Rackspace API Key Authentication

EXT v1.0 (Sep 13, 2011)

DRAFT

openstack™

Rackspace API Key Authentication Extension (Admin Operations)

EXT v1.0 (2011-09-13)
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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
Dependencies	Keystone - OpenStack Identity
	>RAX-KSKEY Extension
Doc Link (PDF)	/home/yogi/keystone/content/admin/RAX-KSKEY-admin-devguide.pdf
Doc Link (WADL)	https://raw.github.com/openstack/keystone/master/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
<?xml version="1.0" encoding="UTF-8"?>
<extension  xmlns="http://docs.openstack.org/common/api/v1.0"
            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

```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-bbbbb-ccccc-12345678"/>
```

Example 2.2. apikeyCredentials JSON

```
{
    "RAX-KSKEY:apiKeyCredentials":{
        "username":"test_user",
        "apiKey":"aaaaa-bbbbb-ccccc-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}/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/RAX-KSKEY:apiKeyCredentials`	Update credentials.
DELETE	`v2.0/users/{userId}/OS-KSADM/credentials/RAX-KSKEY:apiKeyCredentials`	Delete User credentials.
GET	`v2.0/users/{userId}/OS-KSADM/credentials/RAX-KSKEY:apiKeyCredentials`	Get user credentials.

2.6.1. User Operations

Verb	URI	Description
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/RAX-KSKEY:apiKeyCredentials`	Update credentials.
DELETE	`v2.0/users/{userId}/OS-KSADM/credentials/RAX-KSKEY:apiKeyCredentials`	Delete User credentials.
GET	`v2.0/users/{userId}/OS-KSADM/credentials/RAX-KSKEY:apiKeyCredentials`	Get user credentials.

2.6.1.1. Add user Credential.

Verb	URI	Description
POST	`v2.0/users/{userId}/OS-KSADM/` `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. String. Required.
`userId`	template	String.

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-ccccc-12345678"/>
```

Example 2.4. Add user Credential. Request: JSON

```
{
    "RAX-KSKEY:apiKeyCredentials":{
        "username":"test_user",
        "apiKey":"aaaaa-bbbbb-ccccc-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-ccccc-12345678"/>
```

Example 2.6. Add user Credential. Response: JSON

```
{
    "RAX-KSKEY:apiKeyCredentials":{
        "username":"test_user",
        "apiKey":"aaaaa-bbbbb-ccccc-12345678"
    }
}
```

2.6.1.2. List Credentials

Verb	URI	Description

GET	`v2.0/users/{userId}/OS-KSADM/`
	`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. String. Required.
`marker`	query	String. Optional.
`limit`	query	Int. Optional.
`userId`	template	String.

Example 2.7. List Credentials Response: XML

```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-bbbbb-ccccc-12345678"/>
</credentials>
```

Example 2.8. List Credentials Response: JSON

```json
{
    "credentials":[{
            "passwordCredentials":{
                "username":"test_user",
                "password":"mypass"
            }
        },
        {
            "RAX-KSKEY:apiKeyCredentials":{
                "username":"test_user",
                "apiKey":"aaaaa-bbbbb-ccccc-12345678"
            }
        }
    ],
    "credentials_links":[]
}
```

2.6.1.3. Update user credential

Verb	URI	Description
POST	v2.0/users/{userId}/OS-KSADM/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.
userId	template	String.

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-ccccc-12345678"/>
```

Example 2.10. Update user credential Request: JSON

```
{
    "RAX-KSKEY:apiKeyCredentials":{
        "username":"test_user",
        "apiKey":"aaaaa-bbbbb-ccccc-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-ccccc-12345678"/>
```

Example 2.12. Update user credential Response: JSON

```
{
    "RAX-KSKEY:apiKeyCredentials":{
        "username":"test_user",
        "apiKey":"aaaaa-bbbbb-ccccc-12345678"
    }
```

```
}
```

2.6.1.4. Delete user credential

Verb	URI	Description
DELETE	`v2.0/users/{userId}/OS-KSADM/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.
`userId`	template	String.

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}/OS-KSADM/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.
`userId`	template	String.

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-bbbbb-ccccc-12345678"/>
```

Example 2.14. Get user Credentials Response: JSON

```
{
    "RAX-KSKEY:apiKeyCredentials":{
        "username":"test_user",
        "apiKey":"aaaaa-bbbbb-ccccc-12345678"
    }
}
```