

RAckspace API Key Aug 26, 2011 EXT v1.0 Authentication Extension (Service

# Operations) RAckspace API Key Authentication Extension (Service Operations)

EXT v1.0 (2011-08-26)

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This document is intended for client developers interested in using the Rackspace API Key Authentication Service 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 Service Extension

Namespace http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0

Alias RAX-KSKEY-service

Dependencies Keystone - OpenStack Identity

Doc Link (PDF) https://github.com/openstack/keystone/raw/master/keystone/

content/service/RAX-KSKEY-service-devguide.pdf

Doc Link (WADL)

None, the extension makes no modification to the API WADL.

Doc Link (XSD)

https://raw.github.com/openstack/keystone/master/keystone/

content/service/xsd/RAX-KSKEY-credentials.xsd

Short Description Rackspace extensions to Keystone v2.0 API enabling API Key

authentication.

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### **Example 1.1. Extension Query Request: XML**

#### **Example 1.2. Extension Query Request: JSON**

# 1.1. Document Change History

Revision Date	S	ummary of Changes	
Aug. 24, 2011	Initial release.		

# 2. Summary of Changes

The Rackspace API Key Authentication Service Extension allows authenticate call to happen using apikeyCredentials.

## 2.1. New Headers

None.

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## 2.2. New Faults

None.

## 2.3. New Resources

None.

## 2.4. New Actions

None.

## 2.5. New Element

# 2.5.1. Rackspace extensions to Keystone v2.0 API enabling API Key authentication.

#### 2.5.1.1. Authenticate

This extension allows authentication calls to accept new type of credentials apikeyCredentials. These are additional type of credentials defined to support rackspace style authentication. The usage of apikeyCredentials on a existing call to authenticate is illustrated below

Verb	URI	Description
POST	/tokens	Authenticate to generate a token.

Normal Response Code(s):200, 203

Error Response Code(s): unauthorized (401), userDisabled (403), badRequest (400), identityFault (500), serviceUnavailable(503)

This call will return a token if successful. Clients obtain this token, along with the URL to other service APIs, by first authenticating against the Keystone Service and supplying valid credentials. This extension provides support for Rackspace Style API Key credentials.

Client authentication is provided via a ReST interface using the POST method, with v2.0/ tokens supplied as the path. A payload of credentials must be included in the body.

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The Keystone Service is a ReSTful web service. It is the entry point to all service APIs. To access the Keystone Service, you must know URL of the Keystone service.

#### **Example 2.1. XML Auth Request using apikeyCredentials**

```
<?xml version="1.0" encoding="UTF-8"?>
<auth xmlns="http://docs.openstack.org/identity/api/v2.0">
    <apikeyCredentials
    xmlns="http://docs.rackspace.com/identity/api/ext/RAX-KSKEY/v1.0"
    username="testuser"
    apikey="aaaaa-bbbbb-ccccc-12345678"/>
</auth>
```

#### **Example 2.2. JSON Auth Request using apikeyCredentials**

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

#### **Example 2.3. XML Auth Response**

```
<?xml version="1.0" encoding="UTF-8"?>
<auth xmlns="http://docs.openstack.org/identity/api/v2.0">
<token expires="2010-11-01T03:32:15-05:00"</pre>
           id="ab48a9efdfedb23ty3494"/>
    <serviceCatalog>
        <service type="compute" name="Computers in the Cloud">
            <endpoint
                    region="North"
                    tenantId="1234"
          publicURL="https://north.compute.public.com/v2.0/1234"
                    internalURL="https://north.compute.internal.com/v2.0/
1234">
       <version</pre>
           id="2.0"
           info="https://north.compute.public.com/v2.0/"
           list="https://north.compute.public.com/" />
      </endpoint>
            <endpoint
                    region="South"
                    tenantId="3456"
                    publicURL="https://south.compute.public.com/v2.0/3456"
                    internalURL="https://south.compute.internal.com/v2.0/
3456">
          <version</pre>
           info="https://south.compute.public.com/v2.0/"
           list="https://south.compute.public.com/" />
      </endpoint>
        </service>
        <service type="object-store" name="HTTP Object Store">
            <endpoint
                    region="North"
                    tenantId="1234"
```

```
publicURL="https://north.object-store.public.com/v1/1234"
                    internalURL="https://north.object-store.internal.com/v1/
1234">
       <version</pre>
           id="1"
           info="https://north.object-store.public.com/v1/"
           list="https://north.object-store.public.com/" />
      </endpoint>
            <endpoint
                    region="South"
                    tenantId="3456"
                    publicURL="https://south.object-store.public.com/v2.0/
3456"
                    internalURL="https://south.object-store.internal.com/v2.0/
3456">
          <version</pre>
           id="2.0"
           info="https://south.object-store.public.com/v1/"
           list="https://south.object-store.public.com/" />
      </endpoint>
        </service>
        <service type="dns" name="DNS-as-a-Service">
            <endpoint
                    publicURL="https://dns.public.com/v2.0/blah-blah">
        <version</pre>
           id="2.0"
           info="https://dns.public.com/v2.0/"
           list="https://dns.public.com/" />
      </endpoint>
        </service>
    </serviceCatalog>
</auth>
```

#### **Example 2.4. JSON Auth Response**

```
"auth": {
  "token": {
    "id": "asdasdasd-adsasdads-asdasdasd-adsadsasd",
    "expires": "2010-11-01T03:32:15-05:00"
  "serviceCatalog": [
      "name": "Cloud Servers",
      "type": "compute",
      "endpoints": [
          "publicURL": "https://compute.north.host/v1/1234",
          "internalURL": "https://compute.north.host/v1/1234",
          "region": "North",
          "tenantId": "1234",
          "versionId": "1.0",
          "versionInfo": "https://compute.north.host/v1.0/",
          "versionList": "https://compute.north.host/"
        }, {
          "publicURL": "https://compute.north.host/v1.1/3456",
          "internalURL": "https://compute.north.host/v1.1/3456",
          "region": "North",
          "tenantId": "3456",
          "versionId": "1.1",
```

```
"versionInfo": "https://compute.north.host/v1.1/",
            "versionList": "https://compute.north.host/"
        ]
      }, {
        "name": "Cloud Files",
        "type": "object-store",
        "endpoints": [
            "publicURL": "https://compute.north.host/v1/blah-blah",
            "internalURL": "https://compute.north.host/v1/blah-blah",
            "region": "South",
            "tenantId": "1234",
            "versionId": "1.0",
            "versionInfo": "uri",
            "versionList": "uri"
            "publicURL": "https://compute.north.host/v1.1/blah-blah",
            "internalURL": "https://compute.north.host/v1.1/blah-blah",
            "region": "South",
            "tenantId": "3456",
            "versionId": "1.1",
            "versionInfo": "https://compute.north.host/v1.1/",
            "versionList": "https://compute.north.host/"
        ],
        "endpoint_links": [
            "rel": "next",
            "href": "https://identity.north.host/v2.0/endpoints?marker=2"
        ]
     }
   ],
    "serviceCatalog_links": [
        "rel": "next",
        "href": "https://identity.host/v2.0/endpoints?session=2hfh8Ar&marker=
2 "
   ]
 }
```