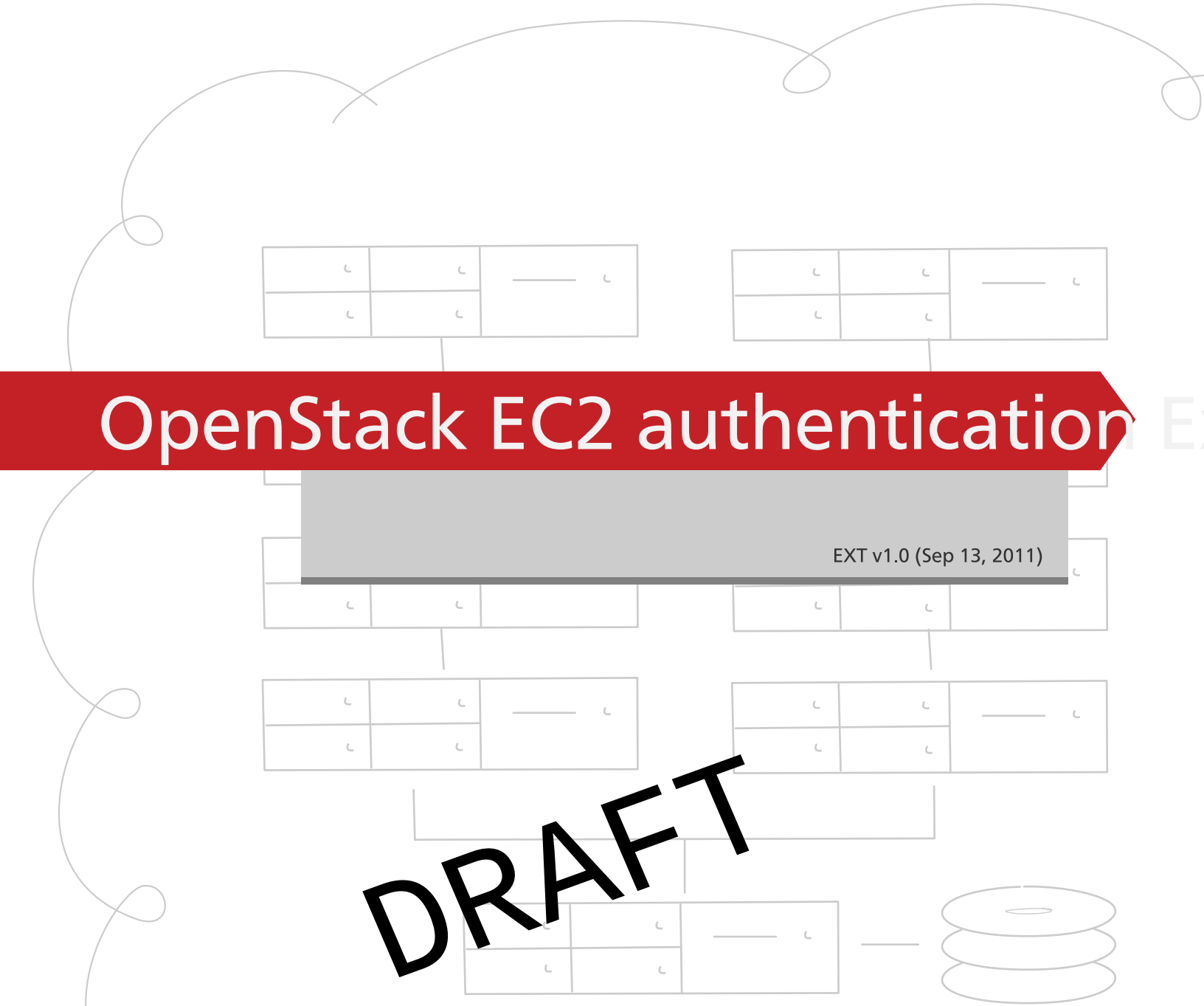
OpenStack EC2 authentication

EXT v1.0 (Sep 13, 2011)



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OpenStack EC2 authentication Extension (Admin Operations)

EXT v1.0 (2011-09-13)
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This document is intended for client developers interested in using the OpenStack EC2 Authentication Service Extension along with the Keystone - OpenStack Identity (API).

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DRAFT - DRAFT - DRAFT -

Table of Contents

1. About This Extension 1
1.1. Document Change History 2
2. Summary of Changes 3
2.1. New Headers 3
2.2. New Faults 3
2.3. New Resources 3
2.4. New Actions 3
2.5. New Element 3
2.5.1. ec2Credentials 3
2.6. OS-KSEC2-admin Extension API Operations 4
2.6.1. User Operations 4

DRAFT - DRAFT - DRAFT -

List of Tables

2.1. Authentication Header 4
2.2. Add user Credential. Request Parameters 4
2.3. List Credentials Request Parameters 5
2.4. Update user credential Request Parameters 6
2.5. Delete user credential Request Parameters 7
2.6. Get user Credentials Request Parameters 8

DRAFT - DRAFT - DRAFT -

List of Examples

1.1. Extension Query Response: XML 2
1.2. Extension Query Response: JSON 2
2.1. ec2Credentials XML 3
2.2. ec2Credentials JSON 3
2.3. Add user Credential. Request: XML 5
2.4. Add user Credential. Request: JSON 5
2.5. Add user Credential. Response: XML 5
2.6. Add user Credential. Response: JSON 5
2.7. List Credentials Response: XML 6
2.8. List Credentials Response: JSON 6
2.9. Update user credential Request: XML 7
2.10. Update user credential Request: JSON 7
2.11. Update user credential Response: XML 7
2.12. Update user credential Response: JSON 7
2.13. Get user Credentials Response: XML 8
2.14. Get user Credentials Response: JSON 8

DRAFT - DRAFT - DRAFT -

1. About This Extension

Name	OpenStack EC2 authentication Extension
Namespace	http://docs.openstack.org/identity/api/ext/OS-KSEC2/v1.0
Alias	OS-KSEC2
Dependencies	Keystone - OpenStack Identity OS-KSEC2 Extension
Doc Link (PDF)	https://raw.github.com/openstack/keystone/master/keystone/content/admin/OS-KSEC2-admin-devguide.pdf
Doc Link (WADL)	https://raw.github.com/openstack/keystone/master/keystone/content/admin/OS-KSEC2-admin.wadl
Doc Link (XSD)	https://raw.github.com/openstack/keystone/master/keystone/content/common/xsd/OS-KSEC2-credentials.xsd
Short Description	OpenStack EC2 authentication Service Extension to Keystone v2.0 API adds the capability to support EC2 style authentication.

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Example 1.1. Extension Query Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
    <extension
        name="OpenStack EC2 authentication Extension"
        namespace="http://docs.openstack.org/identity/api/ext/OS-KSEC2/v1.0"
        alias="OS-KSEC2"
        updated="2011-08-25T09:50:00-00:00">

        <description>
              Adds the capability to support EC2 style authentication.
        </description>

        <atom:link rel="describedby"
                   type="application/pdf"
                   href="https://github.com/openstack/keystone/raw/master/
keystone/content/admin/OS-KSEC2-admin-devguide.pdf"/>
  <atom:link rel="describedby"
     type="application/vnd.sun.wadl+xml"
     href="https://raw.github.com/openstack/keystone/master/keystone/content/
admin/OS-KSEC2-admin.wadl"/>
    </extension>
```

Example 1.2. Extension Query Response: JSON

```
{
  "extension":{
        "name": "OpenStack EC2 authentication Extension",
        "namespace": "http://docs.openstack.org/identity/api/ext/OS-KSEC2/v1.
0",
        "alias": "OS-KSEC2",
        "updated": "2011-08-25T09:50:00-00:00",
        "description": "Adds the capability to support EC2 style
 authentication.",
        "links": [
          {
            "rel": "describedby",
            "type": "application/pdf",
            "href": "https://github.com/openstack/keystone/raw/master/
keystone/content/admin/OS-KSEC2-admin-devguide.pdf"
          },
          {
            "rel": "describedby",
            "type": "application/vnd.sun.wadl+xml",
            "href": "https://raw.github.com/openstack/keystone/master/
keystone/content/admin/OS-KSEC2-admin.wadl"
          }
        ]
 }
}
```

1.1. Document Change History

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

DRAFT - DRAFT - DRAFT -

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2.6. OS-KSEC2-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 OpenStack EC2 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/OS-KSEC2:ec2Credentials`	Update credentials.
DELETE	`v2.0/users/{userId}/credentials/OS-KSEC2:ec2Credentials`	Delete User credentials.
GET	`v2.0/users/{userId}/credentials/OS-KSEC2:ec2Credentials`	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/OS-KSEC2:ec2Credentials`	Update credentials.
DELETE	`v2.0/users/{userId}/credentials/OS-KSEC2:ec2Credentials`	Delete User credentials.
GET	`v2.0/users/{userId}/credentials/OS-KSEC2:ec2Credentials`	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. String. Required.

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Example 2.3. Add user Credential. Request: XML

```
<?xml version="1.0" encoding="UTF-8"?>
  <ec2Credentials
    xmlns="http://docs.openstack.org/identity/api/ext/OS-KSEC2/v1.0"
    username="testuser"
    key="aaaaa"
    signature="bbbbb"/>
```

Example 2.4. Add user Credential. Request: JSON

```
{
    "OS-KSEC2-ec2Credentials":{
        "username":"test_user",
        "secret":"aaaaa",
        "signature":"bbb"
    }
}
```

Example 2.5. Add user Credential. Response: XML

```
<?xml version="1.0" encoding="UTF-8"?>
  <ec2Credentials
    xmlns="http://docs.openstack.org/identity/api/ext/OS-KSEC2/v1.0"
    username="testuser"
    key="aaaaa"
    signature="bbbbb"/>
```

Example 2.6. Add user Credential. Response: JSON

```
{
    "OS-KSEC2-ec2Credentials":{
        "username":"test_user",
        "secret":"aaaaa",
        "signature":"bbb"
    }
}
```

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.

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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"/>
    <ec2Credentials xmlns="http://docs.openstack.org/identity/api/ext/OS-
KSEC2/v1.0"
     username="testuser" key="aaaaa" signature="bbbbb"/>
</credentials>
```

Example 2.8. List Credentials Response: JSON

```
{
    "credentials":[{
            "passwordCredentials":{
                "username":"test_user",
                "password":"mypass"
            }
        },
        {
            "OS-KSEC2-ec2Credentials":{
                "username":"test_user",
                "secret":"aaaaa",
                "signature":"bbb"
            }
        }
    ],
    "credentials_links":[]
}
```

2.6.1.3. Update user credential

Verb	URI	Description
POST	v2.0/users/{userId}/credentials/OS-KSEC2:ec2Credentials	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.

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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"?>
  <ec2Credentials
    xmlns="http://docs.openstack.org/identity/api/ext/OS-KSEC2/v1.0"
    username="testuser"
    key="aaaaa"
    signature="bbbbb"/>
```

Example 2.12. Update user credential Response: JSON

```
{
    "OS-KSEC2-ec2Credentials":{
        "username":"test_user",
        "secret":"aaaaa",
        "signature":"bbb"
    }
}
```

2.6.1.4. Delete user credential

Verb	URI	Description
DELETE	`v2.0/users/{userId}/credentials/OS-KSEC2:ec2Credentials`	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.

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Name	Style	Description
		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/OS-KSEC2:ec2Credentials`	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"?>
  <ec2Credentials
    xmlns="http://docs.openstack.org/identity/api/ext/OS-KSEC2/v1.0"
    username="testuser"
    key="aaaaa"
    signature="bbbbb"/>
```

Example 2.14. Get user Credentials Response: JSON

```
{
    "OS-KSEC2-ec2Credentials":{
        "username":"test_user",
        "secret":"aaaaa",
        "signature":"bbb"
    }
}
```


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