

Rackspace API Key Authentication

EXT v1.0 (Sep 13, 2011)

DRAFT



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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 |
| Dependencies | Keystone - OpenStack Identity |
| Doc Link (PDF) | >RAX-KSKEY 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/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. |

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 | v2.0/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 | v2.0/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-bbbbbb-cccc-12345678" />
```

Example 2.12. Update Credential Response: JSON

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

2.6.1.4. Delete user credential

| Verb | URI | Description |
|---------------|---|--------------------------|
| DELETE | v2.0/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 | v2.0/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"
  }
}
```