

Rackspace API Key Authentication

EXT v1.0 (Sep 13, 2011)

DRAFT



Rackspace API Key Authentication Extension (Admin Operations)

EXT v1.0 (2011-09-13)

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This document is intended for service developers interested in using the Rackspace API Key Authentication Admin Extension along with the Keystone - OpenStack Identity (API). The document is for informational purposes only and is provided "AS IS."

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1. About This Extension

Name	Rackspace API Key Authentication Admin Extension
Namespace	http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0
Alias	RAX-KSKEY-admin
Dependencies	Keystone - OpenStack Identity
Doc Link (PDF)	OS-KSCATALOG-admin Extension /home/yogi/keystone/content/admin/RAX-KSKEY-admin-devguide.pdf
Doc Link (WADL)	/home/yogi/keystone/keystone/content/admin/RAX-KSKEY-admin.wadl
Doc Link (XSD)	/home/yogi/keystone/content/service/xsd/RAX-KSKEY-credentials.xsd
Short Description	Rackspace extensions to Keystone v2.0 API enabling API Key authentication.

Example 1.1. Extension Query Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<extension xmlns="http://docs.openstack.org/common/api/v2.0"
  xmlns:atom="http://www.w3.org/2005/Atom"
  name="Rackspace API Key authentication" namespace="http://docs.
rackspace.com/identity/api/ext/RAX-KSKEY/v1.0"
  alias="RAX-KSKEY-admin"
  updated="2011-08-14T13:25:27-06:00">
  <description>
    Rackspace extensions to Keystone v2.0 API
    enabling API Key authentication.
  </description>
  <atom:link rel="describedby" type="application/pdf"
    href="https://github.com/openstack/keystone/raw/
master/keystone/content/service/RAX-KSKEY-admin-devguide.pdf"/>
</extension>
```

Example 1.2. Extension Query Response: JSON

```
{
  "extension": {
    "name": "Rackspace API Key Authentication Admin",
    "namespace": "http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0",
    "alias": "RAX-KSKEY-admin",
    "updated": "2011-07-13T13:25:27-06:00",
    "description": "Rackspace extensions to Keystone v2.0 API enabling API Key
authentication.",
    "links": [{
      "rel": "describedby",
      "type": "application/pdf",
      "href": "https://github.com/openstack/keystone/raw/master/keystone/
content/admin/RAX-KSKEY-service-devguide.pdf"
    }]
  }
}
```

1.1. Document Change History

Revision Date	Summary of Changes
Sep. 13, 2011	• Initial release.

2. Summary of Changes

The Rackspace API Key Authentication Admin Extension allows crud/listing operations on *apikeyCredentials*.

2.1. New Headers

None.

2.2. New Faults

None.

2.3. New Resources

None.

2.4. New Actions

None.

2.5. New Element

2.5.1. *apikeyCredentials*

This extension allows authentication calls to accept new type of credentials *apikeyCredentials*. These are additional type of credentials defined to support rackspace style authentication. Examples of *apikeyCredentials* are illustrated below

Example 2.1. *apikeyCredentials* XML

```
<?xml version="1.0" encoding="UTF-8"?>
<apikeyCredentials
  xmlns="http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0"
  username="testuser"
  apikey="aaaaa-bbbbbb-cccc-12345678"/>
```

Example 2.2. *apikeyCredentials* JSON

```
{
  "RAX-KSKEY:apikeyCredentials":{
    "username":"test_user",
    "apikey":"aaaaa-bbbbbb-cccc-12345678"
  }
}
```


2.6. RAX-KSKEY-admin Extension API Operations

Table 2.1. Authentication Header

Header Type	Name	Value
HTTP/1.1 Request	X-Auth-Token	txfa8426a08eaf

Following operations are the list of operations whose behavior is altered by Rackspace API Key Authentication Extension:

Verb	URI	Description
User Operations		
POST	/users/{userId}/credentials	Adds a credential to a user.
GET	/users/{userId}/credentials? marker=string&limit=int	List credentials.
POST	/users/{userId}/credentials/RAX- KSKEY:apikeyCredentials	Update credentials.
POST	/users/{userId}/credentials/RAX- KSKEY:apikeyCredentials	Delete User credentials.
GET	/users/{userId}/credentials/RAX- KSKEY:apikeyCredentials	Get user credentials.

2.6.1. User Operations

Verb	URI	Description
POST	/users/{userId}/credentials	Adds a credential to a user.
GET	/users/{userId}/credentials? marker=string&limit=int	List credentials.
POST	/users/{userId}/credentials/RAX- KSKEY:apikeyCredentials	Update credentials.
POST	/users/{userId}/credentials/RAX- KSKEY:apikeyCredentials	Delete User credentials.
GET	/users/{userId}/credentials/RAX- KSKEY:apikeyCredentials	Get user credentials.

2.6.1.1. Add user Credential.

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

Adds a credential to a user.

Table 2.2. 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 2.3. Add Credentials Request: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<apikeyCredentials
  xmlns="http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0"
  username="testuser"
  apikey="aaaaa-bbbbb-cccc-12345678"/>
```

Example 2.4. Add Credentials Request: JSON

```
{
  "RAX-KSKEY:apikeyCredentials": {
    "username": "test_user",
    "apikey": "aaaaa-bbbbb-cccc-12345678"
  }
}
```

Example 2.5. Add Credential Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<apikeyCredentials
  xmlns="http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0"
  username="testuser"
  apikey="aaaaa-bbbbb-cccc-12345678"/>
```

Example 2.6. Add Credential Response: JSON

```
{
  "RAX-KSKEY:apikeyCredentials": {
    "username": "test_user",
    "apikey": "aaaaa-bbbbb-cccc-12345678"
  }
}
```

2.6.1.2. List Credentials

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

List credentials.

Table 2.3. 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.
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 2.7. 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"/>
  <apikeyCredentials
    xmlns="http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0"
    username="testuser"
    apikey="aaaaa-bbbbbb-cccc-12345678"/>
</credentials>
```

Example 2.8. List Credentials Response: JSON

```
{
  "credentials": [{
    "passwordCredentials": {
      "username": "test_user",
      "password": "mypass"
    },
    {
      "RAX-KSKEY:apikeyCredentials": {
        "username": "test_user",
        "apikey": "aaaaa-bbbbbb-cccc-12345678"
      }
    }
  ],
  "credentials_links": []
}
```

2.6.1.3. Update user credential

Verb	URI	Description
POST	/users/{userId}/credentials/RAX-KSKEY:apikeyCredentials	Update credentials.

Update credentials.

Table 2.4. Update 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 (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. Update Credential Request: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<apikeyCredentials
  xmlns="http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0"
  username="testuser"
  apikey="aaaaa-bbbbbb-cccc-12345678" />
```

Example 2.10. Update Credential Request: JSON

```
{
  "RAX-KSKEY:apikeyCredentials": {
    "username": "test_user",
    "apikey": "aaaaa-bbbbbb-cccc-12345678"
  }
}
```

Example 2.11. Update Credential Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<apikeyCredentials
  xmlns="http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0"
```

```
username="testuser"
apikey="aaaaa-bbbbb-cccc-12345678" />
```

Example 2.12. Update Credential Response: JSON

```
{
  "RAX-KSKEY:apikeyCredentials":{
    "username":"test_user",
    "apikey":"aaaaa-bbbbb-cccc-12345678"
  }
}
```

2.6.1.4. Delete user credential

Verb	URI	Description
POST	/users/{userId}/credentials/RAX-KSKEY:apikeyCredentials	Delete User credentials.

Delete User credentials.

Table 2.5. Delete 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)

- (204)

Error Response Code(s)

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

Example 2.13. Delete User Credentials

This operation does not require a request body.

2.6.1.5. Get user Credentials

Verb	URI	Description
GET	/users/{userId}/credentials/RAX-KSKEY:apikeyCredentials	Get user credentials.

Get user credentials.

Table 2.6. Get user Credentials 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 (200 203)

Error Response Code(s)

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

Example 2.14. Get User Credential Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
<apikeyCredentials
  xmlns="http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0"
  username="testuser"
  apikey="aaaaa-bbbbbb-ccccc-12345678" />
```

Example 2.15. Get User Credential Response: JSON

```
{
  "RAX-KSKEY:apikeyCredentials": {
    "username": "test_user",
    "apikey": "aaaaa-bbbbbb-ccccc-12345678"
  }
}
```