



Rackspace Autoscale Reference

API v1.0 (2013-07-02)

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1. Overview

The Rackspace Autoscale service responds to events by changing capacity to meet current needs. This ability to expand the configuration in response to increased workload means that you can begin with a minimal cloud configuration and grow only when the cost of that growth is justified.

1.1. Document Change History

This version of the document replaces and obsoletes all previous versions. The most recent changes are described in the following table:

Revision Date	Summary of Changes	
Jul 2, 2013	Initial draft for preview release.	

1.2. Additional Resources

You can see and experiment with all Rackspace Autoscale API calls at http://docs.autoscale.apiary.io/.

To use Rackspace Autoscale, you will have to be able to set cloud monitoring alarms and create cloud servers and cloud load balancers. You can read API documentation for those and other Rackspace services at http://docs.rackspace.com/.

2. API Reference

Verb	URI	Description			
	Groups				
GET	v1.0/{tenantId}/groups	Lists all the autoscaling groups for the specified tenant ID.			
POST	v1.0/{tenantId}/groups	Create a new scaling group, given the general scaling group configuration, launch configuration, and optional scaling policies. This data provided in the request body in JSON format. If successful, the created group in JSON format containing id and links is returned.			
GET	v1.0/{tenantId}/groups/{groupId}	View manifested view of the scaling group configuration, including the launch configuration, and the scaling policies. This data is returned in the body of the response in JSON format.			
DELETE	v1.0/{tenantId}/groups/{groupId}	Delete a scaling group if there are no entities belonging to the scaling group. If successful, no response body will be returned. If there are pending or active entities, a 409 will be returned.			
GET	v1.0/{tenantId}/groups/{groupId}/ state	Get the current state of the scaling group, including the current set of active entities, the number of pending entities, and the desired number of entities. This data is returned in the body of the response in JSON format.			
	Config	urations			
GET	v1.0/{tenantId}/groups/{groupId}/ config	Get the configuration for a scaling group, which includes the minimum number of entities, the maximum number of entities, global cooldown, and other metadata. This data is returned in the body of the response in JSON format.			
PUT	v1.0/{tenantId}/groups/{groupId}/ config	Edit the configuration for a scaling group, which includes the minimum number of entities, the maximum number of entities, global cooldown, and other metadata. This data provided in the request body in JSON format. If successful, no response body will be returned.			
GET	v1.0/{tenantId}/groups/{groupId}/launch	Get the launch configuration for a scaling group, which includes the details of how to create a server, from what image, which load balancers to join it to, and what networks to add it to, and other metadata. This data is returned in the body of the response in JSON format.			
PUT	v1.0/{tenantId}/groups/{groupId}/launch	Edit the launch configuration for a scaling group, which includes the details of how to create a server, from what image, which load balancers to join it to, and what networks to add it to, and other metadata. This data provided in the request body in JSON format. If successful, no response body will be returned.			
POST	v1.0/{tenantId}/groups/{groupId}/ pause	Pause all execution of scaling policies for this scaling group.			
POST	v1.0/{tenantId}/groups/{groupId}/ resume	Resume all execution of scaling policies for this scaling group.			
	Pol	icies			
GET	v1.0/{tenantId}/groups/{groupId}/ policies	Get a list of scaling policies in the group. Each policy describes an id, name, type, adjustment, cooldown, and links. This data is returned in the body of the response in JSON format.			
POST	v1.0/{tenantId}/groups/{groupId}/ policies	Create one or many new scaling policies. Scaling policies must include a name, type, adjustment, and cooldown. The response header will point to the list policies endpoint. An array of scaling policies is provided in the request body in JSON format.			

Verb	URI	Description
GET	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}	Get a scaling policy which describes an id, name, type, adjustment, and cooldown, and links. This data is returned in the body of the response in JSON format.
policies/{policyId}		Updates a scaling policy. Scaling policies must include a name, type, adjustment, and cooldown. If successful, no response body will be returned.
DELETE	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}	Delete a scaling policy. If successful, no response body will be returned.
POST	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/execute	Execute a scaling policy. If successful, a response body will be returned.
	Exec	utions
POST	v1.0/execute/{capability_version}/ {capability_hash}	Execute a webhook
	Web	hooks
GET	v1.0/{tenantId}/groups/{groupId}/policies/{policyId}/webhooks	Get a list of webhooks and their IDs. This data is returned in the body of the response in JSON format.
POST	<pre>v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks</pre>	Create one or more new scaling policy webhooks. Webhooks must have a name. If successful, the created response body will contain the IDs and links to the newly created webhooks. This data provided in the request body in JSON format.
GET	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks/ {webhookId}	Get information about a specific scaling policy webhook. This data is returned in the body of the response in JSON format.
PUT	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks/ {webhookId}	Update an existing webhook. Webhooklds not recognized will be ignored with accompanying data. URLs will be ignored if submitted, but that will not invalidate the request. If successful, no response body will be returned.
DELETE	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks/ {webhookId}	Delete a scaling policy webhook. If successful, no response body will be returned.

2.1. Groups

Verb	URI	Description
GET	v1.0/{tenantId}/groups	Lists all the autoscaling groups for the specified tenant ID.
POST	v1.0/{tenantId}/groups	Create a new scaling group, given the general scaling group configuration, launch configuration, and optional scaling policies. This data provided in the request body in JSON format. If successful, the created group in JSON format containing id and links is returned.
GET	v1.0/{tenantId}/groups/{groupId}	View manifested view of the scaling group configuration, including the launch configuration, and the scaling policies. This data is returned in the body of the response in JSON format.
DELETE	v1.0/{tenantId}/groups/{groupId}	Delete a scaling group if there are no entities belonging to the scaling group. If successful, no response body will be returned. If there are pending or active entities, a 409 will be returned.
GET	v1.0/{tenantId}/groups/{groupId}/ state	Get the current state of the scaling group, including the current set of active entities, the number of pending entities, and the desired number of entities. This data is returned in the body of the response in JSON format.

2.1.1. List Autoscaling Groups

Verb	URI	Description
GET	v1.0/{tenantId}/groups	Lists all the autoscaling groups for the specified tenant ID.

Normal Response Code(s): 200

For the tenant specified by , this operation returns a list of autoscaling groups.

Table 2.1. List Autoscaling Groups Request Parameters

Name	Style	Туре	Description
tenantId	Template		

Example 2.1. List Autoscaling Groups Request: JSON

Example 2.2. List Autoscaling Groups Response: JSON

```
"groups": [
                             "id": "{groupId1}"
                             "links": [
                             "href": "{url_root}/v1.0/010101/groups/{groupId1}"
                             "rel": "self"
                             ],
                             "active": [],
                             "activeCapacity": 0,
                             "pendingCapacity": 1,
                             "desiredCapacity": 1,
                             "paused": false
                             "id": "{groupId2}"
                             "links": [
                             "href": "{url_root}/v1.0/010101/groups/
{groupId2}",
                             "rel": "self"
                             "active": [],
                             "activeCapacity": 0,
                             "pendingCapacity": 2,
                             "desiredCapacity": 2,
                             "paused": false
                             ],
                             "groups_links": []
```

2.1.2. POST

Verb	URI	Description
POST	v1.0/{tenantId}/groups	Create a new scaling group, given the general scaling group configuration, launch configuration, and optional scaling policies. This data provided in the request body in JSON format. If successful, the created group in JSON format containing id and links is returned.

Normal Response Code(s): 201

Table 2.2. POST Request Parameters

Name	Style	Type	Description
tenantId	Template		

Example 2.3. Request: JSON

```
"groupConfiguration": {
   "name" : "workers"
   "cooldown": 60,
   "minEntities": 5,
   "maxEntities": 100,
   "metadata": {
       "firstkey" : "this is a string"
       "secondkey" : "1"
   },
"launchConfiguration": {
   "type" : "launch_server"
   "args": {
       "server": {
           "flavorRef": 3,
           "name" : "webhead"
           "imageRef" : "0d589460-f177-4b0f-81c1-8ab8903ac7d8"
           "OS-DCF:diskConfig" : "AUTO"
           "metadata": {
               "mykey" : "myvalue"
               },
           "personality": [
               "path": '/root/.ssh/authorized_keys',
               "contents" : "ssh-rsa AAAAB3Nza...LiPk== user@example.net"
           ],
           "networks": [
               ],
       "loadBalancers": [
           "loadBalancerId": 2200,
           "port": 8081
```

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```
},
"scalingPolicies": [
    "name" : "scale up by 10"
    "change": 10,
    "cooldown": 5,
    "type" : "webhook"
{
    "name" : "scale down by 5.5 percent"
    "changePercent": -5.5,
    "cooldown": 6,
    "type" : "webhook"
    "name" : "set number of servers to 10"
    "desiredCapacity": 10,
    "cooldown": 3,
    "type" : "webhook"
]
```

Example 2.4. Response: JSON

```
"group": {
   "id": "{groupId}",
    "links": [
        "href": "{url_root}/v1.0/010101/groups/{groupId}"
        "rel": "self"
     }
    ],
    "groupConfiguration": {
        "name": "workers",
        "cooldown": 60,
        "minEntities": 5,
        "maxEntities": 100,
        "metadata": {
            "firstkey": "this is a string",
            "secondkey": "1",
    "launchConfiguration": {
        "type": "launch_server",
        "args": {
            "server": {
                "flavorRef": 3,
                "name": "webhead",
                "imageRef": "0d589460-f177-4b0f-81c1-8ab8903ac7d8",
                "OS-DCF:diskConfig": "AUTO",
                "metadata": {
                    "mykey": "myvalue"
                "personality": [
                         "path": '/root/.ssh/authorized_keys',
```

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```
"contents": "ssh-rsa AAAAB3Nza...LiPk==
user@example.net"
                       }
                   ],
                   "networks": [
                           ],
               "loadBalancers": [
                       "loadBalancerId": 2200,
                       "port": 8081
               ]
       },
       "scalingPolicies": [
               "id": "{policyId1}",
               "links": [
                   "href": "{url_root}/v1.0/010101/groups/{groupId}/policies/
{policyId1}"
                   "rel": "self"
               ],
               "name": "scale up by 10",
               "change": 10,
               "cooldown": 5,
               "type": "webhook"
               "id": "{policyId2}",
               "links": [
                   "href": "{url_root}/v1.0/010101/groups/{groupId}/policies/
{policyId2}"
                   "rel": "self"
                 }
               "name": "scale down by 5.5 percent",
               "changePercent": -5.5,
               "cooldown": 6,
               "type": "webhook"
               "id": "{policyId3}",
               "links": [
                   "href": "{url_root}/v1.0/010101/groups/{groupId}/policies/
{policyId3}"
                   "rel": "self"
               ],
               "name": "Set number of servers to 10",
               "desiredCapacity": 10,
               "cooldown": 6,
               "type": "webhook"
```

```
}
}
}
```

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2.1.3. GET

Verb	URI	Description
GET	v1.0/{tenantId}/groups/{groupId}	View manifested view of the scaling group configuration, including the launch configuration, and the scaling policies. This data is returned in the body of the response in JSON format.

Normal Response Code(s): 200

Table 2.3. GET Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		

Example 2.5. Request: JSON

Example 2.6. Response: JSON

```
"group": {
       "id": "{groupId}",
       "links": [
           "href": "{url_root}/v1.0/010101/groups/{groupId}"
           "rel": "self"
       ],
       "groupConfiguration": {
           "name": "workers",
           "cooldown": 60,
           "minEntities": 5,
           "maxEntities": 100,
           "metadata": {
               "firstkey": "this is a string",
               "secondkey": "1",
       "launchConfiguration": {
           "type": "launch_server",
           "args": {
               "server": {
                    "flavorRef": 3,
                    "name": "webhead",
                    "imageRef": "0d589460-f177-4b0f-81c1-8ab8903ac7d8",
                    "OS-DCF:diskConfig": "AUTO",
                    "metadata": {
                        "mykey": "myvalue"
                   },
                    "personality": [
                            "path": '/root/.ssh/authorized_keys',
                            "contents": "ssh-rsa AAAAB3Nza...LiPk==
user@example.net"
                   ],
                    "networks": [
```

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```
"uuid": "11111111-1111-1111-1111-11111111111"
                    ],
                "loadBalancers": [
                         "loadBalancerId": 2200,
                         "port": 8081
                ]
            }
        },
        "scalingPolicies": [
                "id": "{policyId1}",
                "links": [
                     "href": "{url_root}/v1.0/010101/groups/{groupId}/policies/
{policyId1}"
                    "rel": "self"
                ],
                "name": "scale up by 10",
                "change": 10,
                "cooldown": 5,
                "type": "webhook"
                "id": "{policyId2}",
                "links": [
                  {
                    "href": "{url_root}/v1.0/010101/groups/{groupId}/policies/
{policyId2}"
                    "rel": "self"
                  }
                "name": "scale down by 5.5 percent",
                "changePercent": -5.5,
                "cooldown": 6,
                "type": "webhook"
                "id": "{policyId3}",
                "links": [
                    "href": "{url_root}/v1.0/010101/groups/{groupId}/policies/
{policyId3}"
                    "rel": "self"
                "name": "set number of servers to 10",
                "desiredCapacity": 10,
                "cooldown": 3,
                "type": "webhook"
            }
       ]
   }
```

2.1.4. DELETE

Verb	URI	Description
DELETE	v1.0/{tenantId}/groups/{groupId}	Delete a scaling group if there are no entities belonging to the scaling group. If successful, no response body will be returned. If there are pending or active entities, a 409 will be returned.

Normal Response Code(s): 204

Table 2.4. DELETE Request Parameters

Name	Style	Type	Description
tenantId	Template		
groupId	Template		

Example 2.7. Request: JSON

2.1.5. **GET**

Verb	URI	Description
GET	v1.0/{tenantId}/groups/{groupId}/ state	Get the current state of the scaling group, including the current set of active entities, the number of pending entities, and the desired number of entities. This data is returned in the body of the response in JSON format.

Normal Response Code(s): 200

Table 2.5. GET Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		

Example 2.8. Request: JSON

Example 2.9. Response: JSON

```
"group": {
        "id": "{groupId}",
        "links": [
                "href": "{url_root}/v1.0/010101/groups/{groupId},
                "rel": "self"
        ],
        "active": [
                "id": "{instanceId1}"
                "links": [
                         "href": "https://dfw.servers.api.rackspacecloud.com/
v2/010101/servers/{instanceId1}",
                         "rel": "self"
                ]
            },
                "id": "{instanceId2}"
                "links": [
                         "href": "https://dfw.servers.api.rackspacecloud.com/
v2/010101/servers/{instanceId2}",
                         "rel": "self"
                ]
        ],
        "activeCapacity": 2,
        "pendingCapacity": 2,
        "desiredCapacity": 4,
        "paused": false
```

2.2. Configurations

Verb	URI	Description
GET	<pre>v1.0/{tenantId}/groups/{groupId}/ config</pre>	Get the configuration for a scaling group, which includes the minimum number of entities, the maximum number of entities, global cooldown, and other metadata. This data is returned in the body of the response in JSON format.
PUT	<pre>v1.0/{tenantId}/groups/{groupId}/ config</pre>	Edit the configuration for a scaling group, which includes the minimum number of entities, the maximum number of entities, global cooldown, and other metadata. This data provided in the request body in JSON format. If successful, no response body will be returned.
GET	v1.0/{tenantId}/groups/{groupId}/launch	Get the launch configuration for a scaling group, which includes the details of how to create a server, from what image, which load balancers to join it to, and what networks to add it to, and other metadata. This data is returned in the body of the response in JSON format.
PUT	v1.0/{tenantId}/groups/{groupId}/launch	Edit the launch configuration for a scaling group, which includes the details of how to create a server, from what image, which load balancers to join it to, and what networks to add it to, and other metadata. This data provided in the request body in JSON format. If successful, no response body will be returned.
POST	v1.0/{tenantId}/groups/{groupId}/ pause	Pause all execution of scaling policies for this scaling group.
POST	v1.0/{tenantId}/groups/{groupId}/ resume	Resume all execution of scaling policies for this scaling group.

2.2.1. **GET**

Verb	URI	Description
GET	v1.0/{tenantId}/groups/{groupId}/ config	Get the configuration for a scaling group, which includes the minimum number of entities, the maximum number of entities, global cooldown, and other metadata. This data is returned in the body of the response in JSON format.

Normal Response Code(s): 200

Table 2.6. GET Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		

Example 2.10. Request: JSON

Example 2.11. Response: JSON

```
{
    "groupConfiguration": {
        "name": "workers",
        "cooldown": 60,
        "minEntities": 5,
        "maxEntities": 100,
        "metadata": {
            "firstkey": "this is a string",
            "secondkey": "1",
        }
    }
}
```

2.2.2. PUT

Verb	URI	Description
PUT	v1.0/{tenantId}/groups/{groupId}/ config	Edit the configuration for a scaling group, which includes the minimum number of entities, the maximum number of entities, global cooldown, and other metadata. This data provided in the request body in JSON format. If successful, no response body will be returned.

Normal Response Code(s): 204

Table 2.7. PUT Request Parameters

Name	Style	Type	Description
tenantId	Template		
groupId	Template		

Example 2.12. Request: JSON

2.2.3. **GET**

Verb	URI	Description
GET	v1.0/{tenantId}/groups/{groupId}/ launch	Get the launch configuration for a scaling group, which includes the details of how to create a server, from what image, which load balancers to join it to, and what networks to add it to, and other metadata. This data is returned in the body of the response in JSON format.

Normal Response Code(s): 200

Table 2.8. GET Request Parameters

Name	Style	Type	Description
tenantId	Template		
groupId	Template		

Example 2.13. Request: JSON

Example 2.14. Response: JSON

```
"launchConfiguration": {
        "type": "launch_server",
        "args": {
            "server": {
                "flavorRef": 3,
                "name": "webhead",
                "imageRef": "0d589460-f177-4b0f-81c1-8ab8903ac7d8",
                "OS-DCF:diskConfig": "AUTO",
                "metadata": {
                    "mykey": "myvalue"
                },
                "personality": [
                         "path": '/root/.ssh/authorized_keys',
                         "contents": "ssh-rsa AAAAB3Nza...LiPk== user@example.
net"
                ],
                "networks": [
                         "uuid": "11111111-1111-1111-1111-11111111111"
                ],
            "loadBalancers": [
                    "loadBalancerId": 2200,
                    "port": 8081
            ]
        }
```

2.2.4. PUT

Verb	URI	Description
PUT	v1.0/{tenantId}/groups/{groupId}/launch	Edit the launch configuration for a scaling group, which includes the details of how to create a server, from what image, which load balancers to join it to, and what networks to add it to, and other metadata. This data provided in the request body in JSON format. If successful, no response body will be returned.

Normal Response Code(s): 204

Table 2.9. PUT Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		

Example 2.15. Request: JSON

```
"type" : "launch_server"
"args": {
   "server": {
       "flavorRef": 3,
       "name" : "webhead"
       "imageRef" : "0d589460-f177-4b0f-81c1-8ab8903ac7d8"
       "OS-DCF:diskConfig" : "AUTO"
       "metadata": {
           "mykey" : "myvalue"
           },
       "personality": [
           "path": '/root/.ssh/authorized_keys',
           "contents" : "ssh-rsa AAAAB3Nza...LiPk== user@example.net"
       ],
       "networks": [
           ],
       },
   "loadBalancers": [
       "loadBalancerId": 2200,
       "port": 8081
   ]
   }
```

2.2.5. **POST**

Verb	URI	Description
POST	v1.0/{tenantId}/groups/{groupId}/	Pause all execution of scaling policies for this scaling
	pause	group.

Normal Response Code(s): 204

Table 2.10. POST Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		

Example 2.16. Request: JSON

2.2.6. POST

Verb	URI	Description
POST	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Resume all execution of scaling policies for this scaling
	resume	group.

Normal Response Code(s): 204

Table 2.11. POST Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		

Example 2.17. Request: JSON

This operation does not return a response body.

2.3. Policies

Verb	URI	Description
GET	v1.0/{tenantId}/groups/{groupId}/ policies	Get a list of scaling policies in the group. Each policy describes an id, name, type, adjustment, cooldown, and links. This data is returned in the body of the response in JSON format.
POST	<pre>v1.0/{tenantId}/groups/{groupId}/ policies</pre>	Create one or many new scaling policies. Scaling policies must include a name, type, adjustment, and cooldown. The response header will point to the list policies endpoint. An array of scaling policies is provided in the request body in JSON format.
GET	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}	Get a scaling policy which describes an id, name, type, adjustment, and cooldown, and links. This data is returned in the body of the response in JSON format.
PUT	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}	Updates a scaling policy. Scaling policies must include a name, type, adjustment, and cooldown. If successful, no response body will be returned.
DELETE	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}	Delete a scaling policy. If successful, no response body will be returned.
POST	v1.0/{tenantId}/groups/{groupId}/policies/{policyId}/execute	Execute a scaling policy. If successful, a response body will be returned.

2.3.1. GET

Verb	URI	Description
GET	<pre>v1.0/{tenantId}/groups/{groupId}/ policies</pre>	Get a list of scaling policies in the group. Each policy describes an id, name, type, adjustment, cooldown, and links. This data is returned in the body of the response in JSON format.

Normal Response Code(s): 200

Table 2.12. GET Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		

Example 2.18. Request: JSON

Example 2.19. Response: JSON

```
"policies": [
            "id":"{policyId1}",
            "data": {
                "name": "scale up by one server",
                "change": 1,
                "cooldown": 150,
                "type": "webhook"
            "links": [
                     "href": "{url_root}/v1.0/010101/groups/{groupId1}/policy/
{policyId1}"
                     "rel": "self"
            ]
            "id": "{policyId2}",
            "data": {
                "name": "scale up ten percent",
                "changePercent": 10,
                "cooldown": 150,
                "type": "webhook"
            "links": [
                     "href": "{url_root}/v1.0/010101/groups/{groupId1}/policy/
{policyId2}"
                    "rel": "self"
            ]
        },
            "id":"{policyId3}",
```

```
"data": {
                "name": "scale down one server",
                "change": -1,
                "cooldown": 150,
                "type": "webhook"
            "links": [
                     "href": "{url_root}/v1.0/010101/groups/{groupId1}/policy/
{policyId3}"
                     "rel": "self"
            ]
        },
            "id": "{policyId4}",
            "data": {
                "name": "scale down ten percent",
                "changePercent": -10,
                "cooldown": 150,
                "type": "webhook"
            },
            "links": [
                {
                     "href": "{url_root}/v1.0/010101/groups/{groupId1}/policy/
{policyId4}"
                     "rel": "self"
            ]
        }
   ]
```

2.3.2. POST

Verb	URI	Description
POST	v1.0/{tenantId}/groups/{groupId}/ policies	Create one or many new scaling policies. Scaling policies must include a name, type, adjustment, and cooldown. The response header will point to the list policies endpoint. An array of scaling policies is provided in the request body in JSON format.

Normal Response Code(s): 201

Table 2.13. POST Request Parameters

Name	Style	Type	Description
tenantId	Template		
groupId	Template		

Example 2.20. Request: JSON

```
[
    "name" : "scale up by one server"
    "change": 1,
    "cooldown": 150,
    "type" : "webhook"
    },
{
    "name" : "scale down by 5.5 percent"
    "changePercent": -5.5,
    "cooldown": 6,
    "type" : "webhook"
    }
]
```

Example 2.21. Response: JSON

```
"policies": [
            "id": {policyId1},
            "links": [
                     "href": "{url_root}/v1.0/010101/groups/{groupId}/policy/
{policyId1}"
                     "rel": "self"
            ],
            "name": "scale up by one server",
            "change": 1,
            "cooldown": 150,
            "type": "webhook"
        },
            "id": {policyId2},
            "links": [
                     "href": "{url_root}/v1.0/010101/groups/{groupId}/policy/
{policyId2}"
```

2.3.3. GET

Verb	URI	Description
GET	policies/{policyId}	Get a scaling policy which describes an id, name, type, adjustment, and cooldown, and links. This data is returned in the body of the response in JSON format.

Normal Response Code(s): 200

Table 2.14. GET Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		
policyId	Template		

Example 2.22. Request: JSON

Example 2.23. Response: JSON

2.3.4. PUT

Verb	URI	Description
PUT	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}	Updates a scaling policy. Scaling policies must include a name, type, adjustment, and cooldown. If successful, no response body will be returned.

Normal Response Code(s): 204

Table 2.15. PUT Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		
policyId	Template		

Example 2.24. Request: JSON

```
{
    "name": 'scale down by 5.5 percent',
    "changePercent": -5.5,
    "cooldown": 6,
    "type" : "webhook"
}
```

2.3.5. DELETE

Verb	URI	Description
DELETE	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}	Delete a scaling policy. If successful, no response body will be returned.

Normal Response Code(s): 204

Table 2.16. DELETE Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		
policyId	Template		

Example 2.25. Request: JSON

2.3.6. POST

Verb	URI	Description
	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/execute	Execute a scaling policy. If successful, a response body will be returned.

Normal Response Code(s): 202

Table 2.17. POST Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		
policyId	Template		

Example 2.26. Request: JSON

Example 2.27. Response: JSON

{}

2.4. Executions

Verb	URI	Description
POST	v1.0/execute/{capability_version}/ {capability_hash}	Execute a webhook

2.4.1. POST

Verb	URI	Description
POST	v1.0/execute/{capability_version}/ {capability_hash}	Execute a webhook

Normal Response Code(s): 202

Table 2.18. POST Request Parameters

Name	Style	Туре	Description
capability_version	Template		
capability_hash	Template		

Example 2.28. Request: JSON

Example 2.29. Response: JSON

{}

2.5. Webhooks

Verb	URI	Description
GET	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks	Get a list of webhooks and their IDs. This data is returned in the body of the response in JSON format.
POST	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks	Create one or more new scaling policy webhooks. Webhooks must have a name. If successful, the created response body will contain the IDs and links to the newly created webhooks. This data provided in the request body in JSON format.
GET	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks/ {webhookId}	Get information about a specific scaling policy webhook. This data is returned in the body of the response in JSON format.
PUT	<pre>v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks/ {webhookId}</pre>	Update an existing webhook. Webhooklds not recognized will be ignored with accompanying data. URLs will be ignored if submitted, but that will not invalidate the request. If successful, no response body will be returned.
DELETE	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks/ {webhookId}	Delete a scaling policy webhook. If successful, no response body will be returned.

2.5.1. GET

Verb	URI	Description
	, , , , , , , , , , , , , , , , , , , ,	Get a list of webhooks and their IDs. This data is returned in the body of the response in JSON format.

Normal Response Code(s): 200

Table 2.19. GET Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		
policyId	Template		

Example 2.30. Request: JSON

Example 2.31. Response: JSON

```
"webhooks": [
            "id":"{webhookId1}",
            "name": "alice",
            "metadata": {
                "notes": "this is for Alice"
            "links": [
                    "href": ".../{groupId1}/policies/{policyId1}/webhooks/
{webhookId1}/",
                    "rel": "self"
                    "href": ".../execute/1/{capability_hash1}/,
                    "rel": "capability"
            ]
        },
            "id":"{webhookId2}",
            "name": "alice",
            "metadata": {
                "notes": "this is for Bob"
            "links": [
                    "href": ".../{groupId1}/policies/{policyId1}/webhooks/
{webhookId2}/",
                    "rel": "self"
                    "href": ".../execute/1/{capability_hash2}/,
                    "rel": "capability"
```

```
}
],
"webhooks_links": []
}
```

2.5.2. POST

Verb	URI	Description
POST	v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks	Create one or more new scaling policy webhooks. Webhooks must have a name. If successful, the created response body will contain the IDs and links to the newly created webhooks. This data provided in the request body in JSON format.

Normal Response Code(s): 201

Table 2.20. POST Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		
policyId	Template		

Example 2.32. Request: JSON

```
[
{
    "name" : "alice"
    "metadata": {
        "notes" : "this is for Alice"
        }
    },
{
    "name" : "bob"
    }
]
```

Example 2.33. Response: JSON

2.5.3. GET

Verb	URI	Description
GET	<pre>v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks/ {webhookId}</pre>	Get information about a specific scaling policy webhook. This data is returned in the body of the response in JSON format.

Normal Response Code(s): 200

Table 2.21. GET Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		
policyId	Template		
webhookId	Template		

Example 2.34. Request: JSON

Example 2.35. Response: JSON

2.5.4. PUT

Verb	URI	Description
PUT	<pre>v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks/ {webhookId}</pre>	Update an existing webhook. WebhookIds not recognized will be ignored with accompanying data. URLs will be ignored if submitted, but that will not invalidate the request. If successful, no response body will be returned.

Normal Response Code(s): 204

Table 2.22. PUT Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		
policyId	Template		
webhookId	Template		

Example 2.36. Request: JSON

```
{
    "name" : "alice"
    "metadata": {
        "notes" : "this is for Alice"
     }
}
```

2.5.5. DELETE

Verb	URI	Description
DELETE	<pre>v1.0/{tenantId}/groups/{groupId}/ policies/{policyId}/webhooks/ {webhookId}</pre>	Delete a scaling policy webhook. If successful, no response body will be returned.

Normal Response Code(s): 204

Table 2.23. DELETE Request Parameters

Name	Style	Туре	Description
tenantId	Template		
groupId	Template		
policyId	Template		
webhookId	Template		

Example 2.37. Request: JSON