE	/tenants/{tenantId}/OS-KSADM/users/{userId}/roles/{roleId}	Deletes a specific role from a user for a tenant.

Deletes a specific role from a user for a tenant.

Table 2.22. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
tenantId	template	String. Optional.
userId	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 2.28. Delete Role From User For a Tenant Request

This operation does not require a request body.

2.1.3. Role Operations

Verb	URI	Description
GET	/OS-KSADM/roles?serviceId=string&marker=string&limit=int	List roles.
PUT	/OS-KSADM/roles	Add a Role.

Verb	URI	Description
GET	/OS-KSADM/roles/{roleId}	Get a role.
DELETE	/OS-KSADM/roles/{roleId}	Delete a role.

2.1.3.1. List Roles

Verb	URI	Description
GET	/OS-KSADM/roles?serviceId=string&marker=string&limit=int	List roles.

List roles.

Table 2.23. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
serviceId	query	String. Optional.
marker	query	String. Optional.
limit	query	Int. Optional.

Normal Response Code(s)

- roles (200 203)

Error Response Code(s)

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

Example 2.29. List Roles Response

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

<roles xmlns="http://docs.openstack.org/identity/api/v2.0">
  <role id="Admin" description="All Access" />
  <role id="Guest" description="Guest Access" />
</roles>
```

```
{
  "roles": [{
    "id": "compute:admin"
  }],
  "roles_links": []
}
```

```
}
```

2.1.3.2. Add Role

Verb	URI	Description
PUT	/OS-KSADM/roles	Add a Role.

Add a Role.

Table 2.24. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.

Normal Response Code(s)

- role (201)

Error Response Code(s)

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

Example 2.30. Add a Role Request

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

<role xmlns="http://docs.openstack.org/identity/api/v2.0"
  id="Admin"
  description="All Access" />
```

```
{
  "role": {
    "id": "Guest",
    "description": "Guest Access"
  }
}
```

Example 2.31. Add a Role Response

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

<role xmlns="http://docs.openstack.org/identity/api/v2.0"
  id="Admin"
```



```
description="All Access" />
```

```
{
  "role": {
    "id": "Guest",
    "description": "Guest Access"
  }
}
```

2.1.3.3. Get Role

Verb	URI	Description
GET	/OS-KSADM/roles/{roleId}	Get a role.

Get a role.

Table 2.25. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
roleId	template	String. Optional.

Normal Response Code(s)

- role (200 203)

Error Response Code(s)

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

Example 2.32. Get a role

```
<?xml version="1.0" encoding="UTF-8"?>
<role xmlns="http://docs.openstack.org/identity/api/v2.0"
  id="Admin"
  description="All Access" />
```

```
{
  "role": {
    "id": "Guest",
    "description": "Guest Access"
  }
}
```

2.1.3.4. Delete Role

Verb	URI	Description
DELETE	/OS-KSADM/roles/{roleId}	Delete a role.

Delete a role.

Table 2.26. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
roleId	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 2.33. Delete a Role

This operation does not require a request body.

2.1.4. Service Operations

Verb	URI	Description
GET	/OS-KSADM/services? serviceId=string&marker=string& limit=int	List services.
PUT	/OS-KSADM/services	Add a service.
GET	/OS-KSADM/services/{serviceId}	Get a service.
DELETE	/OS-KSADM/services/{serviceId}	Delete a service.

2.1.4.1. List Services

Verb	URI	Description
GET	/OS-KSADM/services? serviceId=string&marker=string& limit=int	List services.

List services.

Table 2.27. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
serviceId	query	String. Optional.
marker	query	String. Optional.
limit	query	Int. Optional.

Normal Response Code(s)

- services (200 203)

Error Response Code(s)

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

Example 2.34. List services Response

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

<services xmlns="http://docs.openstack.org/identity/api/ext/OS-KSADM/v1.0">
  <service id="Nova" type="compute" description="Openstack Service" />
  <service id="Glance" type="image-service" description="Openstack Service" />
</services>
```

```
{
  "OS-KSADM:services": [{
    "id": "nova",
    "type": "compute",
    "description": "Computers in the Cloud"
  },
  {
    "id": "glance",
    "type": "image-service",
    "description": "Server Images"
  }
],
  "OS-KSADM:services_links": []
}
```

2.1.4.2. Add Service

Verb	URI	Description
PUT	/OS-KSADM/services	Add a service.

Add a service.

Table 2.28. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.

Normal Response Code(s)

- service (201)

Error Response Code(s)

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

Example 2.35. Add a service Request

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

<service xmlns="http://docs.openstack.org/identity/api/ext/OS-KSADM/v1.0" id=
"nova"
  type="compute" description="OpenStack Compute Service" />

{
  "OS-KSADM:service":{
    "id":"nova",
    "type":"compute",
    "description":"A description ..."
  }
}
```

Example 2.36. Add a service Response

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

<service xmlns="http://docs.openstack.org/identity/api/ext/OS-KSADM/v1.0" id=
"nova"
  type="compute" description="OpenStack Compute Service" />

{
  "OS-KSADM:service":{
    "id":"nova",
    "type":"compute",
    "description":"A description ..."
  }
}
```

2.1.4.3. Get Service

Verb	URI	Description
GET	/OS-KSADM/services/{serviceId}	Get a service.

Get a service.

Table 2.29. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
serviceId	template	Int. Optional.

Normal Response Code(s)

- service (200 203)

Error Response Code(s)

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

Example 2.37. Get a service Response

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

<service xmlns="http://docs.openstack.org/identity/api/ext/OS-KSADM/v1.0" id=
"nova"
  type="compute" description="OpenStack Compute Service" />

{
  "OS-KSADM:service":{
    "id":"nova",
    "type":"compute",
    "description":"A description ..."
  }
}
```

2.1.4.4. Delete Service

Verb	URI	Description
DELETE	/OS-KSADM/services/{serviceId}	Delete a service.

Delete a service.

Table 2.30. Parameters

Name	Style	Description
Request parameters		
X-Auth-Token	header	You need a valid admin token for access. String. Required.
serviceId	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 2.38. Delete a Service

This operation does not require a request body.