

OS-KSADM Extension

API v2.0 (Aug 29, 2011)

DRAFT



OS-KSADM 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-KSADM extensions on top of core keystone operations.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table of Contents

1. About This Extension	1
1.1. Document Change History	2
2. Extension Operations	3
2.1. OS-KSADM Admin Extension API (Service Developer Operations)	4
2.1.1. User Operations	5
2.1.2. Tenant Operations	18
2.1.3. Role Operations	26
2.1.4. Service Operations	30

List of Tables

2.1. Authentication Header	4
2.2. List users parameters	6
2.3. Add user parameters	7
2.4. Update user parameters	8
2.5. Delete user parameters	9
2.6. List Global Roles for a User parameters	10
2.7. Add Global roles to a user. parameters	11
2.8. Get user Role parameters	12
2.9. Delete Global Roles on User. parameters	12
2.10. Add user Credential. parameters	13
2.11. List Credentials parameters	14
2.12. Update user credential parameters	15
2.13. Delete user credential parameters	17
2.14. Get user Credentials parameters	17
2.15. Add Tenant parameters	19
2.16. Update Tenant parameters	20
2.17. Delete a Tenant parameters	21
2.18. List users for a Tenant. parameters	22
2.19. List user with role for tenant. parameters	23
2.20. List roles for a Tenant. parameters	24
2.21. Add roles to a user on a tenant. parameters	25
2.22. Delete roles from a user on tenant. parameters	26
2.23. List Roles parameters	27
2.24. Add Role parameters	28
2.25. Get Role parameters	29
2.26. Delete Role parameters	30
2.27. List Services parameters	31
2.28. Add Service parameters	32
2.29. Get Service parameters	33
2.30. Delete Service parameters	34

List of Examples

2.1. List Users Response: XML	6
2.2. List Users Response: JSON	6
2.3. User Creation Request: XML	7
2.4. User Creation Request: JSON	7
2.5. User Creation Response: XML	8
2.6. User Creation Response: JSON	8
2.7. User Updation Request: XML	8
2.8. User Updation Request: JSON	9
2.9. User Updation Response: XML	9
2.10. User Updation Response: JSON	9
2.11. Delete User Request	10
2.12. List Global Roles for User Response: XML	10
2.13. List Global Roles for User Response: JSON	10
2.14. Adds global role to a user request	11
2.15. List Roles for User Response: XML	12
2.16. List Roles for User Response: JSON	12
2.17. Deletes global role from a user	13
2.18. Add Credentials Request: XML	14
2.19. Add Credentials Request: JSON	14
2.20. Add Credential Response: XML	14
2.21. Add Credential Response: JSON	14
2.22. List Credentials Response: XML	15
2.23. List Credentials Response: JSON	15
2.24. Update Credential Request: XML	16
2.25. Update Credential Request: JSON	16
2.26. Update Credential Response: XML	16
2.27. Update Credential Response: JSON	16
2.28. Delete User Credentials	17
2.29. Get User Credential Response: XML	18
2.30. Get User Credential Response: JSON	18
2.31. Tenant Creation Request: XML	19
2.32. Tenant Creation Request: JSON	19
2.33. Tenant Creation Response: XML	19
2.34. Tenant Creation Response: JSON	19
2.35. Tenant Update Request: XML	20
2.36. Tenant Update Request: JSON	20
2.37. Tenant Update Response: XML	21
2.38. Tenant Update Response: JSON	21
2.39. Delete Tenant Request	21
2.40. List Users for Tenant Response: XML	22
2.41. List Users for Tenant Response: JSON	22
2.42. List Users with a specific role for a Tenant Response: XML	23
2.43. List Users with a specific role for a Tenant Response: JSON	24
2.44. List Roles for Tenant Response: XML	25
2.45. List Roles for Tenant Response: JSON	25
2.46. Add role to a user for a Tenant Request	26
2.47. Delete Role from User for a Tenant Request	26
2.48. List Roles Response: XML	27

2.49. List Roles Response: JSON	27
2.50. Add a Role Request: XML	28
2.51. Add a Role Request: JSON	28
2.52. Add a Role Response: XML	29
2.53. Add a Role Response: JSON	29
2.54. Get a role: XML	29
2.55. Get a role: JSON	30
2.56. Delete a Role	30
2.57. List services Response: XML	31
2.58. List services Response: JSON	31
2.59. Add a service Request: XML	32
2.60. Add a service Request: JSON	32
2.61. Add a service Response: XML	33
2.62. Add a service Response: JSON	33
2.63. Get a service Response: XML	34
2.64. Get a service Response: JSON	34
2.65. Delete a Service	34

1. About This Extension

Name	OpenStack KSADM Extension
Namespace	http://docs.openstack.org/identity/api/ext/OS-KSADM/v1.0
Alias	OS-KSADM
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	v2.0/users	List users.
POST	v2.0/users	Adds a user.
POST	v2.0/users/{userId}	Update a user.
DELETE	v2.0/users/{userId}	Delete a user.
GET	v2.0/users/{userId}/OS-KSADM/roles? serviceId=string	List all the global roles for a user.
PUT	v2.0/users/{userId}/OS-KSADM/ roles/{roleId}	Adds a specific global role to a user.
GET	v2.0/users/{userId}/OS-KSADM/ roles/{roleId}	Get information about a global role that belongs to a user.
DELETE	v2.0/users/{userId}/OS-KSADM/ roles/{roleId}	Deletes a specific global role from a user.
POST	v2.0/users/{userId}/OS-KSADM/ credentials	Adds a credential to a user.
GET	v2.0/users/{userId}/OS-KSADM/ credentials?marker=string& limit=int	List credentials.
POST	v2.0/users/{userId}/OS-KSADM/ credentials/{credential-type}	Update credentials.
DELETE	v2.0/users/{userId}/OS-KSADM/ credentials/{credential-type}	Delete User credentials.
GET	v2.0/users/{userId}/OS-KSADM/ credentials/{credential-type}	Get user credentials.
Tenant Operations		
POST	v2.0/tenants	Creates a tenant.
POST	v2.0/tenants/{tenantId}	Updates a tenant.
DELETE	v2.0/tenants/{tenantId}	Deletes a tenant.
GET	v2.0/tenants/{tenantId}/users? marker=string&limit=int	Lists all the users for a tenant.
GET	v2.0/tenants/{tenantId}/users ?roleId=string&marker=string& limit=int	Lists all the users with a specific role for a tenant.
GET	v2.0/tenants/{tenantId}/OS-KSADM/ roles?marker=string&limit=int	Lists all the roles for a tenant.
PUT	v2.0/tenants/{tenantId}/users/ {userId}/roles/OS-KSADM/{roleId}	Adds a specific role to a user for a tenant.
DELETE	v2.0/tenants/{tenantId}/users/ {userId}/roles/OS-KSADM/{roleId}	Deletes a specific role from a user for a tenant.
Role Operations		
GET	v2.0/OS-KSADM/roles? serviceId=string&marker=string& limit=int	List roles.
POST	v2.0/OS-KSADM/roles	Add a Role.
GET	v2.0/OS-KSADM/roles/{roleId}	Get a role.
DELETE	v2.0/OS-KSADM/roles/{roleId}	Delete a role.
Service Operations		

Verb	URI	Description
GET	v2.0/OS-KSADM/services? marker=string&limit=int	List services.
POST	v2.0/OS-KSADM/services	Add a service.
GET	v2.0/OS-KSADM/services/{serviceId}	Get a service.
DELETE	v2.0/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	v2.0/users	List users.
POST	v2.0/users	Adds a user.
POST	v2.0/users/{userId}	Update a user.
DELETE	v2.0/users/{userId}	Delete a user.
GET	v2.0/users/{userId}/OS-KSADM/roles? serviceId=string	List all the global roles for a user.
PUT	v2.0/users/{userId}/OS-KSADM/ roles/{roleId}	Adds a specific global role to a user.
GET	v2.0/users/{userId}/OS-KSADM/ roles/{roleId}	Get information about a global role that belongs to a user.
DELETE	v2.0/users/{userId}/OS-KSADM/ roles/{roleId}	Deletes a specific global role from a user.
POST	v2.0/users/{userId}/OS-KSADM/ credentials	Adds a credential to a user.
GET	v2.0/users/{userId}/OS-KSADM/ credentials?marker=string& limit=int	List credentials.
POST	v2.0/users/{userId}/OS-KSADM/ credentials/{credential-type}	Update credentials.
DELETE	v2.0/users/{userId}/OS-KSADM/ credentials/{credential-type}	Delete User credentials.
GET	v2.0/users/{userId}/OS-KSADM/ credentials/{credential-type}	Get user credentials.
Tenant Operations		
POST	v2.0/tenants	Creates a tenant.
POST	v2.0/tenants/{tenantId}	Updates a tenant.
DELETE	v2.0/tenants/{tenantId}	Deletes a tenant.
GET	v2.0/tenants/{tenantId}/users? marker=string&limit=int	Lists all the users for a tenant.

Verb	URI	Description
GET	v2.0/tenants/{tenantId}/users? roleId= <i>string</i> &marker= <i>string</i> & limit= <i>int</i>	Lists all the users with a specific role for a tenant.
GET	v2.0/tenants/{tenantId}/OS-KSADM/ roles?marker= <i>string</i> &limit= <i>int</i>	Lists all the roles for a tenant.
PUT	v2.0/tenants/{tenantId}/users/ {userId}/roles/OS-KSADM/{roleId}	Adds a specific role to a user for a tenant.
DELETE	v2.0/tenants/{tenantId}/users/ {userId}/roles/OS-KSADM/{roleId}	Deletes a specific role from a user for a tenant.
Role Operations		
GET	v2.0/OS-KSADM/roles? serviceId= <i>string</i> &marker= <i>string</i> & limit= <i>int</i>	List roles.
POST	v2.0/OS-KSADM/roles	Add a Role.
GET	v2.0/OS-KSADM/roles/{roleId}	Get a role.
DELETE	v2.0/OS-KSADM/roles/{roleId}	Delete a role.
Service Operations		
GET	v2.0/OS-KSADM/services? marker= <i>string</i> &limit= <i>int</i>	List services.
POST	v2.0/OS-KSADM/services	Add a service.
GET	v2.0/OS-KSADM/services/{serviceId}	Get a service.
DELETE	v2.0/OS-KSADM/services/{serviceId}	Delete a service.

2.1.1. User Operations

Verb	URI	Description
GET	v2.0/users	List users.
POST	v2.0/users	Adds a user.
POST	v2.0/users/{userId}	Update a user.
DELETE	v2.0/users/{userId}	Delete a user.
GET	v2.0/users/{userId}/OS-KSADM/roles ?serviceId= <i>string</i>	List all the global roles for a user.
PUT	v2.0/users/{userId}/OS-KSADM/ roles/{roleId}	Adds a specific global role to a user.
GET	v2.0/users/{userId}/OS-KSADM/ roles/{roleId}	Get information about a global role that belongs to a user.
DELETE	v2.0/users/{userId}/OS-KSADM/ roles/{roleId}	Deletes a specific global role from a user.
POST	v2.0/users/{userId}/OS-KSADM/ credentials	Adds a credential to a user.
GET	v2.0/users/{userId}/OS-KSADM/ credentials?marker= <i>string</i> & limit= <i>int</i>	List credentials.
POST	v2.0/users/{userId}/OS-KSADM/ credentials/{credential-type}	Update credentials.
DELETE	v2.0/users/{userId}/OS-KSADM/ credentials/{credential-type}	Delete User credentials.
GET	v2.0/users/{userId}/OS-KSADM/ credentials/{credential-type}	Get user credentials.

2.1.1.1. List users

Verb	URI	Description
GET	v2.0/users	List users.

List users.

Table 2.2. List users 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

```
<?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>
```

Example 2.2. List Users Response: JSON

```
{
  "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	v2.0/users	Adds a user.

Adds a user.

Table 2.3. Add user 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 2.3. User Creation Request: XML

```
<?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"/>
```

Example 2.4. User Creation Request: JSON

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

Example 2.5. User Creation Response: XML

```
<?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"/>
```

Example 2.6. User Creation Response: JSON

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

2.1.1.3. Update user

Verb	URI	Description
POST	v2.0/users/{userId}	Update a user.

Update a user.

Table 2.4. Update user 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 2.7. User Updation Request: XML

```
<?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"/>
```

Example 2.8. User Updation Request: JSON

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

Example 2.9. User Updation Response: XML

```
<?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"/>
```

Example 2.10. User Updation Response: JSON

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

2.1.1.4. Delete user

Verb	URI	Description
DELETE	v2.0/users/{userId}	Delete a user.

Delete a user.

Table 2.5. Delete user 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 2.11. 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	v2.0/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. List Global Roles for a User 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 2.12. List Global Roles for User Response: XML

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

<roles xmlns="http://docs.openstack.org/identity/api/v2.0">
  <role id="123" name="Admin" description="All Access" />
  <role id="234" name="Guest" description="Guest Access" />
</roles>
```

Example 2.13. List Global Roles for User Response: JSON

```
{
```



```

"roles": [{
  "id": "123",
  "name": "compute:admin",
  "description": "Nova Administrator",
},
],
"roles_links": []
}

```

2.1.1.6. Add Global roles to a user.

Verb	URI	Description
PUT	v2.0/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. Add Global roles to a user. 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 2.14. 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	v2.0/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. Get user Role 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 2.15. List Roles for User Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<role xmlns="http://docs.openstack.org/identity/api/v2.0"
  id="123" name="Admin" description="All Access" />
```

Example 2.16. List Roles for User Response: JSON

```
{
  "role": {
    "id": "123",
    "name": "Guest",
    "description": "Guest Access"
  }
}
```

2.1.1.8. Delete Global Roles on User.

Verb	URI	Description
DELETE	v2.0/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. Delete Global Roles on User. parameters

Name	Style	Description
Request parameters		

Name	Style	Description
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 2.17. 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	v2.0/users/{userId}/OS-KSADM/credentials	Adds a credential to a user.

Adds a credential to a user.

Table 2.10. Add user Credential. 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 2.18. Add Credentials Request: XML

```
<?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" />
```

Example 2.19. Add Credentials Request: JSON

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

Example 2.20. Add Credential Response: XML

```
<?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" />
```

Example 2.21. Add Credential Response: JSON

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

2.1.1.10. List Credentials

Verb	URI	Description
GET	v2.0/users/{userId}/OS-KSADM/credentials?marker=string&limit=int	List credentials.

List credentials.

Table 2.11. List Credentials parameters

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

Name	Style	Description
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 2.22. List Credentials Response: XML

```
<?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>
```

Example 2.23. List Credentials Response: JSON

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

2.1.1.11. Update user credential

Verb	URI	Description
POST	v2.0/users/{userId}/OS-KSADM/credentials/{credential-type}	Update credentials.

Update credentials.

Table 2.12. Update user credential parameters

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

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 2.24. Update Credential Request: XML

```
<?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" />
```

Example 2.25. Update Credential Request: JSON

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

Example 2.26. Update Credential Response: XML

```
<?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" />
```

Example 2.27. Update Credential Response: JSON

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

2.1.1.12. Delete user credential

Verb	URI	Description
DELETE	v2.0/users/{userId}/OS-KSADM/credentials/{credential-type}	Delete User credentials.

Delete User credentials.

Table 2.13. Delete user credential parameters

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

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 2.28. Delete User Credentials

This operation does not require a request body.

2.1.1.13. Get user Credentials

Verb	URI	Description
GET	v2.0/users/{userId}/OS-KSADM/credentials/{credential-type}	Get user credentials.

Get user credentials.

Table 2.14. Get user Credentials parameters

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

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 2.29. Get User Credential Response: XML

```
<?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" />
```

Example 2.30. Get User Credential Response: JSON

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

2.1.2. Tenant Operations

Verb	URI	Description
POST	v2.0/tenants	Creates a tenant.
POST	v2.0/tenants/{tenantId}	Updates a tenant.
DELETE	v2.0/tenants/{tenantId}	Deletes a tenant.
GET	v2.0/tenants/{tenantId}/users? marker=string&limit=int	Lists all the users for a tenant.
GET	v2.0/tenants/{tenantId}/users ?roleId=string&marker=string& limit=int	Lists all the users with a specific role for a tenant.
GET	v2.0/tenants/{tenantId}/OS-KSADM/ roles?marker=string&limit=int	Lists all the roles for a tenant.
PUT	v2.0/tenants/{tenantId}/users/ {userId}/roles/OS-KSADM/{roleId}	Adds a specific role to a user for a tenant.
DELETE	v2.0/tenants/{tenantId}/users/ {userId}/roles/OS-KSADM/{roleId}	Deletes a specific role from a user for a tenant.

2.1.2.1. Add Tenant

Verb	URI	Description
POST	v2.0/tenants	Creates a tenant.

This call creates a tenant.

Table 2.15. Add Tenant 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 2.31. Tenant Creation Request: XML

```
<?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>
```

Example 2.32. Tenant Creation Request: JSON

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

Example 2.33. Tenant Creation Response: XML

```
<?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>
```

Example 2.34. Tenant Creation Response: JSON

```
{
  "tenant": {
    "id": "1234",
    "name": "ACME corp",
  }
}
```

```
"description": "A description ...",
"enabled": true
}
```

2.1.2.2. Update Tenant

Verb	URI	Description
POST	v2.0/tenants/{tenantId}	Updates a tenant.

This call updates a tenant.

Table 2.16. Update Tenant 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 2.35. Tenant Update Request: XML

```
<?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>
```

Example 2.36. Tenant Update Request: JSON

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

```
}

```

Example 2.37. Tenant Update Response: XML

```
<?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>
```

Example 2.38. Tenant Update Response: JSON

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

2.1.2.3. Delete a Tenant

Verb	URI	Description
DELETE	v2.0/tenants/{tenantId}	Deletes a tenant.

This call deletes a tenant.

Table 2.17. Delete a Tenant 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 2.39. Delete Tenant Request

This operation does not require a request body.

2.1.2.4. List users for a Tenant.

Verb	URI	Description
GET	v2.0/tenants/{tenantId}/users? marker=string&limit=int	Lists all the users for a tenant.

Lists all the users for a tenant.

Table 2.18. List users for a Tenant. 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 2.40. List Users for Tenant Response: XML

```
<?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>
```

Example 2.41. List Users for Tenant Response: JSON

```
{
  "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	v2.0/tenants/{tenantId}/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. List user with role for tenant. 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 2.42. List Users with a specific role for a Tenant Response: XML

```

<?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>
```

Example 2.43. List Users with a specific role for a Tenant Response: JSON

```
{
  "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	v2.0/tenants/{tenantId}/OS-KSADM/roles?marker= <i>string</i> &limit= <i>int</i>	Lists all the roles for a tenant.

Lists all the roles for a tenant.

Table 2.20. List roles for a Tenant. 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 2.44. List Roles for Tenant Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<roles xmlns="http://docs.openstack.org/identity/api/v2.0">
  <role id="123" name="Admin" description="All Access" />
  <role id="234" name="Guest" description="Guest Access" />
</roles>
```

Example 2.45. List Roles for Tenant Response: JSON

```
{
  "roles": [{
    "id": "123",
    "name": "compute:admin",
    "description": "Nova Administrator",
  }],
  "roles_links": []
}
```

2.1.2.7. Add roles to a user on a tenant.

Verb	URI	Description
PUT	v2.0/tenants/{tenantId}/users/{userId}/roles/OS-KSADM/{roleId}	Adds a specific role to a user for a tenant.

Adds a specific role to a user for a tenant.

Table 2.21. Add roles to a user on a tenant. 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 2.46. Add role to a user for a Tenant Request

This operation does not require a request body.

2.1.2.8. Delete roles from a user on tenant.

Verb	URI	Description
DELETE	v2.0/tenants/{tenantId}/users/{userId}/roles/OS-KSADM/{roleId}	Deletes a specific role from a user for a tenant.

Deletes a specific role from a user for a tenant.

Table 2.22. Delete roles from a user on tenant. 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 2.47. 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	v2.0/OS-KSADM/roles? serviceId=string&marker=string& limit=int	List roles.
POST	v2.0/OS-KSADM/roles	Add a Role.

Verb	URI	Description
GET	v2.0/OS-KSADM/roles/{roleId}	Get a role.
DELETE	v2.0/OS-KSADM/roles/{roleId}	Delete a role.

2.1.3.1. List Roles

Verb	URI	Description
GET	v2.0/OS-KSADM/roles? serviceId=string&marker=string& limit=int	List roles.

List roles.

Table 2.23. List Roles 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 2.48. List Roles Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<roles xmlns="http://docs.openstack.org/identity/api/v2.0">
  <role id="123" name="Admin" description="All Access" />
  <role id="234" name="Guest" description="Guest Access" />
</roles>
```

Example 2.49. List Roles Response: JSON

```
{
  "roles": [{
    "id": "123",
```

```
        "name": "compute:admin",
        "description": "Nova Administrator",
      },
    ],
    "roles_links": []
  }
}
```

2.1.3.2. Add Role

Verb	URI	Description
POST	v2.0/OS-KSADM/roles	Add a Role.

Add a Role.

Table 2.24. Add Role 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 2.50. Add a Role Request: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<role xmlns="http://docs.openstack.org/identity/api/v2.0"
  id="123" name="Admin" description="All Access" />
```

Example 2.51. Add a Role Request: JSON

```
{
  "role": {
    "id": "123",
    "name": "Guest",
    "description": "Guest Access"
  }
}
```

Example 2.52. Add a Role Response: XML

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

<role xmlns="http://docs.openstack.org/identity/api/v2.0"
  id="123" name="Admin" description="All Access" />
```

Example 2.53. Add a Role Response: JSON

```
{
  "role": {
    "id": "123",
    "name": "Guest",
    "description": "Guest Access"
  }
}
```

2.1.3.3. Get Role

Verb	URI	Description
GET	v2.0/OS-KSADM/roles/{roleId}	Get a role.

Get a role.

Table 2.25. Get Role 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 2.54. Get a role: XML

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

<role xmlns="http://docs.openstack.org/identity/api/v2.0"
  id="123" name="Admin" description="All Access" />
```

Example 2.55. Get a role: JSON

```
{
  "role": {
    "id": "123",
    "name": "Guest",
    "description": "Guest Access"
  }
}
```

2.1.3.4. Delete Role

Verb	URI	Description
DELETE	v2.0/OS-KSADM/roles/{roleId}	Delete a role.

Delete a role.

Table 2.26. Delete Role 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 2.56. Delete a Role

This operation does not require a request body.

2.1.4. Service Operations

Verb	URI	Description
GET	v2.0/OS-KSADM/services? marker=string&limit=int	List services.
POST	v2.0/OS-KSADM/services	Add a service.
GET	v2.0/OS-KSADM/services/{serviceId}	Get a service.

Verb	URI	Description
DELETE	v2.0/OS-KSADM/services/{serviceId}	Delete a service.

2.1.4.1. List Services

Verb	URI	Description
GET	v2.0/OS-KSADM/services? marker=string&limit=int	List services.

List services.

Table 2.27. List Services 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)

- services (200 203)

Error Response Code(s)

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

Example 2.57. List services Response: XML

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

<services xmlns="http://docs.openstack.org/identity/api/ext/OS-KSADM/v1.0">
  <service id="123" name="nova" type="compute" description="Openstack Compute Service" />
  <service id="234" name="glance" type="image" description="Openstack Image Service" />
</services>
```

Example 2.58. List services Response: JSON

```
{
  "OS-KSADM:services": [{
    "id": "123",
    "name": "nova",
    "type": "compute",
```

```
        "description": "OpenStack Compute Service"
      },
      {
        "id": "234",
        "name": "glance",
        "type": "image",
        "description": "OpenStack Image Service"
      }
    ],
    "OS-KSADM:services_links": []
  }
}
```

2.1.4.2. Add Service

Verb	URI	Description
POST	v2.0/OS-KSADM/services	Add a service.

Add a service.

Table 2.28. Add Service 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 2.59. Add a service Request: XML

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

<service xmlns="http://docs.openstack.org/identity/api/ext/OS-KSADM/v1.0"
  id="123" name="nova" type="compute" description="OpenStack Compute Service" /
>
```

Example 2.60. Add a service Request: JSON

```
{
  "OS-KSADM:service": {
```

```

    "id": "123",
    "name": "nova",
    "type": "compute",
    "description": "OpenStack Compute Service"
  }
}

```

Example 2.61. Add a service Response: XML

```

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

<service xmlns="http://docs.openstack.org/identity/api/ext/OS-KSADM/v1.0"
  id="123" name="nova" type="compute" description="OpenStack Compute Service" /
>

```

Example 2.62. Add a service Response: JSON

```

{
  "OS-KSADM:service": {
    "id": "123",
    "name": "nova",
    "type": "compute",
    "description": "OpenStack Compute Service"
  }
}

```

2.1.4.3. Get Service

Verb	URI	Description
GET	v2.0/OS-KSADM/services/{serviceId}	Get a service.

Get a service.

Table 2.29. Get Service 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 2.63. Get a service Response: XML

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

<service xmlns="http://docs.openstack.org/identity/api/ext/OS-KSADM/v1.0"
  id="123" name="nova" type="compute" description="OpenStack Compute Service" /
>
```

Example 2.64. Get a service Response: JSON

```
{
  "OS-KSADM:service":{
    "id":"123",
    "name":"nova",
    "type":"compute",
    "description":"OpenStack Compute Service"
  }
}
```

2.1.4.4. Delete Service

Verb	URI	Description
DELETE	v2.0/OS-KSADM/services/{serviceId}	Delete a service.

Delete a service.

Table 2.30. Delete Service 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 2.65. Delete a Service

This operation does not require a request body.