OpenStack Compute

Region Extension

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HOSTING

OpenStack Compute Region Extension

EXT v1.0 (2011-10-20)
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This document is intended for software developers interested in using the Region Extension to the OpenStack Compute Application Programming Interface (API). The document is for informational purposes only and is provided "AS IS."

Table of Contents

List of Examples

1. About This Extension

Name	Region Extension
Namespace	http://docs.rackspacecloud.com/servers/api/ext/region/v1.0
Alias	RAX-RGN
Contact	Gabe Westmaas `<gabe.westmaas@rackspace.com>`
Status	ALPHA
Version	v1.0 (2011-10-20)
Dependencies	OpenStack Compute API v1.1 (2011-09-08)
Doc Link (PDF)	http://docs.rackspacecloud.com/servers/api/ext/rax-rgn.pdf
Doc Link (WADL)	None, the extension makes no modification to the API WADL.
Doc Link (XSD)	http://docs.rackspacecloud.com/servers/api/ext/rax-rgn/api.xsd
Short Description	Adds an attribute to the server that is used to provide a hint as to the geographical region of server.

Example 1.1. Extension Query Response: XML

```xml
<?xml version="1.0" encoding="UTF-8"?>

<extensions xmlns="http://docs.openstack.org/common/api/v1.0"
            xmlns:atom="http://www.w3.org/2005/Atom">
    <extension name="Region Extension"
               namespace="http://docs.rackspacecloud.com/servers/api/
ext/region/v1.0"
               alias="RAX-RGN" updated="2011-10-20T00:00:00">
        <description>
            Adds an attribute to the server that is used to
            provide a hint as to the geographical region of server.
        </description>
        <atom:link rel="describedby" type="application/pdf"
                   href="http://docs.rackspacecloud.com/servers/api/
ext/rax-rgn.pdf"/>
        <atom:link rel="describedby" type="application/xml"
                   href="http://docs.rackspacecloud.com/servers/api/
ext/rax-rgn/api.xsd"/>
    </extension>
</extensions>
```

Example 1.2. Extension Query Response: JSON

```
{
    "extensions": [
        {
            "name": "Region Extension",
            "namespace": "http://docs.rackspacecloud.com/servers/api/
ext/region/v1.0",
            "alias": "RAX-RGN",
            "updated": "2011-10-20T00:00:00",
            "description": "Adds an attribute to the server that is
 used to provide a hint as to the geographical region of server.",
            "links": [
                {
                    "rel": "describedby",
                    "type": "application/pdf",
                    "href": "http://docs.rackspacecloud.com/servers/
api/ext/rax-rgn.pdf"
                },
                {
                    "rel": "describedby",
                    "type": "application/xml",
                    "href": "http://docs.rackspacecloud.com/servers/
api/ext/rax-rgn/api.xsd"
                }
            ]
        }
    ]
}
```

1.1. Document Change History

The most recent changes to this document are desrcibed below.

Revision Date	Summary of Changes
Oct 20, 2011	• Initial release.

2. Summary of Changes

The Region Extension to the OpenStack Compute API adds support for a region attribute on servers. This attribute provides a region identifier that is used to provide a hint as to the geographical region of the server.

2.1. New Headers

None.

2.2. New Faults

None.

2.3. New Resources

None.

2.4. New Actions

None.

2.5. Changes to the OpenStack Compute API

Servers contain a new region attribute that gives a hint as to the geographical region of the server. The attribute is used for informational purposes only, it cannot be set.

2.5.1. Changes to 4.1.3 Get Server Details

Examples 4.11 and 4.12 in the OpenStack Compute Develorer Guide should be replaced with Example 2.1 and Example 2.2 below.

Example 2.1. Server Detail Response: XML

```xml
<?xml version="1.0" encoding="UTF-8"?>
<server xmlns="http://docs.openstack.org/compute/api/v1.1"
        xmlns:atom="http://www.w3.org/2005/Atom"
        xmlns:rgn="http://docs.rackspacecloud.com/servers/api/ext/
region/v1.0"
        id="52415800-8b69-11e0-9b19-734f000004d2"
        tenantId="1234" userId="5678"
        name="sample-server" status="BUILD"
        updated="2010-10-10T12:00:00Z" created="2010-08-10T12:00:00Z"
        progress="60" hostId="e4d909c290d0fb1ca068ffaddf22cbd0"
        accessIPv4="67.23.10.132"
        accessIPv6="::babe:67.23.10.132"
        rgn:region="DFW">
    <image id="52415800-8b69-11e0-9b19-734f6f006e54">
        <atom:link
            rel="self"
            href="http://servers.api.openstack.org/v1.1/1234/images/
52415800-8b69-11e0-9b19-734f6f006e54"/>
        <atom:link
            rel="bookmark"
            href="http://servers.api.openstack.org/1234/images/
52415800-8b69-11e0-9b19-734f6f006e54"/>
    </image>
    <flavor id="52415800-8b69-11e0-9b19-734f216543fd">
        <atom:link
            rel="self"
            href="http://servers.api.openstack.org/v1.1/1234/flavors/
52415800-8b69-11e0-9b19-734f216543fd"/>
        <atom:link
            rel="bookmark"
            href="http://servers.api.openstack.org/1234/flavors/
52415800-8b69-11e0-9b19-734f216543fd"/>
    </flavor>
    <metadata>
        <meta key="Server Label">Web Head 1</meta>
        <meta key="Image Version">2.1</meta>
    </metadata>
    <addresses>
        <network id="public">
            <ip version="4" addr="67.23.10.132"/>
            <ip version="6" addr="::babe:67.23.10.132"/>
            <ip version="4" addr="67.23.10.131"/>
            <ip version="6" addr="::babe:4317:0A83"/>
        </network>
        <network id="private">
            <ip version="4" addr="10.176.42.16"/>
            <ip version="6" addr="::babe:10.176.42.16"/>
        </network>
    </addresses>
    <atom:link
        rel="self"
```

```
        href="http://servers.api.openstack.org/v1.1/1234/servers/
52415800-8b69-11e0-9b19-734f000004d2"/>
    <atom:link
        rel="bookmark"
        href="http://servers.api.openstack.org/1234/servers/
52415800-8b69-11e0-9b19-734f000004d2"/>
</server>
```

Example 2.2. Server Detail Response: JSON

```json
{
    "server": {
        "id": "52415800-8b69-11e0-9b19-734f000004d2",
        "tenantId": "1234",
        "userId": "5678",
        "name": "sample-server",
        "updated": "2010-10-10T12:00:00Z",
        "created": "2010-08-10T12:00:00Z",
        "hostId": "e4d909c290d0fb1ca068ffaddf22cbd0",
        "accessIPv4" : "67.23.10.132",
        "accessIPv6" : "::babe:67.23.10.132",
        "status": "BUILD",
        "progress": 60,
        "RAX-RGN:region" : "DFW",
        "image" : {
            "id": "52415800-8b69-11e0-9b19-734f6f006e54",
            "links": [
                {
                    "rel": "self",
                    "href": "http://servers.api.openstack.org/v1.1/1234/
images/52415800-8b69-11e0-9b19-734f6f006e54"
                },
                {
                    "rel": "bookmark",
                    "href": "http://servers.api.openstack.org/1234/images/
52415800-8b69-11e0-9b19-734f6f006e54"
                }
            ]
        },
        "flavor" : {
            "id": "52415800-8b69-11e0-9b19-734f216543fd",
            "links": [
                {
                    "rel": "self",
                    "href": "http://servers.api.openstack.org/v1.1/1234/
flavors/52415800-8b69-11e0-9b19-734f216543fd"
                },
                {
                    "rel": "bookmark",
                    "href": "http://servers.api.openstack.org/1234/
flavors/52415800-8b69-11e0-9b19-734f216543fd"
                }
            ]
        },
        "addresses":  {
            "public" : [
                {
                    "version": 4,
                    "addr": "67.23.10.132"
                },
                {
                    "version": 6,
                    "addr": "::babe:67.23.10.132"
                },
                {
```

```
                    "version": 4,
                    "addr": "67.23.10.131"
                },
                {
                    "version": 6,
                    "addr": "::babe:4317:0A83"
                }
            ],
            "private" : [
                {
                    "version": 4,
                    "addr": "10.176.42.16"
                },
                {
                    "version": 6,
                    "addr": "::babe:10.176.42.16"
                }
            ]
        },
        "metadata": {
            "Server Label": "Web Head 1",
            "Image Version": "2.1"
        },
        "links": [
            {
                "rel": "self",
                "href": "http://servers.api.openstack.org/v1.1/1234/
servers/52415800-8b69-11e0-9b19-734f000004d2"
            },
            {
                "rel": "bookmark",
                "href": "http://servers.api.openstack.org/1234/servers/
52415800-8b69-11e0-9b19-734f000004d2"
            }
        ]
    }
}
```