

# Rackspace API Key Authentication

EXT v1.0 (Sep 13, 2011)

DRAFT



## EXT v1.0 (2011-09-13)

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	<a href="http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0">http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0</a>
Alias	RAX-KSKEY
Dependencies	Keystone - OpenStack Identity
Doc Link (PDF)	>RAX-KSKEY Extension <a href="/home/yogi/keystone/content/admin/RAX-KSKEY-admin-devguide.pdf">/home/yogi/keystone/content/admin/RAX-KSKEY-admin-devguide.pdf</a>
Doc Link (WADL)	<a href="https://raw.githubusercontent.com/openstack/keystone/master/keystone/content/admin/RAX-KSKEY-admin.wadl">https://raw.githubusercontent.com/openstack/keystone/master/keystone/content/admin/RAX-KSKEY-admin.wadl</a>
Doc Link (XSD)	<a href="/home/yogi/keystone/content/service/xsd/RAX-KSKEY-credentials.xsd">/home/yogi/keystone/content/service/xsd/RAX-KSKEY-credentials.xsd</a>
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/admin/RAX-KSKEY-admin-devguide.pdf"/>
  <atom:link rel="describedby" type="application/vnd.sun.wadl+xml"
    href="https://github.com/openstack/keystone/raw/
master/keystone/content/admin/RAX-KSKEY-admin.wadl"/>
</extension>
```

### Example 1.2. Extension Query Response: JSON

```
{
  "extension": {
    "name": "Rackspace API Key Authentication",
    "namespace": "http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0",
    "alias": "RAX-KSKEY",
    "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-admin-devguide.pdf"
    },
    {
      "rel": "describedby",
      "type": "application/vnd.sun.wadl+xml",
      "href": "https://github.com/openstack/keystone/raw/master/keystone/
content/admin/RAX-KSKEY-admin.wadl"
    }
  ]
}
}
```

## 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	v2.0/users/{userId}/credentials	Adds a credential to a user.
GET	v2.0/users/{userId}/credentials? marker=string&limit=int	List credentials.
POST	v2.0/users/{userId}/credentials/ RAX-KSKEY:apikeyCredentials	Update credentials.
DELETE	v2.0/users/{userId}/credentials/ RAX-KSKEY:apikeyCredentials	Delete User credentials.
GET	v2.0/users/{userId}/credentials/ RAX-KSKEY:apikeyCredentials	Get user credentials.

### 2.6.1. User Operations

Verb	URI	Description
POST	v2.0/users/{userId}/credentials	Adds a credential to a user.
GET	v2.0/users/{userId}/credentials? marker=string&limit=int	List credentials.
POST	v2.0/users/{userId}/credentials/ RAX-KSKEY:apikeyCredentials	Update credentials.
DELETE	v2.0/users/{userId}/credentials/ RAX-KSKEY:apikeyCredentials	Delete User credentials.
GET	v2.0/users/{userId}/credentials/ RAX-KSKEY:apikeyCredentials	Get user credentials.

#### 2.6.1.1. Add user Credential.

Verb	URI	Description
POST	v2.0/users/{userId}/credentials	Adds a credential to a user.

Normal Response Code(s): 201

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

Adds a credential to a user.

**Table 2.2. Add user Credential. Request Parameters**

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

Name	Style	Description
		String. Required.

### Example 2.3. Add user 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-bbbbb-cccc-12345678" />
```

### Example 2.4. Add user Credential. Request: JSON

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

### Example 2.5. Add 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-bbbbb-cccc-12345678" />
```

### Example 2.6. Add user Credential. Response: JSON

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

## 2.6.1.2. List Credentials

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

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 credentials.

### Table 2.3. List Credentials Request Parameters

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

Name	Style	Description
		String. Required.
marker	query	String. Optional.
limit	query	Int. Optional.

### 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	v2.0/users/{userId}/credentials/ RAX-KSKEY:apikeyCredentials	Update credentials.

Normal Response Code(s): 200

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

Update credentials.

**Table 2.4. Update user credential Request Parameters**

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

### Example 2.9. Update user 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-bbbbb-cccc-12345678" />
```

### Example 2.10. Update user credential Request: JSON

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

### Example 2.11. Update 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-bbbbb-cccc-12345678" />
```

### Example 2.12. Update user credential Response: JSON

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

## 2.6.1.4. Delete user credential

Verb	URI	Description
DELETE	v2.0/users/{userId}/credentials/ RAX-KSKEY:apikeyCredentials	Delete User credentials.

Normal Response Code(s): 204

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

Delete User credentials.

Table 2.5. Delete user credential Request Parameters

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

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

### 2.6.1.5. Get user Credentials

Verb	URI	Description
GET	v2.0/users/{userId}/credentials/ RAX-KSKEY:apikeyCredentials	Get user credentials.

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 user credentials.

**Table 2.6. Get user Credentials Request Parameters**

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

This operation does not require a request body.

#### Example 2.13. Get user Credentials 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-cccc-12345678" />
```

#### Example 2.14. Get user Credentials Response: JSON

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