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# 1 Accounts-accountId-os-security-group-rules-ruleId:DELETE

This operation will delete a firewall group rule.

## 2 DELETE /accounts/{accountId}/os-security-group-rules/{ruleId}

This operation will delete a firewall group rule.

### 2.1 Parameters

accountId - *string*  
The selected account Id.

ruleId - *string*  
The unique firewall group rule identifier.

### 2.2 Response Codes

Success  
*HTTP/1.1 204 No Content*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 2.3 Examples

#### Successfully delete the specified firewall group rule

```
DELETE https://api.hostway.com/accounts/{accountId}/os-security-group-rules/{firewall_group_rule_id}
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

```
HTTP/1.1 204 No Content
```

#### Failure while trying to delete a non-existent firewall group rule

```
DELETE https://api.hostway.com/accounts/{accountId}/os-security-group-rules/{fake_firewall_group_rule_id}
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Failure while trying to make unauthorized access

```
DELETE https://api.hostway.com/accounts/{accountId}/os-security-group-rules/{firewall_group_rule_id}
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

```
HTTP/1.1 401 Unauthorized
```

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### Failure while trying to pass invalid account number

```
DELETE https://api.hostway.com/accounts/fakeId/os-security-group-rules/{firewall_group_rule_id}
```

#### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Response Body:

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 2.4 Alternative URI /accounts/os-security-group-rules/{ruleId}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
DELETE /accounts/os-security-group-rules/{ruleId}
```

### **3 Accounts-accountId-os-security-group-rules:POST**

This operation will create a new firewall group rule.

## 4 POST /accounts/{accountId}/os-security-group-rules

This operation will create a new firewall group rule.

### 4.1 Request

#### 4.1.1 Parameters

accountId - *string*  
The selected account Id.

#### 4.1.2 JSON

```
{
  "securityGroupRule" : {
    "fromPort": {start_port},
    "toPort": {end_port},
    "protocol": "{ip_protocol}",
    "cidr": "127.0.0.1/24",
    "parentGroupId": "{parent_group_id}",
    "action": "{action}",
    "priority": {priority}
  }
}
```

##### 4.1.2.1 securityGroupRule

fromPort - *int*  
Start port number.

toPort - *int*  
End port number.

protocol - *string*  
IP protocol used. Can be TCP, UDP, AH, ESP, GRE, AH+ESP, or ALL  
AH, ESP, GRE, AH+ESP, ALL protocols don't support port - both should be 0

cidr - *string*  
CIDR notation IP address.

parentGroupId - *string*  
Parent group identifier for this rule.

action = *string*  
rule target action. One of ACCEPT, REJECT or DROP

priority = *integer*  
rule priority, starting from 0 lowest priority

### 4.2 Response

#### 4.2.1 JSON

```
{
  "securityGroupRule" : {
    "fromPort": {start_port},
    "protocol": "{ip_protocol}",
    "links": [
      {
        "href": "https://api.hostway.com/accounts/{accountId}/os-security-group-rules/{firewall_group_rule_id}/",
        "rel": "self"
      }
    ],
    "toPort": {end_port},
    "parentGroupId": "{parent_firewall_group_name}",
    "cidr": "127.0.0.1/24"
  },
  "id": {firewall_group_rule_id}
}
```

##### 4.2.1.1 securityGroupRule

fromPort - *int*  
Start port number.

protocol - *string*  
IP protocol used.

links - *list*  
[Hypermedia](#) for this resource.

toPort - *int*  
End port number.

parentGroupId - *string*  
Parent group identifier for this rule.

cidr - *string*  
IP range in CIDR notation.

id - *string*

Firewall group rule unique identifier.

## 4.3 Response Codes

Success

*HTTP/1.1 201 Created*

Failure

*HTTP/1.1 400 Bad Request*

*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

*HTTP/1.1 404 Not Found* - The resource does not exist.

## 4.4 Examples

### Successfully create a new firewall group rule

**POST** <https://api.hostway.com/accounts/{accountId}/os-security-group-rules>

*Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

*Request Body:*

```
{
  "security_group_rule" : {
    "from_port": 80,
    "to_port": 80,
    "ip_protocol": "tcp",
    "cidr": "127.0.0.1/24",
    "parent_group_id": "group2012May11_NpCpS3995",
    "action": "ACCEPT",
    "priority": 1
  }
}
```

*Response Code:*

*HTTP/1.1 201 Created*

*Response Body:*

```
{
  "securityGroupRule" : {
    "fromPort": 80,
    "protocol": "tcp",
    "links": [
      {
        "href": "https://api.hostway.com/accounts/{accountId}/os-security-group-rules/214/",
        "rel": "self"
      }
    ],
    "toPort": 80,
    "parentGroupId": "group2012May11_NpCpS3995",
    "cidr": "127.0.0.1/24",
    "id": 214
  }
}
```

### Successfully create a new firewall group rule with an IP without a netmask

**POST** <https://api.hostway.com/accounts/{accountId}/os-security-group-rules>

*Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

*Request Body:*

```
{
  "securityGroupRule" : {
    "fromPort": 80,
    "toPort": 80,
    "protocol": "TCP",
    "cidr": "127.0.0.1",
    "parentGroupId": "group2012May11_NpCpS3995"
  }
}
```

*Response Code:*

*HTTP/1.1 201 Created*

*Response Body:*

```
{
  "securityGroupRule" : {
    "fromPort": 80,
    "protocol": "tcp",
    "links": [
      {
        "href": "https://api.hostway.com/accounts/{accountId}/os-security-group-rules/215/",

```

```
    "rel": "self"
  },
  ],
  "toPort": 80,
  "parentGroupId": "group2012May11_NpCpS3995",
  "cidr": "127.0.0.1/32",
  "id": 215
}
}
```

### Failure while trying to create a new firewall group rule with invalid data

**POST** https://api.hostway.com/accounts/{accountId}/os-security-group-rules

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  Empty
}
```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```
{
  "badRequest" : {
    "message": "Invalid",
    "code": 400,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### Failure while trying to create a new rule with invalid from and to ports

**POST** https://api.hostway.com/accounts/{accountId}/os-security-group-rules

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "securityGroupRule" : {
    "fromPort": 81,
    "toPort": 80,
    "protocol": "tcp",
    "cidr": "127.0.0.1/24",
    "parentGroupId": "group2012May11_NpCpS3995"
  }
}
```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```
{
  "badRequest" : {
    "message": "FirewallRuleError",
    "code": 400,
    "details": "Invalid ports",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### Failure while trying to create a new rule rule with an invalid protocol

**POST** https://api.hostway.com/accounts/{accountId}/os-security-group-rules

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "securityGroupRule" : {
    "fromPort": 80,
    "toPort": 80,
    "protocol": "proto",
    "cidr": "127.0.0.1/24",
    "parentGroupId": "group2012May11_NpCpS3995"
  }
}
```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```
{
  "badRequest" : {
    "message": "Invalid",
    "code": 400,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Failure while trying to create a new firewall rule with an invalid IP address

**POST** http(s)://{api\_server}/accounts/{accountId}/os-security-group-rules

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "securityGroupRule" : {
    "fromPort": 80,
    "toPort": 80,
    "protocol": "tcp",
    "cidr": "ip_address",
    "parentGroupId": "group2012May11_NpCpS3995"
  }
}
```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```
{
  "badRequest" : {
    "message": "FirewallRuleError",
    "code": 400,
    "details": "Source IP address is invalid",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Failure while trying to make unauthorized access

**POST** https://api.hostway.com/accounts/{accountId}/os-security-groups

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### Failure while trying to pass invalid account number

**POST** http(s)://{api\_server}/accounts/fakeld/os-security-groups

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 4.5 Alternative URI /accounts/os-security-group-rules

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /accounts/os-security-group-rules

## **5 Accounts-accountId-os-security-groups-groupId:DELETE**

This operation will delete the specified firewall group.

## 6 DELETE /accounts/{accountId}/os-security-groups/{groupId}

This operation will delete the specified firewall group.

### 6.1 Parameters

accountId - *string*  
The selected account Id.

groupId - *string*  
The unique identifier of the firewall group.

### 6.2 Response Codes

Success  
HTTP/1.1 204 No Content

Failure  
HTTP/1.1 401 Unauthorized - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
HTTP/1.1 404 Not Found - The resource does not exist.

### 6.3 Examples

#### Successfully delete the specified firewall group

```
DELETE https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012May11_OK30Zs7Ju
```

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Response Code:

```
HTTP/1.1 204 No Content
```

#### Failure while trying to make unauthorized access

```
DELETE https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012May11_OK30Zs7Ju
```

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

##### Response Code:

```
HTTP/1.1 401 Unauthorized
```

##### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### Failure while trying to delete a non-existent firewall group

```
DELETE https://api.hostway.com/accounts/{accountId}/os-security-groups/{fake_firewall_group_id}
```

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Failure while trying to pass invalid account number

```
DELETE https://api.hostway.com/accounts/fakeId/os-security-groups/group2012May11_OK30Zs7Ju
```

##### Response Code:

```
HTTP/1.1 404 Not Found
```

##### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 6.4 Alternative URI /accounts/os-security-groups/{groupId}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
DELETE /accounts/os-security-groups/{groupId}
```

## 7 Accounts-accountId-os-security-groups-groupId:GET

This operation will list the details for the specified firewall group.

## 8 GET /accounts/{accountId}/os-security-groups/{groupId}

This operation will list the details for the specified firewall group.

### 8.1 Parameters

accountId - *string*  
The selected account Id.

groupId - *string*  
The unique identifier of the firewall group.

### 8.2 Response

#### 8.2.1 JSON

```
{
  "securityGroup" : {
    "displayName" : "{firewall_group_display_name}",
    "description" : "{firewall_group_description}",
    "links" : [
      {
        "href" : "https://api.hostway.com/accounts/{accountId}/os-security-groups/{groupId}/",
        "rel" : "self"
      }
    ],
    "rules" : [
      {
        "fromPort" : "{start_port}",
        "toPort" : "{end_port}",
        "protocol" : "{ip_protocol}",
        "cidr" : "0.0.0.0/0",
        "id" : "145"
      },
      {
        "fromPort" : "{start_port}",
        "toPort" : "{end_port}",
        "protocol" : "{ip_protocol}",
        "cidr" : "127.0.0.1/0",
        "id" : "169"
      }
    ],
    "servers" : [{"server_id"}],
    "accountNumber" : "{user_account_number}",
    "id" : "{firewall_group_id}"
  }
}
```

##### 8.2.1.1 securityGroup

displayName - *string*  
The display name of the firewall group.

description - *string*  
Text describing the firewall group.

links - *list*  
[Hypermedia](#) for this resource.

rules - *list*  
List describing all defined security rules for the group.

servers - *list*  
List of server ids this firewall group is assigned to.

accountNumber - *string*  
Identifies an account that owns the firewall group.

id - *string*  
The id of this firewall group.\*(Unique identifier for this firewall group.)

### 8.3 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 8.4 Examples

#### Successfully list details for specified firewall group

**GET** https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012May11\_OK30Zs7Ju

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 200 OK

**Response Body:**

```
{
  "securityGroup" : {
    "displayName": "Test Firewall Group 1",
    "description": "Test firewall group 1 description.",
    "links": [
      {
        "href": "https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012May11_OK30Zs7Ju/",
        "rel": "self"
      }
    ],
    "rules": [
      {
        'toPort': 1111,
        'fromPort': 1111,
        'protocol': 'TCP',
        'id': 145,
        'cidr': '0.0.0.0/0'
      },
      {
        'toPort': 80,
        'fromPort': 80,
        'protocol': 'TCP',
        'id': 196,
        'cidr': '127.0.0.1/24'
      }
    ],
    "id": "group2012May11_OK30Zs7Ju",
    "accountNumber": "test_account_120761",
    "servers": ["test-server-0003"]
  }
}
```

**Failure while trying to request details for a firewall group that does not exist**

**GET** https://api.hostway.com/accounts/{accountId}/os-security-groups/{fake\_firewall\_group\_id}

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to make unauthorized access**

**GET** https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012May11\_OK30Zs7Ju

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

**Response Code:**

HTTP/1.1 401 Unauthorized

**Response Body:**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to pass invalid account number**

**GET** https://api.hostway.com/accounts/fakeld/os-security-groups/group2012May11\_OK30Zs7Ju

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound" : {
    "message": "Resource not found",
  }
}
```

```
"code": 404,  
"details": "",  
"errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
}
```

## 8.5 Alternative URI /accounts/os-security-groups/{groupId}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /accounts/os-security-groups/{groupId}
```

## 9 Accounts-accountId-os-security-groups-groupId:PUT

This operation will update displayName and/or description of the specified firewall group.

## 10 PUT /accounts/{accountId}/os-security-groups/{groupId}

### 10.1 Parameters

accountId - *string*  
The selected account Id.

groupId - *string*  
The unique identifier of the firewall group.

### 10.2 Request

#### 10.2.1 JSON

```
{
  "securityGroup" : {
    "displayName" : "{firewall_group_display_name}",
    "description" : "{firewall_group_description}",
  }
}
```

### 10.3 Response

#### 10.3.1 JSON

```
{
  "securityGroup" : {
    "displayName" : "{firewall_group_display_name}",
    "description" : "{firewall_group_description}",
    "links" : [
      {
        "href" : "https://api.hostway.com/accounts/{accountId}/os-security-groups/{groupId}/",
        "rel" : "self"
      }
    ],
    "rules" : [
      {
        "fromPort" : "{start_port}",
        "toPort" : "{end_port}",
        "protocol" : "{ip_protocol}",
        "cidr" : "0.0.0.0/0",
        "id" : "145"
      },
      {
        "fromPort" : "{start_port}",
        "toPort" : "{end_port}",
        "protocol" : "{ip_protocol}",
        "cidr" : "127.0.0.1/0",
        "id" : "169"
      }
    ],
    "servers" : [{"server_id"}],
    "accountNumber" : "{user_account_number}",
    "id" : "{firewall_group_id}"
  }
}
```

### 10.4 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 10.5 Examples

#### Successfully edit details for specified firewall group

PUT [https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012May11\\_OK30Zs7Ju](https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012May11_OK30Zs7Ju)

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "securityGroup" : {
    "displayName": "New display name",
    "description": "New description",
  }
}
```

#### Response Code:

HTTP/1.1 200 OK

#### Response Body:

```
{
```

```

"securityGroup" : {
  "displayName": "New display name",
  "description": "New description.",
  "links": [
    {
      "href": "https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012May11_OK30Zs7Ju/",
      "rel": "self"
    }
  ],
  "rules": [
    {
      'toPort': 1111,
      'fromPort': 1111,
      'protocol': 'TCP',
      'id': 145,
      'cidr': '0.0.0.0/0'
    },
    {
      'toPort': 80,
      'fromPort': 80,
      'protocol': 'tcp',
      'id': 196,
      'cidr': '127.0.0.1/24'
    }
  ],
  "id": "group2012May11_OK30Zs7Ju",
  "accountNumber": "test_account_120761",
  "servers": ["test-server-0003"]
}
}

```

### Failure while trying to edit a firewall group that does not exist

**PUT** https://api.hostway.com/accounts/{accountId}/os-security-groups/{fake\_firewall\_group\_id}

#### Request Headers:

```

Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string

```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```

{
  "itemNotFound":
  {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}

```

## 11 Accounts-accountId-os-security-groups:GET

This operation lists existing firewall groups.

## 12 GET /accounts/{accountId}/os-security-groups

This operation lists existing firewall groups.

### 12.1 Request

#### 12.1.1 Request Parameters

accountId - *string*  
The selected account Id.

### 12.2 Response

#### 12.2.1 JSON

```
{
  "securityGroups" : [
    {
      "displayName" : "{firewall_group_display_name}",
      "description" : "{firewall_group_description}",
      "links" : [
        {
          "href" : "https://api.hostway.com/accounts/{accountId}/os-security-groups/{firewall_group_id}/",
          "rel" : "self"
        }
      ],
      "rules" : [
        {
          "fromPort" : {start_port},
          "toPort" : {end_port},
          "protocol" : "{ip_protocol}",
          "cidr" : "0.0.0.0/0",
          "id" : "145"
        }
      ],
      "servers" : [{"server_id"}],
      "accountNumber" : "{user_account_number}",
      "Id" : "{firewall_group_id}"
    }
  ]
}
```

##### 12.2.1.1 security\_groups

displayName - *string*  
The display name of the firewall group.

description - *string*  
Text describing the firewall group.

links - *list*  
[Hypermedia](#) for this resource.

rules - *list*  
List describing all defined security rules for the group.

fault - *dictionary*  
Might hold a fault information for the firewall group.

servers - *list*  
List of server ids this firewall group is assigned to.

accountNumber - *string*  
Identifies an account that owns the firewall group.

id - *string*  
The id of this firewall group.\*(Unique identifier for this firewall group.)

### 12.3 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 12.4 Examples

#### Successfully list firewall groups

**GET** https://api.hostway.com/accounts/{accountId}/os-security-groups

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 200 OK

**Response Body:**

```
{
  "securityGroup" : [
    {
      "displayName": "Test Firewall Group 1",
      "description": "Test firewall group 1 description.",
      "links": [
        {
          "href": "https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012May11_OK30Zs7Ju/",
          "rel": "self"
        }
      ],
      "rules": [
        {
          "toPort": 1111,
          "fromPort": 1111,
          "protocol": "TCP",
          "id": 145,
          "cidr": "0.0.0.0/0"
        },
        {
          "toPort": 80,
          "fromPort": 80,
          "protocol": "TCP",
          "id": 196,
          "cidr": "127.0.0.1/24"
        }
      ],
      "id": "group2012May11_OK30Zs7Ju",
      "accountNumber": "test_account_120761",
      "servers": ["test-server-0003"]
    },
    {
      "displayName": "Test Firewall Group",
      "description": "Test firewall group description.",
      "links": [
        {
          "href": "https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012Apr30_9J5qDw0Io/",
          "rel": "self"
        }
      ],
      "rules": [
        {
          "toPort": 3389,
          "fromPort": 3389,
          "protocol": "tcp",
          "id": 116,
          "cidr": "0.0.0.0/0"
        },
        {
          "toPort": 8443,
          "fromPort": 8443,
          "protocol": "tcp",
          "id": 117,
          "cidr": "0.0.0.0/0"
        },
        {
          "toPort": 22,
          "fromPort": 22,
          "protocol": "tcp",
          "id": 118,
          "cidr": "0.0.0.0/0"
        }
      ],
      "id": "group2012Apr30_9J5qDw0Io",
      "accountNumber": "test_account_901265",
      "servers": ["test-server-0011", "test-server-0024"]
    }
  ]
}
```

**Failure while trying to make unauthorized access**

**POST** https://api.hostway.com/accounts/{accountId}/os-security-groups

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

**Response Code:**

HTTP/1.1 401 Unauthorized

**Response Body:**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to pass invalid account number**

**POST** https://api.hostway.com/accounts/fakeld/os-security-groups

**Response Code:**

HTTP/1.1 404 Not Found

*Response Body:*

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 12.5 Alternative URI /accounts/os-security-groups

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

GET /accounts/os-security-groups

## 13 Accounts-accountId-os-security-groups:POST

A Security/Firewall Group defines firewall rules for your Server. You have the ability to configure your firewall connections and secure your network as required. You may have one or multiple servers behind a firewall group. Hostway provides a default firewall group, and typical firewall rules are already configured. You can create multiple firewall groups as needed.

## 14 POST /accounts/{accountId}/os-security-groups

This operation will create a new firewall group.

### 14.1 Request

#### 14.1.1 Parameters

accountId - *string*  
The selected account Id.

#### 14.1.2 JSON

```
{
  "securityGroup": {
    "displayName": "{firewall_group_display_name}",
    "description": "{firewall_group_description}"
  }
}
```

##### 14.1.2.1 securityGroup

displayName - *string*  
Display name for this firewall group.

description - *string*  
Descriptive information for this firewall group.

### 14.2 Response

#### 14.2.1 JSON

```
{
  "securityGroup": {
    "displayName": "{firewall_group_display_name}",
    "description": "{firewall_group_description}",
    "links": [
      {
        "href": "https://api.hostway.com/accounts/{accountId}/os-security-groups/{firewall_group_id}/",
        "rel": "self"
      }
    ],
    "rules": [],
    "id": "{firewall_group_id}",
    "accountNumber": "{user_account_number}",
    "servers": []
  }
}
```

##### 14.2.1.1 securityGroup

displayName - *string*  
Display name for this firewall group.

description - *string*  
Descriptive information for this firewall group.

links - *list*  
[Hypermedia](#) for this resource.

rules - *list*  
List of all defined security rules for the group.

id - *string*  
The id of the firewall group. \*(Unique identifier for this firewall group.)

accountNumber - *string*  
The account number this firewall group resource belongs to.

servers - *list*  
List of server IDs this security group is assigned to.

### 14.3 Response Codes

Success  
*HTTP/1.1 201 Created*

Failure  
*HTTP/1.1 400 Bad Request*  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 409 Conflict* - The resource already exists.

### 14.4 Examples

#### Successfully create a new firewall group

**POST** https://api.hostway.com/accounts/{accountId}/os-security-groups

*Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  "securityGroup" : {
    "displayName" : "Test Firewall Group",
    "description" : "Test firewall group description."
  }
}
```

**Response Code:**

HTTP/1.1 201 Created

**Response Body:**

```
{
  "securityGroup" : {
    "displayName": "Test Firewall Group",
    "description": "Test firewall group description.",
    "links": [
      {
        "href": "https://api.hostway.com/accounts/{accountId}/os-security-groups/group2012May11_OK30Zs7Ju/",
        "rel": "self"
      }
    ],
    "rules": [],
    "id": "group2012May11_OK30Zs7Ju",
    "accountNumber": "test_account_120761",
    "servers": []
  }
}
```

**Failure while trying to create a new firewall group with invalid data**

**POST** https://api.hostway.com/accounts/{accountId}/os-security-groups

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  Empty
}
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest" : {
    "message": "Invalid",
    "code": 400,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to create a new firewall group with an already existing firewall group display name**

**POST** https://api.hostway.com/accounts/{accountId}/os-security-groups

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  "securityGroup" : {
    "displayName" : "Test Firewall Group",
    "description" : "Test firewall group description."
  }
}
```

**Response Code:**

HTTP/1.1 409 Conflict

**Response Body:**

```
{
  "computeFault" : {
    "message": "GroupNameError",
    "code": 400,
    "details": "Display name in use",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

```
}
```

### Failure while trying to make unauthorized access

**POST** https://api.hostway.com/accounts/{accountId}/os-security-groups

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

### Failure while trying to pass invalid account number

**POST** https://api.hostway.com/accounts/fakeld/os-security-groups

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 14.5 Alternative URI /accounts/os-security-groups

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /accounts/os-security-groups

## 15 Allocate Flexible IP

A Flexible IP address is a static IP address that can be bound to any single Server. When you associate a flexible IP with a Server the IP is bound to that Server's network interface. You will use your flexible IP to connect to your Server. You can allocate IPs and release IPs from your account as needed.

## 16 POST /accounts/{accountId}/flexcloud/os-floating-ips

Allocates a new flexible IP.

### 16.1 Request

```
{
  "zone": "AUS001"
}
```

#### 16.1.1 Parameters

accountId - *string*  
The selected account Id.

### 16.2 Response

#### 16.2.1 JSON

```
{
  "floating_ip" : {
    "instance_id" : "{instance_id}",
    "ip" : "{ip_address}",
    "fixed_ip" : null,
    "links" : [
      {
        "href" : "http://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip_address}/",
        "rel" : "self"
      }
    ],
    "pool" : "default"
  }
}
```

##### 16.2.1.1 floating\_ip

instance\_id - *string*  
Unique instance identifier floating IP is assigned to.

ip - *string*  
IP address allocated.

fixed\_ip - *string*  
Fixed IP address.

links - *list*  
[Hypermedia](#) for this resource.

pool - *string*  
Name of the pool IP address belongs to.

### 16.3 Response Codes

Success  
*HTTP/1.1 202 Accepted*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied incorrect credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Resource not found* : The resource was accessed with wrong account number

### 16.4 Examples

#### Successfully allocate a flexible IP

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-floating-ips

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Response Code:

HTTP/1.1 202 Accepted

##### Response Body:

```
{
  "floating_ip" : {
    "instance_id" : null,
    "ip" : "{ip_address}",
    "fixed_ip" : null,
    "links" : [
      {
        "href" : "http://{api_server}/account/{accountId}/flexcloud/os-floating-ips/{ip_address}/",
        "rel" : "self"
      }
    ],
    "pool" : "default"
  }
}
```

```
}
```

### Unauthorized access

**POST** http://{api\_server}/accounts/{accountId}/flexcloud/os-floating-ips

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

### Failure while trying to pass invalid account number

**POST** http://{api\_server}/accounts/fake/flexcloud/os-floating-ips

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 16.5 Alternative URI /os-floating-ips

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /os-floating-ips

## 17 AssignSecurityGroupToServer

This operation will assign a securityGroup to the specified server

## 18 PUT /accounts/{accountId}/flexcloud/servers/{id}/os-security-group

### 18.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server.

### 18.2 Request

#### 18.2.1 JSON

```
{
  "securityGroup" : {
    "id": "{security_group_id}",
    "status": "{status}"
  }
}
```

securityGroup.id - *string*  
The unique name of the securityGroup.

status - *string*  
Status. Only enabled is supported currently

### 18.3 Response Codes

Success  
HTTP/1.1 200 OK

Failure  
HTTP/1.1 400 Bad Request  
HTTP/1.1 401 Unauthorized : This server could not verify that you are authorized to access the document you requested. Either you supplied incorrect credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

### 18.4 Examples

#### Successfully assign a securityGroup to the specified server

PUT http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/os-security-group

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Request Body:

```
{
  "securityGroup" : {
    "id": "group2012Nov02_jD6NX8BsK"
    "status": "enabled"
  }
}
```

##### Response Code:

HTTP/1.1 200 OK

##### Response Body:

```
{
  "securityGroup" : {
    "id": "2012May08_61EfdIZ3Y"
    "links": [{"href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012Nov02_jD6NX8BsK/", "rel": "self"}]
  }
}
```

#### Failure while trying to assign a firewall group to server

PUT http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/os-security-group

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

```
{
  "securityGroup" : {
    "id": "not_exist",
    "status": "enabled"
  }
}
```

##### Response Code:

HTTP/1.1 400 Bad Request

## 19 AttachVolumeToServer

This operation will attach an already existing volume to the specified [Server](#).

## 20 POST /accounts/{accountId}/flexcloud/servers/{id}/os-volume\_attachments

### 20.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server.

### 20.2 Request

#### 20.2.1 JSON

```
{
  "volumeAttachment" : {
    "volumeId" : "{volume_id}",
    "device": "{device_path}"
  }
}
```

volumeId- *string*  
The unique identifier of the volume.

device- *string*  
The device path specified.

### 20.3 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied incorrect credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found*  
*HTTP/1.1 409 Conflict*

### 20.4 Examples

#### Successfully attach a volume to specified server

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/os-volume\_attachments

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "volumeAttachment" : {
    "volumeId" : "hbs2012May08_61EfdIZ3Y",
    "device": "/dev/test"
  }
}
```

#### Response Code:

*HTTP/1.1 200 OK*

#### Failure while trying to attach a volume that is already attached to the server

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/os-volume\_attachments

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "volumeAttachment" : {
    "volumeId" : "hbs2012May08_61EfdIZ3Y",
    "device": "/dev/test"
  }
}
```

#### Response Code:

*HTTP/1.1 409 Conflict*

#### Response Body:

```
{
  "conflict": {
    "message": "VolumeAlreadyAttached",
    "code": 409,
    "details": "hbs is already attached",
  }
}
```

```
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### Failure while trying to attach a volume that does not exist

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/os-volume\_attachments

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "volumeAttachment" : {
    "volumeId" : "fake_volume_id",
    "device": "/dev/test"
  }
}
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "notFound": {
    "message": "VolumeNotFound",
    "code": 404,
    "details": "hostway block store not found",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### Unauthorized access

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/os-volume\_attachments

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

### Failure while trying to pass invalid account number

**POST** http(s)://{api\_server}/accounts/fake/flexcloud/servers/{id}/os-volume\_attachments

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 20.5 Alternative URI /servers/{id}/os-volume\_attachments

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
POST /servers/{id}/os-volume_attachments
```

## 21 Create Firewall Group

A Security/Firewall Group defines firewall rules for your Server. You have the ability to configure your firewall connections and secure your network as required. You may have one or multiple servers behind a firewall group. Hostway provides a default firewall group, and typical firewall rules are already configured. You can create multiple firewall groups as needed.

## 22 POST /accounts/{accountId}/flexcloud/os-security-groups

This operation will create a new firewall group.

### 22.1 Request

#### 22.1.1 Parameters

accountId - *string*  
The selected account Id.

#### 22.1.2 JSON

```
{
  "securityGroup" : {
    "displayName" : "{firewall_group_display_name}",
    "description" : "{firewall_group_description}"
  }
}
```

##### 22.1.2.1 securityGroup

displayName - *string*  
Display name for this firewall group.

description - *string*  
Descriptive information for this firewall group.

### 22.2 Response

#### 22.2.1 JSON

```
{
  "securityGroup" : {
    "displayName": "{firewall_group_display_name}",
    "description": "{firewall_group_description}",
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/{firewall_group_name}/",
        "rel": "self"
      }
    ],
    "rules": [],
    "id": "{firewall_group_id}",
    "accountNumber": "{user_account_number}",
    "servers": []
  }
}
```

##### 22.2.1.1 securityGroup

displayName - *string*  
Display name for this firewall group.

description - *string*  
Descriptive information for this firewall group.

links - *list*  
[Hypermedia](#) for this resource.

rules - *list*  
List of all defined security rules for the group.

id - *string*  
The id of the firewall group.\*(Unique identifier for this firewall group.)

accountNumber - *string*  
The account number this firewall group resource belongs to.

servers - *list*  
List of server IDs this security group is assigned to.

### 22.3 Response Codes

Success  
*HTTP/1.1 201 Created*

Failure  
*HTTP/1.1 400 Bad Request*  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 409 Conflict* - The resource already exists.

### 22.4 Examples

#### Successfully create a new firewall group

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups

*Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  "securityGroup" : {
    "displayName" : "Test Firewall Group",
    "description" : "Test firewall group description."
  }
}
```

**Response Code:**

HTTP/1.1 201 Created

**Response Body:**

```
{
  "securityGroup" : {
    "displayName": "Test Firewall Group",
    "description": "Test firewall group description.",
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012May11_OK30Zs7Ju/",
        "rel": "self"
      }
    ],
    "rules": [],
    "id": "group2012May11_OK30Zs7Ju",
    "accountNumber": "test_account_120761",
    "servers": []
  }
}
```

**Failure while trying to create a new firewall group with invalid data**

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  Empty
}
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest" : {
    "message": "Invalid",
    "code": 400,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to create a new firewall group with an already existing firewall group display name**

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  "securityGroup" : {
    "displayName" : "Test Firewall Group",
    "description" : "Test firewall group description."
  }
}
```

**Response Code:**

HTTP/1.1 409 Conflict

**Response Body:**

```
{
  "computeFault" : {
    "message": "GroupNameError",
    "code": 400,
    "details": "Display name in use",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

```
}
```

### Failure while trying to make unauthorized access

```
POST http(s)://{api_server}/accounts/{accountId}/flexcloud/os-security-groups
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

```
HTTP/1.1 401 Unauthorized
```

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

### Failure while trying to pass invalid account number

```
POST http(s)://{api_server}/accounts/fake/flexcloud/os-security-groups
```

#### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 22.5 Alternative URI /os-security-groups

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
POST /os-security-groups
```

## 23 Create Firewall Group Rule

This operation will create a new firewall group rule.

## 24 POST /accounts/{accountId}/flexcloud/os-security-group-rules

This operation will create a new firewall group rule.

### 24.1 Request

#### 24.1.1 Parameters

accountId - *string*  
The selected account Id.

#### 24.1.2 JSON

```
{
  "securityGroupRule" : {
    "fromPort": {start_port},
    "toPort": {end_port},
    "protocol": "{ip_protocol}",
    "cidr": "127.0.0.1/24",
    "parentGroupId": "{parent_group_id}"
  }
}
```

##### 24.1.2.1 securityGroupRule

fromPort - *int*  
Start port number.

toPort - *int*  
End port number.

protocol - *string*  
IP protocol used. TCP or UDP

cidr - *string*  
CIDR notation IP address.

parentGroupId - *string*  
Parent group identifier for this rule.

### 24.2 Response

#### 24.2.1 JSON

```
{
  "securityGroupRule" : {
    "fromPort": {start_port},
    "protocol": "{ip_protocol}",
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-group-rules/{firewall_group_rule_id}/",
        "rel": "self"
      }
    ],
    "toPort": {end_port},
    "parentGroupId": "{parent_firewall_group_name}",
    "cidr": "127.0.0.1/24"
    "id": {firewall_group_rule_id}
  }
}
```

##### 24.2.1.1 securityGroupRule

fromPort - *int*  
Start port number.

protocol - *string*  
IP protocol used.

links - *list*  
[Hypermedia](#) for this resource.

toPort - *int*  
End port number.

parentGroupId - *string*  
Parent group identifier for this rule.

cidr - *string*  
IP range in CIDR notation.

id - *string*  
Firewall group rule unique identifier.

### 24.3 Response Codes

Success  
*HTTP/1.1 201 Created*

Failure

*HTTP/1.1 400 Bad Request*

*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

*HTTP/1.1 404 Not Found* - The resource does not exist.

## 24.4 Examples

### Successfully create a new firewall group rule

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-group-rules

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "security_group_rule" : {
    "from_port": 80,
    "to_port": 80,
    "ip_protocol": "tcp",
    "cidr": "127.0.0.1/24",
    "parent_group_id": "group2012May11_NpCpS3995"
  }
}
```

#### Response Code:

HTTP/1.1 201 Created

#### Response Body:

```
{
  "securityGroupRule" : {
    "fromPort": 80,
    "protocol": "tcp",
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-group-rules/214/",
        "rel": "self"
      }
    ],
    "toPort": 80,
    "parentGroupId": "group2012May11_NpCpS3995",
    "cidr": "127.0.0.1/24",
    "id": 214
  }
}
```

### Successfully create a new firewall group rule with an IP without a netmask

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-group-rules

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "securityGroupRule" : {
    "fromPort": 80,
    "toPort": 80,
    "protocol": "TCP",
    "cidr": "127.0.0.1",
    "parentGroupId": "group2012May11_NpCpS3995"
  }
}
```

#### Response Code:

HTTP/1.1 201 Created

#### Response Body:

```
{
  "securityGroupRule" : {
    "fromPort": 80,
    "protocol": "tcp",
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-group-rules/215/",
        "rel": "self"
      }
    ],
    "toPort": 80,
    "parentGroupId": "group2012May11_NpCpS3995",
    "cidr": "127.0.0.1/32",
    "id": 215
  }
}
```

### Failure while trying to create a new firewall group rule with invalid data

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-group-rules

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  Empty
}
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest" : {
    "message": "Invalid",
    "code": 400,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to create a new rule with invalid from and to ports**

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-group-rules

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  "securityGroupRule" : {
    "fromPort": 81,
    "toPort": 80,
    "protocol": "tcp",
    "cidr": "127.0.0.1/24",
    "parentGroupId": "group2012May11_NpCpS3995"
  }
}
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest" : {
    "message": "FirewallRuleError",
    "code": 400,
    "details": "Invalid ports",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to create a new rule rule with an invalid protocol**

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-group-rules

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  "securityGroupRule" : {
    "fromPort": 80,
    "toPort": 80,
    "protocol": "proto",
    "cidr": "127.0.0.1/24",
    "parentGroupId": "group2012May11_NpCpS3995"
  }
}
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest" : {
    "message": "Invalid",
    "code": 400,
  }
}
```

```
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### Failure while trying to create a new firewall rule with an invalid IP address

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-group-rules

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "securityGroupRule" : {
    "fromPort": 80,
    "toPort": 80,
    "protocol": "tcp",
    "cidr": "ip_address",
    "parentGroupId": "group2012May11_NpCpS3995"
  }
}
```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```
{
  "badRequest" : {
    "message": "FirewallRuleError",
    "code": 400,
    "details": "Source IP address is invalid",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### Failure while trying to make unauthorized access

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

### Failure while trying to pass invalid account number

**POST** http(s)://{api\_server}/accounts/fake/flexcloud/os-security-groups

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 24.5 Alternative URI /os-security-group-rules

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization](#) header.

POST /os-security-group-rules

## 25 Create Volume

A Volume provides storage space that can be used with your Server. This storage space is independent from the storage space that is included with your Server. Once a volume is created, it can be easily attached to a Server. Once attached, it will appear as a mounted device. You can attach multiple volumes to a Server.

## 26 POST /accounts/{accountId}/flexcloud/volumes

This operation will create a new volume.

### 26.1 Request

#### 26.1.1 Parameters

accountId - *string*  
The selected account Id.

#### 26.1.2 JSON

```
{
  "volume": {
    "display_name": "{display_volume_name}",
    "display_description": "{display_volume_description}",
    "size": {size_quantity},
    "volume_type": "{volume_type_id}",
    "metadata": {
      "contents": "{contents_type}"
    },
    "availability_zone": "{availability_zone_id}"
  }
}
```

##### 26.1.2.1 volume

display\_name - *string*  
Display name for this volume.

display\_description - *string*  
Descriptive information for this volume.

size - *int*  
Volume size.

volume\_type - *string*  
Identifier of volume type. \*(Unused in the current API version - please pass empty value).

metadata - *string*  
Additional metadata info.

availability\_zone - *string*  
Identifier of the availability zone into which this volume is created.

### 26.2 Response

#### 26.2.1 JSON

```
{
  "volume": {
    "status": "{volume_status}"
    "id": "{volume_id}",
    "display_name": "{display_volume_name}",
    "display_description": "{display_volume_description}",
    "size": {size_quantity},
    "volume_type": "{volume_type_id}",
    "metadata": {
      "contents": "{contents_type}"
    },
    "availability_zone": "{availability_zone_id}"
    "snapshot_id": "",
    "attachments": [],
    "created_at": "2012-02-14T20:53:07Z"
  }
}
```

##### 26.2.1.1 volume

status - *string*  
Current status of the volume instance. Possible values: **Pending**, **Open** and **ClosePending**.

id - *string*  
Identifier of the volume instance.

display\_name - *string*  
Display name for this volume.

display\_description - *string*  
Descriptive information for this volume.

size - *int*  
Volume size.

volume\_type - *string*  
Identifier of the volume type used. \*(Unused in the current API version - please pass empty value).

metadata - *string*  
Additional metadata info.

availability\_zone - *string*

Identifier of the availability zone into which this volume is created.

`snapshot_id` - *string*  
Identifier of the snapshot associated with this volume.

`attachments` - *list*  
List of attachments this volume is associated with.

`created_at` - *string*  
Volume creation timestamp.

## 26.3 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 400 Bad Request*  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.  
*HTTP/1.1 409 Conflict*

## 26.4 Examples

### Successfully create a new volume

**POST** `http(s)://{api_server}/accounts/{accountId}/flexcloud/volumes`

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "volume" : {
    "display_name" : "test_volume_001",
    "display_description" : "Test_Volume_001_Description.",
    "size" : 30,
    "volume_type" : "289da7f8-6440-407c-9fb4-7db01ec49164",
    "metadata" : {
      "contents": "junk"
    },
    "availability_zone" : "test_zone"
  }
}
```

#### Response Code:

*HTTP/1.1 200 OK*

#### Response Body:

```
{
  "volume": {
    "status": "Pending",
    "id": 8,
    "display_name" : "test_volume_001",
    "display_description" : "Test_Volume_001_Description.",
    "size" : 30,
    "availability_zone" : "test_zone"
    "attachments": [],
    "created_at": "2012-05-07 15:15:21.678868"
  }
}
```

### Failure while trying to create a new volume with an already existing volume name

**POST** `http(s)://{api_server}/accounts/{accountId}/flexcloud/volumes`

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "volume" : {
    "display_name" : <span style="color:red">"test_volume_001"</span>,
    "display_description" : "Test creating a new volume with already existing volume name.",
    "size" : 30,
    "volume_type" : "289da7f8-6440-407c-9fb4-7db01ec49164",
    "metadata" : {"contents": "junk"},
    "availability_zone" : "test_zone"
  }
}
```

#### Response Code:

*HTTP/1.1 409 Conflict*



```
{
  "volume" : {
    "display_name" : "vol-test-name-invalid-zone",
    "display_description" : "Test creating a volume with invalid availability zone(empty zone).",
    "size" : <span style="color:red">500</span>,
    "volume_type" : "289da7f8-6440-407c-9fb4-7db01ec49164",
    "metadata" : {"contents": "junk"},
    "availability_zone" : "test_zone"
  }
}
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "VolumeSize",
    "code": 400,
    "details": "not available HBS Size",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Unauthorized access**

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/volumes

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

**Response Code:**

HTTP/1.1 401 Unauthorized

**Response Body:**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to pass invalid account number**

**POST** http(s)://{api\_server}/accounts/fake/flexcloud/volumes

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 26.5 Alternative URI /volumes

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /volumes

## 27 Delete Allocated Flexible IP

This operation will delete the specified allocated flexible IP address.

## 28 DELETE /accounts/{accountId}/flexcloud/os-floating-ips/{ip\_address}

Deletes and deallocates the specified allocated flexible IP address.

### 28.1 Parameters

accountId - *string*  
The selected account Id.

ip\_address - *string*

### 28.2 Response Codes

Success  
*HTTP/1.1 202 Accepted*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied incorrect credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 28.3 Examples

#### Delete the specified allocated flexible IP address

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip_address}
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 202 Accepted

#### Failure while trying to delete a non-existent allocated floating IP address

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{fake_ip_address}
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Unauthorized access

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip_address}
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### Failure while trying to pass invalid account number

```
DELETE http(s)://{api_server}/accounts/fake/flexcloud/os-floating-ips/{ip_address}
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 28.4 Alternative URI /os-floating-ips/{ip\_address}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
DELETE /os-floating-ips/{ip_address}
```

## 29 Delete Firewall Group

This operation will delete the specified firewall group.

## 30 DELETE /accounts/{accountId}/flexcloud/os-security-groups/{id}

This operation will delete the specified firewall group.

### 30.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the firewall group.

### 30.2 Response Codes

Success  
*HTTP/1.1 204 No Content*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 30.3 Examples

#### Successfully delete the specified firewall group

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012May11_OK30Zs7Ju
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

```
HTTP/1.1 204 No Content
```

#### Failure while trying to make unauthorized access

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012May11_OK30Zs7Ju
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

```
HTTP/1.1 401 Unauthorized
```

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### Failure while trying to delete a non-existent firewall group

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/{fake_firewall_group_name}
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Failure while trying to pass invalid account number

```
DELETE http(s)://{api_server}/accounts/fake/flexcloud/os-security-groups/group2012May11_OK30Zs7Ju
```

#### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 30.4 Alternative URI /os-security-groups/{name}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
DELETE /os-security-groups/{name}
```

## 31 Delete Firewall Group Rule

This operation will delete a firewall group rule.

## 32 DELETE /accounts/{accountId}/flexcloud/os-security-group-rules/{id}

This operation will delete a firewall group rule.

### 32.1 Parameters

accountId - *string*  
The selected account Id.

id - *string*  
The unique firewall group rule identifier.

### 32.2 Response Codes

Success  
*HTTP/1.1 204 No Content*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 32.3 Examples

#### Successfully delete the specified firewall group rule

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/os-security-group-rules/{firewall_group_rule_id}
```

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Response Code:

HTTP/1.1 204 No Content

#### Failure while trying to delete a non-existent firewall group rule

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/os-security-group-rules/{fake_firewall_group_rule_id}
```

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Response Code:

HTTP/1.1 404 Not Found

#### Failure while trying to make unauthorized access

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/os-security-group-rules/{firewall_group_rule_id}
```

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

##### Response Code:

HTTP/1.1 401 Unauthorized

##### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### Failure while trying to pass invalid account number

```
DELETE http(s)://{api_server}/accounts/fake/flexcloud/os-security-group-rules/{firewall_group_rule_id}
```

##### Response Code:

HTTP/1.1 404 Not Found

##### Response Body:

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 32.4 Alternative URI /os-security-group-rules/id

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
DELETE /os-security-group-rules/{id}
```

## 33 Delete Volume

This operation will delete a single volume.

## 34 DELETE /accounts/{accountId}/flexcloud/volumes/{id}

This operation will delete a single volume.

### 34.1 Parameters

accountId - *string*  
The selected account Id.

id - *string*  
The unique volume identifier.

### 34.2 Response Codes

Success  
*HTTP/1.1 204 No Content*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 34.3 Examples

#### Successfully delete the specified volume

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/volumes/{volume_id}
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

```
HTTP/1.1 204 No Content
```

#### Failure while trying to delete a non-existent volume

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/volumes/{fake_volume_id}
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Failure while trying to make an unauthorized access

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/volumes/{volume_id}
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

```
HTTP/1.1 401 Unauthorized
```

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### Failure while trying to pass invalid account number

```
DELETE http(s)://{api_server}/accounts/fake/flexcloud/volumes/{volume_id}
```

#### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Response Body:

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 34.4 Alternative URI /volumes/{volume\_id}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
DELETE /volumes/{volume_id}
```

## 35 DetachVolumeFromServer

This operation detaches a volume attachment from the server specified.

## 36 DELETE

**/accounts/{accountId}/flexcloud/servers/{server\_id}/os-volume\_attachments/{volume\_id}**

### 36.1 Parameters

**accountId** - *string*  
The selected account Id.

**server\_id**  
The unique identifier of the server.

**volume\_id**  
The unique volume identifier.

### 36.2 Response Codes

**Success**  
*HTTP/1.1 204 No Content*

**Failure**  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied incorrect credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 36.3 Examples

#### Successfully detach a server's volume attachment

**DELETE** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test-server-0013/os-volume\_attachments/hbs2012May03\_00xRg0Jz7

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 204 No Content

#### Failure while trying to detach a volume attachment that does not exist

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test-server-0013/os-volume\_attachments/fake\_volume\_id

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound":
  {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Failure while trying to detach a volume attachment for a server that does not exist

**DELETE** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/fake\_server\_id/os-volume\_attachments/hbs2012May03\_00xRg0Jz7

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound":
  {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## Unauthorized request

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/test-server-0013/os-volume_attachments/hbs2012May03_0OxRg0Jz7
```

### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

### Response Code:

```
HTTP/1.1 401 Unauthorized
```

### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

## Failure while trying to pass invalid account number

```
DELETE http(s)://{api_server}/accounts/fake/flexcloud/servers/{id}/os-volume_attachments/hbs2012May03_0OxRg0Jz7
```

### Response Code:

```
HTTP/1.1 404 Not Found
```

### Response Body:

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 36.4 Alternative URI /servers/{server\_id}/os-volume\_attachments/{volume\_id}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
DELETE /servers/{server_id}/os-volume_attachments/{volume_id}
```

## 37 Edit Firewall Group

This operation will update displayname and/or description of the specified firewall group.

## 38 PUT /accounts/{accountId}/flexcloud/os-security-groups/{id}

### 38.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the firewall group.

### 38.2 Request

#### 38.2.1 JSON

```
{
  "securityGroup" : {
    "displayName" : "{firewall_group_display_name}",
    "description" : "{firewall_group_description}",
  }
}
```

### 38.3 Response

#### 38.3.1 JSON

```
{
  "securityGroup" : {
    "displayName" : "{firewall_group_display_name}",
    "description" : "{firewall_group_description}",
    "links" : [
      {
        "href" : "http://{api-server}/accounts/{accountId}/flexcloud/os-security-groups/{firewall_group_name}/",
        "rel" : "self"
      }
    ],
    "rules" : [
      {
        "fromPort" : "{start_port}",
        "toPort" : "{end_port}",
        "protocol" : "{ip_protocol}",
        "cidr" : "0.0.0.0/0",
        "id" : "145"
      },
      {
        "fromPort" : "{start_port}",
        "toPort" : "{end_port}",
        "protocol" : "{ip_protocol}",
        "cidr" : "127.0.0.1/0",
        "id" : "169"
      }
    ],
    "servers" : [{"server_id"}],
    "accountNumber" : "{user_account_number}",
    "id" : "{firewall_group_name}"
  }
}
```

### 38.4 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 38.5 Examples

#### Successfully edit details for specified firewall group

PUT http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012May11\_OK30Zs7Ju

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "securityGroup" : {
    "displayName": "New display name",
    "description": "New description",
  }
}
```

#### Response Code:

HTTP/1.1 200 OK

#### Response Body:

```
{
```

```

"securityGroup" : {
  "displayName": "New display name",
  "description": "New description.",
  "links": [
    {
      "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012May11_OK30Zs7Ju/",
      "rel": "self"
    }
  ],
  "rules": [
    {
      'toPort': 1111,
      'fromPort': 1111,
      'protocol': 'TCP',
      'id': 145,
      'cidr': '0.0.0.0/0'
    },
    {
      'toPort': 80,
      'fromPort': 80,
      'protocol': 'tcp',
      'id': 196,
      'cidr': '127.0.0.1/24'
    }
  ],
  "id": "group2012May11_OK30Zs7Ju",
  "accountNumber": "test_account_120761",
  "servers": ["test-server-0003"]
}
}

```

### Failure while trying to edit a firewall group that does not exist

**PUT** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups/{fake\_firewall\_group\_name}

#### Request Headers:

```

Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string

```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```

{
  "itemNotFound":
  {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}

```

## 39 Flavor

## 40 GET /accounts/{accountId}/flexcloud/flavors/detail/{id}

This operation will return size details of a single flavor.

### 40.1 Contents

- 1 GET /accounts/{accountId}/flexcloud/flavors/detail/{id}
  - ◆ 1.1 Request
    - ◇ 1.1.1 Parameters
  - ◆ 1.2 Response
    - ◇ 1.2.1 Status Code
    - ◇ 1.2.2 Response Body
      - 1.2.2.1 Parameters
  - ◆ 1.3 Examples
    - ◇ 1.3.1 Successfully view flavor details
    - ◇ 1.3.2 Failure while trying to make an unauthorized request
    - ◇ 1.3.3 Failure while trying to access a flavor that is not allowed for this user
    - ◇ 1.3.4 Failure while trying to access a flavor that does not exist
    - ◇ 1.3.5 Account not found
  - ◆ 1.4 Alternative URI /flavors/detail/{id}
  - ◆ 1.5 See also

### 40.2 Request

GET /accounts/{accountId}/flexcloud/flavors/detail/{id}

#### 40.2.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the flavor to be retrieved. *Note see warnings in [Hypermedia](#).*

### 40.3 Response

#### 40.3.1 Status Code

200 OK  
Success

401 Unauthorized  
This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

403 Forbidden  
The resource cannot be accessed by the user

404 Not Found  
The requested resource does not exist

#### 40.3.2 Response Body

```
{
  "flavor": {
    "name": "{display_flavor_name}",
    "links": [
      { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/{flavor_id}/", "rel": "self" }
    ],
    "vcpu": "1",
    "ram": 512,
    "disk": 10,
    "id": "{flavor_id}"
  }
}
```

##### 40.3.2.1 Parameters

id - *string*  
Unique identifier for this flavor.

links - *array*  
[Hypermedia](#) for this resource.

name - *string*  
Display name for this flavor.

ram - *number*  
Memory allocated with this flavor. Specified in MB.

disk - *number*  
Disk space allocated with this flavor. Specified in GB.

vcpu - *number*  
Number of CPUs allocated with this flavor.

## 40.4 Examples

### 40.4.1 Successfully view flavor details

#### Request

```
GET /accounts/{accountId}/flexcloud/flavors/1
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
200 OK
{
  "flavor": {
    "name": "Small",
    "links": [
      { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/1/", "rel": "self" }
    ],
    "vcpu": "1",
    "ram": 512,
    "disk": 10,
    "id": "1"
  }
}
```

### 40.4.2 Failure while trying to make an unauthorized request

#### Request

```
GET /accounts/{accountId}/flexcloud/flavors/1
Authorization: Basic {invalid authorization}
```

#### Response

```
401 Unauthorized
```

### 40.4.3 Failure while trying to access a flavor that is not allowed for this user

#### Request

```
GET /accounts/{accountId}/flexcloud/flavors/101
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
403 Forbidden
{
  "forbidden": {
    "message": "forbidden",
    "code": 403,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### 40.4.4 Failure while trying to access a flavor that does not exist

#### Request

```
GET /accounts/{accountId}/flexcloud/flavors/missing_flavor_id
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
404 Not Found
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### 40.4.5 Account not found

#### Request

```
GET /accounts/fake/flexcloud/flavors/101
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
{
  "itemNotFound": {
    "guid": "23684df5-0532-4794-802d-fdc82e4e7e7c",
    "message": "Resource not found",
    "code": 404,
    "details": ""
  }
}
```

## 40.5 Alternative URI /flavors/detail/{id}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /flavors/detail/{id}
```

## 40.6 See also

- [FlexCloud Server API](#)
- [Common Features](#)

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## 41 FlavorList

## 42 GET

### /accounts/{accountId}/flexcloud/flavors?minDisk={diskInGB}&minRam={ramInMB}

Lists all available flavors optionally limited by the query parameters.

#### 42.1 Contents

- 1 GET  
/accounts/{accountId}/flexcloud/flavors?minDisk={diskInGB}&minRam={ramInMB}
  - ◆ 1.1 Request
    - ◇ 1.1.1 URI Parameters
  - ◆ 1.2 Response
    - ◇ 1.2.1 Status Code
    - ◇ 1.2.2 Response Body
      - 1.2.2.1 Parameters
  - ◆ 1.3 Examples
    - ◇ 1.3.1 Successfully list available flavors
    - ◇ 1.3.2 Failure while trying to make an unauthorized request
    - ◇ 1.3.3 Account not found
  - ◆ 1.4 See also
  - ◆ 1.5 Alternative URI /flavors

#### 42.2 Request

GET /accounts/{accountId}/flexcloud/flavors?minDisk={diskInGB}&minRam={ramInMB}

##### 42.2.1 URI Parameters

accountId - *string*  
The selected account id.

minDisk - *int*  
*Optional* Only flavors with a disk size greater than or equal to minDisk will be returned. Specified in GB.

minRam - *int*  
*Optional* Only flavors with a memory size greater than or equal to minRam will be returned. Specified in MB.

Also see [Pagination](#)

#### 42.3 Response

##### 42.3.1 Status Code

200 OK  
Success

401 Unauthorized  
Failure - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

404 Not Found  
Failure - Resource does not exist

##### 42.3.2 Response Body

```
{
  "flavors": [
    {
      "id": "{flavor_id}",
      "links": [
        { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/{flavor_id}/", "rel": "self" }
      ],
      "name": "{display_flavor_name}"
    },
    {
      "id": "{flavor_id}",
      "links": [
        { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/{flavor_id}/", "rel": "self" }
      ],
      "name": "{display_flavor_name}"
    }
  ]
}
```

###### 42.3.2.1 Parameters

id - *string*  
Unique identifier for this flavor.

links - *array*  
[Hypermedia](#) for this resource.

name - *string*  
Display name for this flavor.

#### 42.4 Examples

## 42.4.1 Successfully list available flavors

### Request

```
GET /accounts/{accountId}/flexcloud/flavors
Authorization: Basic {Base64-encoded username:password string}
```

### Response

```
200 OK

{
  "flavors": [
    {
      "name": "Small",
      "links": [
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/1/", "rel": "self"},
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/1/", "rel": "bookmark"}
      ],
      "id": "1"
    },
    {
      "name": "Large",
      "links": [
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/3/", "rel": "self"},
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/3/", "rel": "bookmark"}
      ],
      "id": "3"
    }
  ]
}
```

## 42.4.2 Failure while trying to make an unauthorized request

### Request

```
GET /accounts/{accountId}/flexcloud/flavors
Authorization: Basic {invalid authorization}
```

### Response

```
401 Unauthorized
```

## 42.4.3 Account not found

### Request

```
GET /accounts/fake/flexcloud/flavors
Authorization: Basic {Base64-encoded username:password string}
```

### Response

```
{
  "itemNotFound": {
    "guid": "23684df5-0532-4794-802d-fdc82e4e7e7c",
    "message": "Resource not found",
    "code": 404,
    "details": ""
  }
}
```

## 42.5 See also

- [FlexCloud Server API](#)
- [Common Features](#)

## 42.6 Alternative URI /flavors

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /accounts/{accountId}/flexcloud/flavors
```

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## 43 FlavorListDetails

## 44 GET

### /accounts/{accountId}/flexcloud/flavors/detail?minDisk={diskInGB}&minRam={ramInMB}

This operation will list all available flavors with size details optionally limited by the query parameters.

#### 44.1 Contents

- 1 GET
  - /accounts/{accountId}/flexcloud/flavors/detail?minDisk={diskInGB}&minRam={ramInMB}
  - ◆ 1.1 Request
    - ◇ 1.1.1 URI Parameters
  - ◆ 1.2 Response
    - ◇ 1.2.1 Status Code
    - ◇ 1.2.2 Response Body
      - 1.2.2.1 Parameters
  - ◆ 1.3 Examples
    - ◇ 1.3.1 Successfully list flavors with details
    - ◇ 1.3.2 Failure while trying to make an unauthorized request
    - ◇ 1.3.3 Account not found
  - ◆ 1.4 Alternative URI /flavors/detail
  - ◆ 1.5 See also

#### 44.2 Request

GET /accounts/{accountId}/flexcloud/flavors/detail?minDisk={diskInGB}&minRam={ramInMB}

##### 44.2.1 URI Parameters

accountId - *string*  
The selected account id.

minDisk - *int*  
*Optional* Only flavors only with a disk size greater than or equal to minDisk will be returned. Specified in GB.

minRam - *int*  
*Optional* Only flavors with a memory size greater than or equal to minRam will be returned. Specified in MB.

Also see [Pagination](#)

#### 44.3 Response

##### 44.3.1 Status Code

200 OK  
Success

401 Unauthorized  
Failure - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

404 Not Found  
Failure - Resource does not exist

##### 44.3.2 Response Body

```
{
  "flavors": [
    {
      "name": "{display_flavor_name}",
      "links": [
        { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/{flavor_id}/", "rel": "self" }
      ],
      "vcpu": 1,
      "ram": 512,
      "disk": 10,
      "id": "{flavor_id}"
    },
    {
      "name": "{display_flavor_name}",
      "links": [
        { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/{flavor_id}/", "rel": "self" }
      ],
      "vcpu": 4,
      "ram": 16384,
      "disk": 60,
      "id": "{flavor_id}"
    }
  ]
}
```

###### 44.3.2.1 Parameters

id - *string*  
Unique identifier for this flavor.

links - *array*  
[Hypermedia](#) for this resource.

name - *string*  
Display name for this flavor.

ram - *number*  
Memory allocated with this flavor. Specified in MB.

disk - *number*  
Disk space allocated with this flavor. Specified in GB.

vcpu - *number*  
Number of CPUs allocated with this flavor.

## 44.4 Examples

### 44.4.1 Successfully list flavors with details

#### Request

```
GET /accounts/{accountId}/flexcloud/flavors/detail
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
200 OK
{
  "flavors": [
    {
      "name": "Small",
      "links": [
        { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/1/", "rel": "self" }
      ],
      "vcpu": 1,
      "ram": 512,
      "disk": 10,
      "id": "1"
    },
    {
      "name": "Large",
      "links": [
        { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/flavors/2/", "rel": "self" }
      ],
      "vcpu": 4,
      "ram": 16384,
      "disk": 60,
      "id": "2"
    }
  ]
}
```

### 44.4.2 Failure while trying to make an unauthorized request

#### Request

```
GET /accounts/{accountId}/flexcloud/flavors/detail
Authorization: Basic {invalid authorization}
```

#### Response

```
401 Unauthorized
```

### 44.4.3 Account not found

#### Request

```
GET /accounts/{accountId}/flexcloud/flavors/detail
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
{
  "itemNotFound": {
    "guid": "23684df5-0532-4794-802d-fdc82e4e7e7c",
    "message": "Resource not found",
    "code": 404,
    "details": ""
  }
}
```

## 44.5 Alternative URI /flavors/detail

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /flavors/detail
```

## 44.6 See also

- [FlexCloud Server API](#)
- [Common Features](#)

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## 45 FlexCloud Server

## 46 FlexCloud Server API

FlexCloud Server is a web service that provides compute capacity in the cloud. It is designed to allow you to quickly scale capacity as your computing requirements change. You can setup and provision [Server](#) Instances and other computing resources in minutes programmatically via the FlexCloud Server API. You have full control over your computing resources and you only pay for what you use.

The base URL for the FlexCloud Server API <https://api.hostwayenterprise.com/>

### 46.1 Contents

- [1 FlexCloud Server API](#)
  - ◆ [1.1 Flavor](#)
  - ◆ [1.2 Image](#)
  - ◆ [1.3 Zone](#)
  - ◆ [1.4 Server](#)
  - ◆ [1.5 Flexible IP](#)
  - ◆ [1.6 Volume](#)
  - ◆ [1.7 Security/Firewall Group](#)
  - ◆ [1.8 See also](#)

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### 46.2 Flavor

A Flavor is a set of resource constraints including RAM, disk size and number of CPUs. They are used to describe [Server](#), [ServerListDetails](#) and [ServerCreate](#).

- [FlavorList](#)
- [FlavorListDetails](#)
- [Flavor](#)

### 46.3 Image

An Image is a disk template that is used to create new servers [ServerCreate](#). They are also used to inspect running [ServerListDetails](#) and [Server](#) instances.

- [ImageList](#)
- [ImageListDetails](#)
- [Image](#)

### 46.4 Zone

- [Zone](#)

### 46.5 Server

A Server is a virtual machine instance in the cloud infrastructure. [Flavor](#), [Image](#) and [Zone](#) are requisite elements when creating a server.

- [ServerList](#)
- [ServerListDetails](#)
- [Server](#)
- [ServerCreate](#)
- [ServerActions](#)
  - ◆ [ServerActionReboot](#)
  - ◆ [ServerActionStop](#)
  - ◆ [ServerActionStart](#)
  - ◆ [ServerActionResize](#)
  - ◆ [ServerActionAddFlexibleIP](#)
  - ◆ [ServerActionRemoveFlexibleIP](#)
  - ◆ [ServerActionUpgradePlesk](#)
- [ListServerIPs](#)
- [AttachVolumeToServer](#)
- [ListVolumeAttachmentsForServer](#)
- [ListVolumeDetailsForServerVolumeAttachment](#)
- [DetachVolumeFromServer](#)
- [ServerMonitoringDetails](#)
  - ◆ [ServerMonitoringDetailsCPU](#)
  - ◆ [ServerMonitoringDetailsDisk](#)
  - ◆ [ServerMonitoringDetailsBandwidth](#)
- [ServerSnapshotList](#)
- [ServerSnapshot](#)
- [ServerSnapshotCreate](#)
- [ServerSnapshotActions](#)

- ◆ [ServerSnapshotActionRestore](#)
- [AssignSecurityGroupToServer](#)

## 46.6 Flexible IP

A Flexible IP address is a static IP address that can be bound to any single Server. When you associate a flexible IP with a Server the IP is bound to that Server's network interface. You will use your flexible IP to connect to your Server. You can allocate IPs and release IPs from your account as needed.

- [Allocate Flexible IP](#)
- [List Flexible IPs](#)
- [View Allocated Flexible IP](#)
- [Delete Allocated Flexible IP](#)

## 46.7 Volume

A Volume provides storage space that can be used with your Server. This storage space is independent from the storage space that is included with your Server. Once a volume is created, it can be easily attached to a Server. Once attached, it will appear as a mounted device. You can attach multiple volumes to a Server.

- [Create Volume](#)
- [View Single Volume](#)
- [List Volumes](#)
- [List Volumes Detail](#)
- [Delete Volume](#)

## 46.8 Security/Firewall Group

A Security/Firewall Group defines firewall rules for your Server. You have the ability to configure your firewall connections and secure your network as required. You may have one or multiple servers behind a firewall group. Hostway provides a default firewall group, and typical firewall rules are already configured. You can create multiple firewall groups as needed.

- [Create Firewall Group](#)
- [List Firewall Groups](#)
- [View Firewall Group Details](#)
- [Edit Firewall Group](#)
- [Delete Firewall Group](#)
- [Create Firewall Group Rule](#)
- [List Firewall Group Rules](#)
- [Delete Firewall Group Rule](#)

## 46.9 See also

- [Common Features](#)

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## 47 Image

## 48 GET /accounts/{accountId}/flexcloud/images/{id}

Returns details for a single image.

### 48.1 Contents

- 1 GET /accounts/{accountId}/flexcloud/images/{id}
  - ◆ 1.1 Request
    - ◇ 1.1.1 Parameters
  - ◆ 1.2 Response
    - ◇ 1.2.1 Status Code
    - ◇ 1.2.2 Response Body
      - 1.2.2.1 Parameters
  - ◆ 1.3 Examples
    - ◇ 1.3.1 Successfully view image
    - ◇ 1.3.2 Failure while trying to make an unauthorized request
    - ◇ 1.3.3 Permission denied failure
    - ◇ 1.3.4 Failure while trying to request for an image that does not exist
    - ◇ 1.3.5 Account Number not found
  - ◆ 1.4 Alternative URI /images/{id}
  - ◆ 1.5 See also

### 48.2 Request

GET /accounts/{accountId}/flexcloud/images/{id}

#### 48.2.1 Parameters

**accountId**  
The selected account Id.

**id**  
The unique identifier of the image to be retrieved. *Note see warnings in [Hypermedia](#).*

### 48.3 Response

#### 48.3.1 Status Code

200 OK  
Success

401 Unauthorized  
This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

403 Forbidden  
The resource is forbidden for this user

404 Not Found  
The resource does not exist

#### 48.3.2 Response Body

```
{
  "image": {
    "status": "SAVING",
    "updated": null,
    "name": "{display_image_name}",
    "links": [
      { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/{image_id}/", "rel": "self" },
      { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/{image_id}/", "rel": "bookmark" }
    ],
    "created": "yyyy-mm-ddThh:mm:ss",
    "id": "{image_id}",
    "zones": ["{zone_id}"]
  }
}
```

##### 48.3.2.1 Parameters

**id** - *string*  
Unique identifier for this image.

**links** - *array*  
[Hypermedia](#) for this resource.

**name** - *string*  
Display name for this image.

**status** - *string*  
Current state of this image. Valid values are ACTIVE, SAVING, DELETED.  
**ACTIVE** - Image is ready to be used.  
**SAVING** - Image is being uploaded or saved from a running [Server](#) instance.  
**DELETED** - Image was recently deleted or is in the process of being deleted.

**created** - *string*  
The date and time the image was created. ISO 8601 format, YYYY-MM-DDTHH:MM:SS.

updated  
Unused always null.

zones - *string*  
Zones where the image is available.

## 48.4 Examples

### 48.4.1 Successfully view image

#### Request

```
GET /accounts/{accountId}/flexcloud/images/133
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
200 OK
{
  "image": {
    "status": "SAVING",
    "updated": null,
    "name": "test_debian_image",
    "links": [
      {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/133/", "rel": "self"},
      {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/133/", "rel": "bookmark"}
    ],
    "created": "2011-09-30T02:38:57",
    "id": "133",
    "zones": ["AUS001"]
  }
}
```

### 48.4.2 Failure while trying to make an unauthorized request

#### Request

```
GET /accounts/{accountId}/flexcloud/images/133
Authorization: Basic {invalid authorization}
```

#### Response

```
401 Unauthorized
```

### 48.4.3 Permission denied failure

#### Request

```
GET /accounts/{accountId}/flexcloud/images/122
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
403 Forbidden
{
  "forbidden": {
    "message": "Forbidden",
    "code": 403,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### 48.4.4 Failure while trying to request for an image that does not exist

#### Request

```
GET /accounts/{accountId}/flexcloud/images/missing_image_id
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
404 Not Found
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### 48.4.5 Account Number not found

#### Request

```
GET /accounts/fake/flexcloud/images/122
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
{
  "itemNotFound": {
    "guid": "23684df5-0532-4794-802d-fdc82e4e7e7c",
    "message": "Resource not found",
    "code": 404,
    "details": ""
  }
}
```

## 48.5 Alternative URI /images/{id}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /images/{id}
```

## 48.6 See also

- [FlexCloud Server API](#)
- [Common Features](#)

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## 49 ImageList

## 50 GET

`/accounts/{accountId}/flexcloud/images?name={imageName}&status={imageStatus}&t`

Lists all images.

### 50.1 Contents

- 1 GET
  - `/accounts/{accountId}/flexcloud/images?name={imageName}&status={imageStatus}&type={imageType}&zone={zoneId}`
  - ◆ 1.1 Request
    - ◇ 1.1.1 Parameters
  - ◆ 1.2 Response
    - ◇ 1.2.1 Status Code
    - ◇ 1.2.2 Response Body
      - 1.2.2.1 Parameters
  - ◆ 1.3 Examples
    - ◇ 1.3.1 Successfully list images
    - ◇ 1.3.2 Failure while trying to make an unauthorized request
    - ◇ 1.3.3 Account Number not found
  - ◆ 1.4 Alternative URI `/images`
  - ◆ 1.5 See also

### 50.2 Request

GET `/accounts/{accountId}/flexcloud/images?name={imageName}&status={imageStatus}&type={imageType}&zone={zoneId}`

#### 50.2.1 Parameters

`accountId` - *string*

The selected account Id.

`name` - *string*

Optional image name to search for.

`status` - *string*

Optional Image status to search for. Values: **ACTIVE, SAVING, DELETED.**

`type` - *string*

Optional type of the image to search for. Values: **BASE, SERVER.**

`zone` - *string*

Optional the zone where the image is available.

### 50.3 Response

#### 50.3.1 Status Code

- 200 OK
  - Success
- 401 Unauthorized
  - Failure - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.
- 404 Not Found
  - Failure - The Resource does not exist

#### 50.3.2 Response Body

```
{
  "images": [
    {
      "name": "{display_image_name}",
      "links": [
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/{image_id}/", "rel": "self"},
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/{image_id}/", "rel": "bookmark"}
      ],
      "id": "{image_id}",
      "zones": ["{zone_id_1}", "{zone_id_2}"]
    },
    {
      "name": "{display_image_name}",
      "links": [
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/{image_id}/", "rel": "self"},
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/{image_id}/", "rel": "bookmark"}
      ],
      "id": "{image_id}",
      "zones": ["{zone_id}"]
    }
  ]
}
```

##### 50.3.2.1 Parameters

`id` - *string*

Unique identifier for this image.

`links` - *array*

Hypermedia for this resource.

name - *string*  
Display name for this image.

zones - *string*  
Zones where the image is available.

## 50.4 Examples

### 50.4.1 Successfully list images

#### Request

```
GET /accounts/{accountId}/flexcloud/images
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
200 OK
{
  "images": [
    {
      "name": "test_public_image",
      "links": [
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/123/", "rel": "self"},
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/123/", "rel": "bookmark"}
      ],
      "id": "123",
      "zones": ["AUS001"]
    },
    {
      "name": "test_debian_image",
      "links": [
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/290/", "rel": "self"},
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/290/", "rel": "bookmark"}
      ],
      "id": "290",
      "zones": ["AUS001"]
    },
    {
      "name": "test_private_image",
      "links": [
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/233/", "rel": "self"},
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/233/", "rel": "bookmark"}
      ],
      "id": "233",
      "zones": ["AUS001"]
    }
  ]
}
```

### 50.4.2 Failure while trying to make an unauthorized request

#### Request

```
GET /accounts/{accountId}/flexcloud/images
Authorization: Basic {invalid authorization}
```

#### Response

```
401 Unauthorized
```

### 50.4.3 Account Number not found

#### Request

```
GET /accounts/fake/flexcloud/images
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
{
  "itemNotFound": {
    "guid": "23684df5-0532-4794-802d-fdc82e4e7c",
    "message": "Resource not found",
    "code": 404,
    "details": ""
  }
}
```

## 50.5 Alternative URI /images

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /images
```

## 50.6 See also

- [FlexCloud Server API](#)
- [Common Features](#)

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## 51 ImageListDetails

## 52 GET

`/accounts/{accountId}/flexcloud/images/detail?name={imageName}&status={imageSta`

This operation will list all images including their details.

### 52.1 Contents

- 1 GET  
`/accounts/{accountId}/flexcloud/images/detail?name={imageName}&status={imageStatus}&type={imageType}&zone={zoneId}`
  - ◆ 1.1 Request
    - ◇ 1.1.1 URI Parameters
  - ◆ 1.2 Response
    - ◇ 1.2.1 Status Code
    - ◇ 1.2.2 Response Body
      - 1.2.2.1 Parameters
  - ◆ 1.3 Examples
    - ◇ 1.3.1 Successfully list image details
    - ◇ 1.3.2 Failure while trying to make an unauthorized request
    - ◇ 1.3.3 Account Number not found
  - ◆ 1.4 Alternative URI  
`/images/detail?name={imageName}&status={imageStatus}&type={imageType}&zone={zoneId}`
  - ◆ 1.5 See also

### 52.2 Request

GET

`/accounts/{accountId}/flexcloud/images/detail?name={imageName}&status={imageStatus}&type={imageType}&zone={zoneId}`

#### 52.2.1 URI Parameters

`accountId` - *string*

The ID of the selected account.

`name` - *string*

Optional image name to search for.

`status` - *string*

Optional Image status to search for. Values: **ACTIVE**, **SAVING**, **DELETED**.

`type` - *string*

Optional type of the image to search for. Values: **BASE**, **SERVER**.

`zone` - *string*

Optional the Zone where the image is available.

### 52.3 Response

#### 52.3.1 Status Code

200 OK

Success

401 Unauthorized

Failure - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

404 Not Found

Failure - The Resource was not found

#### 52.3.2 Response Body

```
{
  "images": [
    {
      "status": "{status}",
      "updated": null,
      "name": "{display_image_name}",
      "links": [
        { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/{image_id}/", "rel": "self" },
        { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/{image_id}/", "rel": "bookmark" }
      ],
      "created": "yyyy-mm-ddThh:mm:ss",
      "id": "{image_id}",
      "zones": [ "{zone_id}" ]
    },
    {
      "status": "{status}",
      "updated": null,
      "name": "{display_image_name}",
      "links": [
        { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/{image_id}/", "rel": "self" },
        { "href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/{image_id}/", "rel": "bookmark" }
      ],
      "created": "yyyy-mm-ddThh:mm:ss",
      "id": "{image_id}",
      "zones": [ "{zone_id_1}", "{zone_id_2}" ]
    }
  ]
}
```

### 52.3.2.1 Parameters

- id** - *string*  
Unique identifier for this image.
- links** - *array*  
Hypermedia for this resource.
- name** - *string*  
Display name for this image.
- status** - *string*  
Current state of this image. Valid values are ACTIVE, SAVING, DELETED.  
**ACTIVE** - Image is ready to be used.  
**SAVING** - Image is being uploaded or saved from a running [Server](#) instance.  
**DELETED** - Image was recently deleted or is in the process of being deleted.
- created** - *string*  
The date and time the image was created. ISO 8601 format, YYYY-MM-DDTHH:MM:SS.
- updated**  
Unused always null.
- zones**  
Zones where the image is available.

## 52.4 Examples

### 52.4.1 Successfully list image details

#### Request

```
GET /accounts/{accountId}/flexcloud/images/detail
Authorization: Basic {Base64-encoded username:password string}
```

#### Response

```
200 OK
```

```
{
  "images": [
    {
      "status": "ACTIVE",
      "updated": null,
      "name": "test_public_image",
      "links": [
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/123/", "rel": "self"},
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/123/", "rel": "bookmark"}
      ],
      "created": "2011-11-09T03:19:48",
      "id": "123",
      "zones": ["AUS001"]
    },
    {
      "status": "SAVING",
      "updated": null,
      "name": "test_debian_image",
      "links": [
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/233/", "rel": "self"},
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/233/", "rel": "bookmark"}
      ],
      "created": "2011-09-30T02:38:57",
      "id": "233",
      "zones": ["AUS001"]
    },
    {
      "status": "ACTIVE",
      "updated": null,
      "name": "test_private_image",
      "links": [
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/145/", "rel": "self"},
        {"href": "https://api.hostway.com/accounts/{accountId}/flexcloud/images/145/", "rel": "bookmark"}
      ],
      "created": "2011-11-09T03:19:01",
      "id": "145",
      "zones": ["AUS001"]
    }
  ]
}
```

### 52.4.2 Failure while trying to make an unauthorized request

#### Request

```
GET /accounts/{accountId}/flexcloud/images/detail
Authorization: Basic {invalid authorization}
```

#### Response

```
401 Unauthorized
```

### 52.4.3 Account Number not found

#### Request

```
GET /accounts/fake/flexcloud/images
Authorization: Basic {Base64-encoded username:password string}
```

## Response

```
{
  "itemNotFound": {
    "guid": "23684df5-0532-4794-802d-fdc82e4e7e7c",
    "message": "Resource not found",
    "code": 404,
    "details": ""
  }
}
```

## 52.5 Alternative URI

**`/images/detail?name={imageName}&status={imageStatus}&type={imageType}&zone={zoneId}`**

An alternative way to execute this call is to omit the `accountId` portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /images/detail
```

## 52.6 See also

- [FlexCloud Server API](#)
- [Common Features](#)

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## 53 List Firewall Groups

This operation lists existing firewall groups.

## 54 GET /accounts/{accountId}/flexcloud/os-security-groups

This operation lists existing firewall groups.

### 54.1 Request

#### 54.1.1 Request Parameters

accountId - *string*  
The selected account Id.

### 54.2 Response

#### 54.2.1 JSON

```
{
  "securityGroups" : [
    {
      "displayName" : "{firewall_group_display_name}",
      "description" : "{firewall_group_description}",
      "links" : [
        {
          "href" : "http://{api-server}/accounts/{accountId}/flexcloud/os-security-groups/{firewall_group_id}/",
          "rel" : "self"
        }
      ],
      "rules" : [
        {
          "fromPort" : {start_port},
          "toPort" : {end_port},
          "protocol" : "{ip_protocol}",
          "cidr" : "0.0.0.0/0",
          "id" : "145"
        }
      ],
      "servers" : [{"server_id"}],
      "accountNumber" : "{user_account_number}",
      "Id" : "{firewall_group_id}"
    }
  ]
}
```

##### 54.2.1.1 security\_groups

displayName - *string*  
The display name of the firewall group.

description - *string*  
Text describing the firewall group.

links - *list*  
[Hypermedia](#) for this resource.

rules - *list*  
List describing all defined security rules for the group.

fault - *dictionary*  
Might hold a fault information for the firewall group.

servers - *list*  
List of server ids this firewall group is assigned to.

accountNumber - *string*  
Identifies an account that owns the firewall group.

id - *string*  
The id of this firewall group.\*(Unique identifier for this firewall group.)

### 54.3 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 54.4 Examples

#### Successfully list firewall groups

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 200 OK

**Response Body:**

```
{
  "securityGroup" : [
    {
      "displayName": "Test Firewall Group 1",
      "description": "Test firewall group 1 description.",
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012May11_OK30Zs7Ju/",
          "rel": "self"
        }
      ],
      "rules": [
        {
          "toPort": 1111,
          "fromPort": 1111,
          "protocol": "TCP",
          "id": 145,
          "cidr": "0.0.0.0/0"
        },
        {
          "toPort": 80,
          "fromPort": 80,
          "protocol": "TCP",
          "id": 196,
          "cidr": "127.0.0.1/24"
        }
      ],
      "id": "group2012May11_OK30Zs7Ju",
      "accountNumber": "test_account_120761",
      "servers": ["test-server-0003"]
    },
    {
      "displayName": "Test Firewall Group",
      "description": "Test firewall group description.",
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012Apr30_9J5qDw0Io/",
          "rel": "self"
        }
      ],
      "rules": [
        {
          "toPort": 3389,
          "fromPort": 3389,
          "protocol": "tcp",
          "id": 116,
          "cidr": "0.0.0.0/0"
        },
        {
          "toPort": 8443,
          "fromPort": 8443,
          "protocol": "tcp",
          "id": 117,
          "cidr": "0.0.0.0/0"
        },
        {
          "toPort": 22,
          "fromPort": 22,
          "protocol": "tcp",
          "id": 118,
          "cidr": "0.0.0.0/0"
        }
      ],
      "id": "group2012Apr30_9J5qDw0Io",
      "accountNumber": "test_account_901265",
      "servers": ["test-server-0011", "test-server-0024"]
    }
  ]
}
```

**Failure while trying to make unauthorized access**

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

**Response Code:**

HTTP/1.1 401 Unauthorized

**Response Body:**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to pass invalid account number**

**POST** http(s)://{api\_server}/accounts/fake/flexcloud/os-security-groups

**Response Code:**

HTTP/1.1 404 Not Found

*Response Body:*

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 54.5 Alternative URI /os-security-groups

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /os-security-groups
```

## 55 List Flexible IPs

## 56 GET /accounts/{accountId}/flexcloud/os-floating-ips

This operation will list all the allocated flexible IP addresses in your account.

### 56.1 Contents

- 1 GET  
/accounts/{accountId}/flexcloud/os-floating-ips
  - ◆ 1.1 Request
    - ◇ 1.1.1 Request Parameters
  - ◆ 1.2 Response
    - ◇ 1.2.1 JSON
      - 1.2.1.1 floating\_ips
  - ◆ 1.3 Response Codes
  - ◆ 1.4 Examples
  - ◆ 1.5 Alternative URI  
/os-floating-ips

### 56.2 Request

GET /accounts/{accountId}/flexcloud/os-floating-ips

#### 56.2.1 Request Parameters

accountId - *string*  
The selected account Id.

### 56.3 Response

#### 56.3.1 JSON

```
{
  "floating_ips" : [
    {
      "instance_id" : {instance_id},
      "ip": "{ip_address}",
      "fixed_ip": null,
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip_address}/",
          "rel": "self"
        }
      ],
      "pool": "default"
    },
    {
      "instance_id": "{instance_id}",
      "ip": "{ip_address}",
      "fixed_ip": null,
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip_address}/",
          "rel": "self"
        }
      ],
      "pool": "default"
    }
  ]
}
```

##### 56.3.1.1 floating\_ips

instance\_id - *string*  
Unique instance identifier floating IP is assigned to.

ip - *string*  
IP address allocated.

fixed\_ip - *string*  
Fixed IP address.

links - *list*  
[Hypermedia](#) for this resource.

pool - *string*  
Name of the pool IP address belongs to.

### 56.4 Response Codes

Success  
HTTP/1.1 200 OK

### 56.5 Examples

#### List servers

GET http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-floating-ips

### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

### Response Code:

```
HTTP/1.1 200 OK
```

### Response Body:

```
{
  "floating_ips" : [
    {
      "instance_id" : null,
      "ip": "{ip_address}",
      "fixed_ip": null,
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip_address}/",
          "rel": "self"
        }
      ],
      "pool": "default"
    },
    {
      "instance_id": "test_server_0013",
      "ip": "{ip_address}",
      "fixed_ip": null,
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip_address}/",
          "rel": "self"
        }
      ],
      "pool": "default"
    }
  ]
}
```

### Unauthorized access

```
GET http://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips
```

### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

### Response Code:

```
HTTP/1.1 401 Unauthorized
```

### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

### Failure while trying to pass invalid account number

```
GET http://{api_server}/accounts/fake/flexcloud/os-floating-ips
```

### Response Code:

```
HTTP/1.1 404 Not Found
```

### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 56.6 Alternative URI /os-floating-ips

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /os-floating-ips
```

## 57 List Volumes

## 58 GET /accounts/{accountId}/flexcloud/volumes

This operation will return a list of all existing volumes.

### 58.1 Result

#### 58.1.1 Parameters

`accountId` - *string*  
The selected account Id.

#### 58.1.2 JSON

```
{
  "volumes" : [
    {
      "id": "{volume_id}",
      "display_name" : "{display_volume_name}",
      "display_description" : "{display_volume_description}",
      "size" : "{volume_size_quantity}",
      "volume_type" : "{volume_type_id}",
      "metadata" : {},
      "availability_zone" : "{availability_zone_id}",
      "attachments": [],
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/{volume_id}/",
          "rel": "self"
        }
      ]
    },
    {
      "id": "{volume_id}",
      "display_name" : "{display_volume_name}",
      "display_description" : "{display_volume_description}",
      "size" : "{volume_size_quantity}",
      "volume_type" : "{volume_type_id}",
      "metadata" : {},
      "availability_zone" : "{availability_zone_id}",
      "attachments": [],
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/{volume_id}/",
          "rel": "self"
        }
      ]
    }
  ]
}
```

##### 58.1.2.1 volumes

`id` - *string*  
Identifier of the volume instance.

`display_name` - *string*  
Display name for this volume.

`display_description` - *string*  
Descriptive information for this volume.

`size` - *string*  
Volume size in GB.

`volume_type` - *string*  
Identifier of the volume type used. \*(Not used in the current version).

`metadata` - *string*  
Additional metadata info.

`availability_zone` - *string*  
Identifier of the availability zone into which this volume was created.

`attachments` - *list*  
List of attachments this volume is associated with.

`links` - *array*  
[Hypermedia](#) for this resource.

`snapshot_id` - *string*  
Identifier of the snapshot associated with this volume if exists.

`created_at` - *string*  
Volume creation timestamp.

## 58.2 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

## 58.3 Examples

### Successfully list existing volumes

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/volumes

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 200 OK

#### Response Body:

```
{
  "volumes" : [
    {
      "display_name": "vol-test-003",
      "attachments": [],
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/hbs2012May03_00xRg0Jz7/",
          "rel": "self"
        }
      ],
      "availability_zone": "test_zone",
      "created_at": "2012-05-03 11:35:44",
      "volume_type": "",
      "display_description": "Another test volume.",
      "snapshot_id": "",
      "metadata": {},
      "id": "hbs2012May03_00xRg0Jz7",
      "size": "30GB"
    },
    {
      "display_name": "vol-test-001",
      "attachments": [],
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/hbs2012Apr20_NrznxEeq9/",
          "rel": "self"
        }
      ],
      "availability_zone": "TEST001",
      "created_at": "2012-04-20 16:48:15",
      "volume_type": "",
      "display_description": "Test volume 001.",
      "snapshot_id": "",
      "metadata": {},
      "id": "hbs2012Apr20_NrznxEeq9",
      "size": "10GB"
    }
  ]
}
```

### Failure while trying to make an unauthorized request

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/volumes

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

### Failure while trying to pass invalid account number

**GET** http(s)://{api\_server}/accounts/fake/flexcloud/volumes

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound" : {
```

```
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 58.4 Alternative URI /volumes

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /volumes
```

# 59 List Volumes Detail

This operation returns a list of all existing volumes with detailed information.

## 60 GET /accounts/{accountId}/flexcloud/volumes/detail

This operation returns a list of all existing volumes with detailed information.

### 60.1 Result

#### 60.1.1 Parameters

**accountId** - *string*  
The selected account Id.

#### 60.1.2 JSON

```
{
  "volumes" : [
    {
      "id": "{volume_id}",
      "display_name" : "{display_volume_name}",
      "display_description" : "{display_volume_description}",
      "size" : "{volume_size_quantity}",
      "volume_type" : "{volume_type_id}",
      "metadata" : {},
      "availability_zone" : "{availability_zone_id}",
      "attachments": [],
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/{volume_id}/",
          "rel": "self"
        }
      ]
    },
    {
      "id": "{volume_id}",
      "display_name" : "{display_volume_name}",
      "display_description" : "{display_volume_description}",
      "size" : "{volume_size_quantity}",
      "volume_type" : "{volume_type_id}",
      "metadata" : {},
      "availability_zone" : "{availability_zone_id}",
      "attachments": [],
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/{volume_id}/",
          "rel": "self"
        }
      ]
    }
  ]
}
```

#### 60.1.2.1 volumes

**id** - *string*  
Identifier of the volume instance.

**display\_name** - *string*  
Display name for this volume.

**display\_description** - *string*  
Descriptive information for this volume.

**size** - *string*  
Volume size in GB.

**volume\_type** - *string*  
Identifier of the volume type used. \*(Not used in the current version).

**metadata** - *string*  
Additional metadata info.

**availability\_zone** - *string*  
Identifier of the availability zone into which this volume was created.

**attachments** - *list*  
List of attachments this volume is associated with.

**links** - *array*  
[Hypermedia](#) for this resource.

**snapshot\_id** - *string*  
Identifier of the snapshot associated with this volume if exists.

**created\_at** - *string*  
Volume creation timestamp.

## 60.2 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

## 60.3 Examples

### Successfully list existing volumes with detailed information

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/volumes/detail

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 200 OK

#### Response Body:

```
{
  "volumes" : [
    {
      "display_name": "vol-test-003",
      "attachments": [],
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/hbs2012May03_00xRg0Jz7/",
          "rel": "self"
        }
      ],
      "availability_zone": "test_zone",
      "created_at": "2012-05-03 11:35:44",
      "volume_type": "",
      "display_description": "Another test volume.",
      "snapshot_id": "",
      "metadata": {},
      "id": "hbs2012May03_00xRg0Jz7",
      "size": "30GB"
    },
    {
      "display_name": "vol-test-001",
      "attachments": [],
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/hbs2012Apr20_NrznxEeq9/",
          "rel": "self"
        }
      ],
      "availability_zone": "TEST001",
      "created_at": "2012-04-20 16:48:15",
      "volume_type": "",
      "display_description": "Test volume 001.",
      "snapshot_id": "",
      "metadata": {},
      "id": "hbs2012Apr20_NrznxEeq9",
      "size": "10GB"
    }
  ]
}
```

### Failure while trying to make an unauthorized request

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/volumes/detail

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

### Failure while trying to pass invalid account number

**GET** http(s)://{api\_server}/accounts/fake/flexcloud/volumes/detail

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
  }
}
```

```
    "code": 404,  
    "details": "",  
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
  }  
}
```

## 60.4 Alternative URI /volumes/detail

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /volumes/detail
```

## 61 ListServerIPs

This operation will list all flexible IPs assigned to a specific [Server](#).

## 62 GET /accounts/{accountId}/flexcloud/servers/{id}/ips

### 62.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server.

### 62.2 Result

#### 62.2.1 JSON

```
{
  "addresses" : {
    "public" : [
      {
        "version" : 4,
        "addr" : "{ip_address}"
      }
    ],
    "private" : [
      {
        "version" : 4,
        "addr" : "{ip_address}"
      }
    ]
  },
  "links" : [
    {
      "href" : "http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/ips",
      "rel": "self"
    }
  ]
}
```

addr - *string*  
The address of the allocated flexible IP.

links - *array*  
[Hypermedia](#) for this resource.

### 62.3 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied incorrect credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - Resource not found.

### 62.4 Examples

#### Successfully list all flexible IPs assigned to the specified server

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/ips

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 200 OK

#### Response Body:

```
{
  "addresses" : {
    "public" : [
      {
        "version" : 4,
        "addr" : "{ip_address}"
      }
    ],
    "private" : [
      {
        "version" : 4,
        "addr" : "{ip_address}"
      }
    ]
  },
  "links" : [
    {
      "href" : "http://{api_server}/accounts/{accountId}/flexcloud/servers/test_server_0013/ips",
      "rel": "self"
    }
  ]
}
```

#### Unauthorized access

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/ips

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

**Response Code:**

HTTP/1.1 401 Unauthorized

**Response Body:**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to list flexible IPs for a non-existent server**

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{fake\_server\_id}/ips

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to pass invalid account number**

**GET** http(s)://{api\_server}/accounts/fake/flexcloud/servers/test\_server\_0013/ips

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 62.5 Alternative URI /servers/{id}/ips

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

**GET** /servers/{id}/ips

## 63 ListVolumeAttachmentsForServer

This operation will list all of the volume attachments for a specific [Server](#).

## 64 GET /accounts/{accountId}/flexcloud/servers/{id}/os-volume\_attachments

### 64.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server.

### 64.2 Result

#### 64.2.1 JSON

```
{
  "volumeAttachments": [
    {
      "device": "{device_path}",
      "serverId": {server_id},
      "id": {volume_attachment_id},
      "volumeId": {volume_id}
    },
    {
      "device": "{device_path}",
      "serverId": {server_id},
      "id": {volume_attachment_id},
      "volumeId": {volume_id}
    }
  ]
}
```

##### 64.2.1.1 volumeAttachments

device - *string*  
Device used for this volume attachment.

serverId - *string*  
Unique server identifier.

id - *string*  
Unique volume attachment identifier.

volumeId - *string*  
Unique volume identifier.

### 64.3 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied incorrect credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found*

### 64.4 Examples

#### Successfully list volume attachments

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_id}/os-volume\_attachments

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Response Code:

HTTP/1.1 200 OK

##### Response Body:

```
{
  "volumeAttachments": [
    {
      "device": "/dev/test",
      "serverId": 6,
      "id": 1,
      "volumeId": 41
    },
    {
      "device": "/dev/test1",
      "serverId": 6,
      "id": 2,
      "volumeId": 23
    }
  ]
}
```

#### Failure while trying to list volume attachments for a non-existent server

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{fake\_server\_id}/os-volume\_attachments

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Unauthorized request

```
GET http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/os-volume_attachments
```

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

```
HTTP/1.1 401 Unauthorized
```

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### Failure while trying to pass invalid account number

```
GET http(s)://{api_server}/accounts/fake/flexcloud/servers/{id}/os-volume_attachments
```

#### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 64.5 Alternative URI /servers/{id}/os-volume\_attachments

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /servers/{id}/os-volume_attachments
```

## 65 ListVolumeDetailsForServerVolumeAttachment

This operation returns volume details for the specific server's volume attachment.

## 66 GET

`/accounts/{accountId}/flexcloud/servers/{server_id}/os-volume_attachments/{volume_id}`

### 66.1 Parameters

`accountId` - *string*  
The selected account Id.

`server_id`  
The unique identifier of the server.

`volume_id`  
The unique volume identifier.

### 66.2 Result

#### 66.2.1 JSON

```
{
  "volume" : {
    "id": "{volume_id}",
    "display_name" : "{display_volume_name}",
    "display_description" : "{display_volume_description}",
    "size" : {size_quantity},
    "volume_type" : "{volume_type_id}",
    "metadata" : {},
    "availability_zone" : "{availability_zone_id}",
    "attachments": [],
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/{volume_id}/",
        "rel": "self"
      }
    ],
    "snapshot_id": "",
    "created_at": "2012-05-03 11:35:44"
  }
}
```

##### 66.2.1.1 volume

`id` - *string*  
Identifier of the volume instance.

`display_name` - *string*  
Display name for this volume.

`display_description` - *string*  
Descriptive information for this volume.

`size` - *int*  
Volume size.

`volume_type` - *string*  
Identifier of the volume type used. \*(Not used in the current version).

`metadata` - *string*  
Additional metadata info.

`availability_zone` - *string*  
Identifier of the availability zone into which this volume was created.

`attachments` - *list*  
List of attachments this volume is associated with.

`links` - *array*  
[Hypermedia](#) for this resource.

`snapshot_id` - *string*  
Identifier of the snapshot associated with this volume if exists.

`created_at` - *string*  
Volume creation timestamp.

### 66.3 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied incorrect credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 66.4 Examples

#### Successfully get volume details for a server volume attachment

GET `http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/test-server-0013/os-volume_attachments/hbs2012May03_00xRg0Jz7`

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 200 OK

#### Response Body:

```
{
  "volume": {
    "display_name": "vol-test-003",
    "attachments": [],
    "links": [
      {
        "href": "http://{api_server}/account/{accountId}/flexcloud/volumes/hbs2012May03_00xRg0Jz7/",
        "rel": "self"
      }
    ],
    "availability_zone": "test_zone",
    "created_at": "2012-05-03 11:35:44",
    "volume_type": "",
    "display_description": "Another test volume.",
    "snapshot_id": "",
    "metadata": {},
    "id": "hbs2012May03_00xRg0Jz7",
    "size": "30GB"
  }
}
```

#### Failure while trying to get volume details for a volume that does not exist

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test-server-0013/os-volume\_attachments/fake\_volume\_id

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Failure while trying to get volume details for a server that does not exist

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/fake\_server\_id/os-volume\_attachments/hbs2012May03\_00xRg0Jz7

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Unauthorized request

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test-server-0013/os-volume\_attachments/hbs2012May03\_00xRg0Jz7

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

*Response Body:*

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to pass invalid account number**

**GET** http(s)://{api\_server}/accounts/fake/flexcloud/servers/{id}/os-volume\_attachments

*Response Code:*

HTTP/1.1 404 Not Found

*Response Body:*

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**66.5 Alternative URI /servers/{server\_id}/os-volume\_attachments/{volume\_id}**

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

GET /servers/{server\_id}/os-volume\_attachments/{volume\_id}

## 67 Server

This article describes operations for getting details of servers, along with updating and deleting servers in your account. Other types of operations on a server are: [ServerCreate](#), [ServerActions](#), etc.

## 68 GET /accounts/{accountId}/flexcloud/servers/{id}

This operation will return details of a single server.

### 68.1 Parameters

**accountId** - *string*  
The selected account Id.

**id** - *string*  
Id of the server to get.

### 68.2 Result

#### 68.2.1 JSON

```
{
  "server": {
    "status": "ACTIVE",
    "updated": null,
    "hostId": "{host_id}",
    "addresses": {
      "public": [
        {
          "version": 4,
          "addr": "{ip_address}"
        }
      ],
      "private": [
        {
          "version": 4,
          "addr": "{ip_address}"
        }
      ]
    },
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/",
        "rel": "self"
      }
    ],
    "image": {
      "name": "{display_image_name}",
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/images/{image_id}/",
          "rel": "self"
        }
      ]
    },
    "id": "{image_id}"
  },
  "userId": "{user_account_id}",
  "flavor": {
    "name": "1024MB Server3",
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/flavors/{flavor_id}/",
        "rel": "self"
      }
    ]
  },
  "id": 3
},
"securityGroup": {
  "id": "{security_group_id}",
  "links": [
    {
      "href": "http://{server_name}/accounts/{accountId}/flexcloud/os-security-groups/{security_group_id}/",
      "rel": "self"
    }
  ]
}
},
"id": "{server_id}",
"zone": "{zone_textkey}",
"name": "{display_server_name}",
"adminPass": null,
"created": "2011-12-05T12:51:28",
"tenantId": null,
"accessIPv4": "{ip_address}",
"accessIPv6": null,
"progress": 100,
"metadata": {
}
}
}
```

##### 68.2.1.1 server

**id** - *string*  
Unique identifier for this server.

**links** - *list*  
[Hypermedia](#) for this resource.

**status** - *string*  
Current state of the server. Values: **BUILD**, **ACTIVE**, **PROCESSING**, **SUSPENDED**, **DELETED**, **UNKNOWN**

**hostId** - *string*  
Id of the physical host this virtual machine is running on.

userId - *string*  
Unique identifier for the owner of this server.

name - *string*  
Display name for this server.

adminPass - *string*  
always null.

created - *string*  
The date and time this server was created. ISO 8601 format, YYYY-MM-DDTHH:MM:SS.

accessIPv4 - *string*  
The default included public IPv4 address.

progress - *number*  
The progress of the current this server while in the BUILD status. The value is in the range of 0 - 100, but currently will only even be 0, 50, 100.

metadata - *object*  
Unused always an empty object.

tenantId  
Unused always always null.

accessIPv6  
Unused always null.

updated  
Unused always null.

zone  
Zone text key

#### 68.2.1.2 addresses

addresses.public.version - *number*  
IP version of this address. Values: 4

addresses.public.addr - *string*  
Public IP address of this server

addresses.private.version - *number*  
IP version of this address. Values: 4

addresses.private.addr - *string*  
Private IP address of this server

#### 68.2.1.3 image

image.name - *string*  
The display name of the image this server is based on.

image.links - *list*  
[Hypermedia](#) for the image.

image.id - *string*  
Unique identifier for image this server is based on.

#### 68.2.1.4 flavor

flavor.name - *string*  
The display name of the flavor this server is based on.

flavor.links - *list*  
[Hypermedia](#) for the flavor.

flavor.id - *string*  
Unique identifier for flavor this server is based on.

#### 68.2.1.5 securityGroup

securityGroup.id - *string*  
the id of the security group that is assigned to this server

securityGroup.links - *list*  
[Hypermedia](#) for the securityGroup.

## 68.3 Response Codes

Success  
OK (200)

Failure  
Unauthorized (401) : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
ItemNotFound (404) : The resource requested is not found.

## 68.4 Examples

### Successfully get server details

GET http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013

#### - Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### - Response: OK (200):

```
{
  "server": {
    {
      "status": "ACTIVE",
      "updated": null,
      "hostId": "{host_id}",
      "addresses": {
        {
          "public": [
            {
              "version": 4,
              "addr": "{ip_address}"
            }
          ],
          "private": [
            {
              "version": 4,
              "addr": "{ip_address}"
            }
          ]
        }
      },
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/test_server_0013/",
          "rel": "self"
        }
      ]
    },
    "image": {
      "name": "CentOS 5 Plesk",
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/images/test_public_image/",
          "rel": "self"
        }
      ]
    },
    "id": "test_public_image"
  },
  "securityGroup": {
    "id": "group2012Nov02_jD6NX8BsK",
    "links": [
      {
        "href": "http://{server_name}/accounts/{accountId}/flexcloud/os-security-groups/group2012Nov02_jD6NX8BsK/",
        "rel": "self"
      }
    ]
  }
},
  "userId": "{user_account_id}",
  "flavor": { "name": "", "links": [], "id": "" },
  "id": "test_server_0013",
  "zone": "AUS001",
  "name": "test_server_created",
  "adminPass": null,
  "created": "2011-11-25T12:16:47",
  "tenantId": null,
  "accessIPv4": "{ip_address}",
  "accessIPv6": null,
  "progress": 100,
  "metadata": {}
}
}
```

- When a server is in pending status (has not completed the provisioning process), the creation timestamp and hostId that are returned will be empty strings.

#### Failure while trying to get server details without proper authorization - Response: Unauthorized (401):

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### Failure while trying to get server details for a non-existent server id or passing invalid account number - Response: ItemNotFound (404):

```
{
  "itemNotFound": {
    {
      "message": "Resource not found",
      "code": 404,
      "details": "",
      "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
    }
  }
}
```

## 69 PUT /accounts/{accountId}/flexcloud/servers/{id}

This operation will update details of a single server.

### 69.1 Parameters

accountId - *string*  
The selected account Id.

id - *string*  
Id of the server to update.

#### 69.1.1 server attributes

name - *string*  
New display server name to update

### 69.2 Request

#### 69.2.1 JSON

```
{
  "server" :
  {
    "name" : "{new_display_name}"
  }
}
```

### 69.3 Response

#### 69.3.1 JSON

```
{
  "server":{
    "status":"ACTIVE",
    "updated":null,
    "hostId":"{host_id}",
    "addresses":{
      "public":[
        {
          "version":4,
          "addr":"{ip_address}"
        }
      ],
      "private":[
        {
          "version":4,
          "addr":"{ip_address}"
        }
      ]
    },
    "links":[
      {
        "href":"http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/",
        "rel":"self"
      }
    ],
    "image":{
      "name":"{display_image_name}",
      "links":[
        {
          "href":"http://{api_server}/accounts/{accountId}/flexcloud/images/{image_id}/",
          "rel":"self"
        }
      ],
      "id":"{image_id}"
    },
    "securityGroup": {
      "id":"{security_group_id}",
      "links":[
        {
          "href":"http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/{security_group_id}/",
          "rel":"self"
        }
      ]
    },
    "userId":"{user_account_id}",
    "flavor":{
      "name":"1024MB Server3",
      "links":[
        {
          "href":"http://{api_server}/accounts/{accountId}/flexcloud/flavors/{flavor_id}/",
          "rel":"self"
        }
      ],
      "id":3
    },
    "id":"{server_id}",
    "zone": "AUS001",
    "name":"{new_display_name}",
    "adminPass":null,
    "created":"2011-12-05T12:51:28",
    "tenantId":null,
    "accessIPv4":"{ip_address}",
    "accessIPv6":null,
    "progress":100,
    "metadata":{
  }
```

```
}  
}
```

## 69.4 Response Codes

### Success

*HTTP/1.1 200 OK*

### Failure

*HTTP/1.1 400 Bad Request* : Display name in use. / Display name invalid.

*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

*HTTP/1.1 404 Not Found* : The resource requested is not found.

*HTTP/1.1 405 Method Not Allowed* : Unsupported server attribute.

## 70 DELETE /accounts/{accountId}/flexcloud/servers/{id}

This operation will delete a single server.

### 70.1 Parameters

`accountId` - *string*  
The selected account Id.

`id` - *string*  
Id of the server to delete.

### 70.2 Response Codes

Success  
*HTTP/1.1 202 Accepted* or *HTTP/1.1 204 No Content*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* : The resource requested is not found.

### 70.3 Examples

#### Successfully delete a specific server

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/123
```

*Response Code:*

*HTTP/1.1 202 Accepted*

#### Failure while trying to update a non-existent server

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{fake_server_id}
```

*Response Code:*

*HTTP/1.1 404 Not Found*

#### Failure while trying to pass invalid account number

```
DELETE http(s)://{api_server}/accounts/fake/flexcloud/servers/123
```

*Response Code:*

*HTTP/1.1 404 Not Found*

### 70.4 Alternative URI /servers/{id}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /servers/{id}
```

## 71 ServerActionAddFlexibleIP

This operation will assign an already allocated flexible IP to the specified `server`.

## 72 POST /accounts/{accountId}/flexcloud/servers/{id}/action

### 72.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server.

### 72.2 Request

#### 72.2.1 JSON

```
{
  "addFloatingIp" :
  {
    "address" : {ip_address}
  }
}
```

address - *string*  
The address of the allocated floating IP.

### 72.3 Response Codes

Success  
*HTTP/1.1 202 Accepted* : The request is accepted for processing.

Failure  
*HTTP/1.1 400 Bad Request* : Check your parameter (no address in JSON). / Server Not Found.  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 403 Forbidden* : The server understood the request, but is refusing to fulfill it. The IP address specified is already assigned to another resource instance.  
*HTTP/1.1 404 Not Found* : The resource requested is not found.  
*HTTP/1.1 409 Conflict* : Server not provisioned.  
*HTTP/1.1 502 Bad Gateway* : Error while assigning IP address ... / Invalid data received when assigning IP address ...

### 72.4 Alternative URI /servers/{id}/action

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /servers/{id}/action

## 73 ServerActionReboot

The reboot action allows for either a soft or hard reboot of a [Server](#). With a soft reboot (SOFT), the operating system is signaled to restart, which allows for a graceful shutdown of all processes. A hard reboot (HARD) is the equivalent of power cycling the server.

## 74 POST /accounts/{accountId}/flexcloud/servers/{id}/action

### 74.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server to reboot.

#### 74.1.1 JSON

```
{
  "reboot":
  {
    "type": "HARD"
  }
}
```

type - *string*  
Type of reboot to perform. Values: **HARD**, **SOFT**.

### 74.2 Response Codes

Success  
*HTTP/1.1 202 Accepted* : The request is accepted for processing.

Failure  
*HTTP/1.1 400 Bad Request* : Check your parameter. / Other error  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* : The resource requested is not found.  
*HTTP/1.1 405 Method Not Allowed* : The requested action is not supported.  
*HTTP/1.1 409 Conflict* : Already rebooting.

### 74.3 Alternative URI /servers/{id}/action

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /servers/{id}/action

## 75 ServerActionRemoveFlexibleIP

This operation will remove an already assigned flexible IP from a [Server](#).

## 76 POST /accounts/{accountId}/flexcloud/servers/{id}/action

### 76.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server.

### 76.2 Request

#### 76.2.1 JSON

```
{
  "removeFloatingIp" :
  {
    "address" : {ip_address}
  }
}
```

address - *string*  
The address of the allocated flexible IP.

### 76.3 Response Codes

Success  
*HTTP/1.1 202 Accepted* : The request is accepted for processing.

Failure  
*HTTP/1.1 400 Bad Request* : Check your parameter (no address in JSON). / Server Not Found.  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* : The resource requested is not found.  
*HTTP/1.1 409 Conflict* : Server not provisioned. / Invalid IP address  
*HTTP/1.1 502 Bad Gateway* : Error while removing IP address ...

### 76.4 Alternative URI /servers/{id}/action

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /servers/{id}/action

## 77 ServerActionResize

The resize action changes the Flavor of a Server.

## 78 POST /accounts/{accountId}/flexcloud/servers/{id}/action

### 78.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server to be resized.

### 78.2 Request

#### 78.2.1 JSON

```
{
  "resize" :
  {
    "flavor":
    {
      "id": "{flavor_id}"
    }
  }
}
```

id - *string*  
The id of the flavor to use.

### 78.3 Response Codes

Success  
*HTTP/1.1 202 Accepted* : The request is accepted for processing.

Failure  
*HTTP/1.1 400 Bad Request* : Server already uses this flavor.  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 403 Forbidden* : This server cannot be resized.  
*HTTP/1.1 404 Not Found* : The resource requested is not found.  
*HTTP/1.1 405 Method Not Allowed* : The requested action is not supported.  
*HTTP/1.1 500 Internal Server Error* : Unknown error was raised while processing your request.  
*HTTP/1.1 503 Service Unavailable* : Selected profile is unavailable.

### 78.4 Alternative URI /servers/{id}/action

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /servers/{id}/action

## 79 ServerActions

The following actions can be performed on a [Server](#).

### 79.1 Reboot

This operation allows for either a soft or hard reboot of a server. With a soft reboot (SOFT), the operating system is signaled to restart, which allows for a graceful shutdown of all processes. A hard reboot (HARD) is the equivalent of power cycling the server.

[ServerActionReboot](#)

### 79.2 Stop

This operation stops a server.

[ServerActionStop](#)

### 79.3 Start

This operation starts a stopped server.

[ServerActionStart](#)

### 79.4 Resize

This operation changes the [Flavor](#) of a server.

[ServerActionResize](#)

### 79.5 Add Flexible IP

This operation adds a new Flexible IP to a server.

[ServerActionAddFlexibleIP](#)

### 79.6 Remove Floating IP

This operation removes an existing Flexible IP from a server.

[ServerActionRemoveFlexibleIP](#)

### 79.7 Upgrade Plesk

This operation will upgrade the Plesk license on a server.

[ServerActionUpgradePlesk](#)

## 80 ServerActionStart

The start action is used for starting a [Server](#). Starting a stopped server will change its status from STOPPED to ACTIVE.

## 81 POST /accounts/{accountId}/flexcloud/servers/{id}/action

### 81.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server to reboot.

#### 81.1.1 JSON

```
{  "os-start": null
}
```

### 81.2 Response Codes

Success  
*HTTP/1.1 202 Accepted* : The request is accepted for processing.

Failure  
*HTTP/1.1 400 Bad Request* : An error occurred.  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* : The resource requested is not found.  
*HTTP/1.1 405 Method Not Allowed* : The requested action is not supported.  
*HTTP/1.1 409 Conflict* : Other status change in progress.

### 81.3 Alternative URI /servers/{id}/action

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /servers/{id}/action

## 82 ServerActionStop

The stop action is used for stopping a [Server](#). Stopping a server changes its status from ACTIVE to STOPPED.

## 83 POST /accounts/{accountId}/flexcloud/servers/{id}/action

### 83.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server to reboot.

#### 83.1.1 JSON

```
{  
  "os-stop": null  
}
```

### 83.2 Response Codes

Success  
*HTTP/1.1 202 Accepted* : The request is accepted for processing.

Failure  
*HTTP/1.1 400 Bad Request* : An error occurred.  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* : The resource requested is not found.  
*HTTP/1.1 405 Method Not Allowed* : The requested action is not supported.  
*HTTP/1.1 409 Conflict* : Other status change in progress.

### 83.3 Alternative URI /servers/{id}/action

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /servers/{id}/action

## 84 ServerActionUpgradePlesk

This operation will upgrade the Plesk license for the specified [Server](#).

## 85 POST /accounts/{accountId}/flexcloud/servers/{id}/action

### 85.1 Parameters

accountId - *string*  
The selected account Id.

id  
The unique identifier of the server.

### 85.2 Request

#### 85.2.1 JSON

```
{
  "upgradePlesk" : {
    "username": "{plesk_server_username}",
    "password": "{plesk_server_password}",
    "port_number": "{plesk_server_port}",
    "addon_textkey": "{plesk_addon_textkey}"
  }
}
```

##### 85.2.1.1 upgradePlesk

username - *string*  
The username used for authentication for managing Plesk license.

password - *string*  
The password used for authentication for managing Plesk license.

port\_number - *string*  
The port used for managing Plesk license.

addon\_textkey - *string*  
Plesk addon textkey to upgrade to.

### 85.3 Response Codes

Success  
*HTTP/1.1 202 Accepted* : The request is accepted for processing.

Failure  
*HTTP/1.1 400 Bad Request* : Check your parameter / Server not found  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 403 Forbidden* : The server understood the request, but is refusing to fulfill it.  
*HTTP/1.1 404 Not Found* : The resource does not exist.  
*HTTP/1.1 409 Conflict* : The request could not be completed due to a conflict with the current state of the resource. / Wrong Addon TextKey

### 85.4 Examples

#### Successfully upgrade Plesk server license

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/action

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Request Body:

```
{
  "upgradePlesk" : {
    "username": "plesk-username",
    "password": "plesk-password",
    "port_number": "12",
    "addon_textkey": "plesk.9.linux.powerpack"
  }
}
```

##### Response Code:

HTTP/1.1 202 Accepted

#### Failure while trying to upgrade Plesk while server is processing another task

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/action

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Request Body:

```
{
  "upgradePlesk" : {
```

```
    "username": "plesk-username",
    "password": "plesk-password",
    "port_number": "12",
    "addon_textkey": "plesk.9.linux.powerpack"
  }
}
```

**Response Code:**

HTTP/1.1 409 Conflict

**Response Body:**

```
{
  "conflict": {
    "message": "PleskStillUpgrading",
    "code": 409,
    "details": "Some task is in processing for this instance. please wait for a while",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efel6e83bf"
  }
}
```

**Unauthorized access**

**POST** http(s)://{api\_server}/accounts/{accountid}/flexcloud/servers/test\_server\_0013/action

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

**Request Body:**

```
{
  "upgradePlesk" : {
    "username": "plesk-username",
    "password": "plesk-password",
    "port_number": "12",
    "addon_textkey": "plesk.9.linux.powerpack"
  }
}
```

**Response Code:**

HTTP/1.1 401 Unauthorized

**Response Body:**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to upgrade Plesk with an empty parameter body**

**POST** http(s)://{api\_server}/accounts/{accountid}/flexcloud/servers/test\_server\_0013/action

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  empty
}
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad Request",
    "code": 400,
    "details": "Multiple actions per request are not allowed",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efel6e83bf"
  }
}
```

**Failure while trying to upgrade Plesk with incorrect Plesk server credentials**

**POST** http(s)://{api\_server}/accounts/{accountid}/flexcloud/servers/test\_server\_0013/action

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  "upgradePlesk" : {
    "username": "fake-plesk-username",
    "password": "fake-plesk-password",
    "port_number": "12",
    "addon_textkey": "plesk.9.linux.powerpack"
  }
}
```

**Response Code:**

HTTP/1.1 403 Forbidden

**Response Body:**

```
{
  "forbidden": {
    "message": "WrongPleskAuthentication",
    "code": 403,
    "details": "Could not login to Plesk vm, check your VM login information",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efel6e83bf"
  }
}
```

**Failure while trying to upgrade Plesk for a non-existent port server**

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/action

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  "upgradePlesk" : {
    "username": "plesk-username",
    "password": "plesk-password",
    "port_number": "1222",
    "addon_textkey": "plesk.9.linux.powerpack"
  }
}
```

**Response Code:**

HTTP/1.1 403 Forbidden

**Response Body:**

```
{
  "forbidden": {
    "message": "WrongPleskAuthentication",
    "code": 403,
    "details": "Could not login to Plesk vm, check your VM login information",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efel6e83bf"
  }
}
```

**Failure while trying to upgrade Plesk for a non-existent Plesk addon textkey**

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/test\_server\_0013/action

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Request Body:**

```
{
  "upgradePlesk" : {
    "username": "plesk-username",
    "password": "plesk-password",
    "port_number": "12",
    "addon_textkey": "fake.plesk.addon.textkey"
  }
}
```

**Response Code:**

HTTP/1.1 409 Conflict

**Response Body:**

```
{
  "conflict": {
    "message": "WrongAddonTextkey",
    "code": 409,
    "details": "Please specify proper addon textkey",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efel6e83bf"
  }
}
```

**Failure while trying to upgrade Plesk for a non-existent Plesk server**

**POST** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/fake\_server\_name/action

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "upgradePlesk" : {
    "username": "plesk-username",
    "password": "plesk-password",
    "port_number": "12",
    "addon_textkey": "plesk.9.linux.powerpack"
  }
}
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efel6e83bf"
  }
}
```

### Failure while trying to upgrade Plesk for a non-existent Plesk server with invalid account number

POST http(s)://{api\_server}/accounts/fake\_account/flexcloud/servers/test\_server\_0013/action

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "upgradePlesk" : {
    "username": "plesk-username",
    "password": "plesk-password",
    "port_number": "12",
    "addon_textkey": "plesk.9.linux.powerpack"
  }
}
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efel6e83bf"
  }
}
```

## 85.5 Alternative URI /servers/{id}/action

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
POST /servers/{id}/action
```

## 86 ServerCreate

This operation will create a new server. Server creation is asynchronous, the progress can be checked with the URL in the response Location header or the self link in the body.

## 87 POST /accounts/{accountId}/flexcloud/servers

This operation will create a new server. Server creation is asynchronous, the progress can be checked with the URL in the response Location header or the self link in the body.

### 87.1 Request

#### 87.1.1 Request Parameters

accountId - *string*  
The selected account Id.

#### 87.1.2 JSON

```
{
  "server":{
    "name":"{display_server_name}",
    "imageRef":"http://{server_name}/accounts/{accountId}/flexcloud/images/{image_id}/",
    "flavorRef":"http://{server_name}/accounts/{accountId}/flexcloud/flavors/{flavor_id}/",
    "securityGroupRef":"http://{server_name}/accounts/{accountId}/flexcloud/os-security-groups/{security_group_id}/",
    "adminPass":"{initial_password}",
    "zone": "{zone_textkey}"
  }
}
```

name - *string*  
Display name for this server

imageRef - *string*  
Absolute URL of the [Image](#) to use

flavorRef - *string*  
Absolute URL of the [Flavor](#) to use

securityGroupRef - *string*  
Absolute URL of the [SecurityGroup](#) to use

adminPass - *string*  
Initial admin password. If not specified, the automatically generated password would be returned.

zone  
Zone textkey

### 87.2 Result

#### 87.2.1 JSON

```
{
  "server":{
    "status":"{state_status}",
    "updated":null,
    "hostId":"",
    "addresses":{
      "public":[
        {
          "version":4,
          "addr":"{ip_address}"
        }
      ],
      "private":[
        {
          "version":4,
          "addr":"{ip_address}"
        }
      ]
    },
    "links":[
      {
        "href":"http://{server_name}/accounts/{accountId}/flexcloud/servers/{server_id}/",
        "rel":"self"
      }
    ]
  },
  "image":{
    "name":"{display_image_name}",
    "links":[
      {
        "href":"http://{server_name}/accounts/{accountId}/flexcloud/images/{image_id}/",
        "rel":"self"
      }
    ]
  },
  "id":"{image_id}"
},
"securityGroup": {
  "id":"{security_group_id}",
  "links":[
    {
      "href":"http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/{security_group_id}/",
      "rel":"self"
    }
  ]
},
"userId":"{user_account_id}",
"flavor":{
  "name":"{display_flavor_name}",
  "links":[
    {
      "href":"{server_name}/accounts/{accountId}/flexcloud/flavors/{flavor_id}/",

```

```

        "rel": "self"
    }
  ],
  "id": {flavor_id}
},
"id": {server_id},
"zone": "{zone_textkey}",
"name": "{display_server_name}",
"adminPass": "{initial_password}",
"created": "",
"tenantId": null,
"accessIPv4": "{ip_address}",
"accessIPv6": null,
"progress": 0,
"metadata": {
}
}
}

```

- When a server is in pending status (has not completed the provisioning process), the creation timestamp and hostId that are returned will be empty strings.

### 87.2.1.1 server

id - *string*

Unique identifier for this server.

links - *list*

[Hypermedia](#) for this resource.

status - *string*

Current state of the server. Values: **BUILD, ACTIVE, PROCESSING, SUSPENDED, DELETED, UNKNOWN**

hostId - *string*

Id of the physical host this virtual machine is running on.

userId - *string*

Unique identifier for the owner of this server.

name - *string*

Display name for this server.

created - *string*

The date and time this server was created. ISO 8601 format, YYYY-MM-DDTHH:MM:SS.

accessIPv4 - *string*

The default included public IPv4 address.

progress - *number*

The progress of the current this server while in the BUILD status. The value is in the range of 0 - 100, but currently will only even be 0, 50, 100.

adminPass - *string*

The admin password. Not null only in the creating server response.

metadata - *object*

Unused always an empty object.

tenantId

Unused always always null.

accessIPv6

Unused always null.

updated

Unused always null.

zone

Zone text key

### 87.2.1.2 addresses

addresses.public.version - *number*

IP version of this address. Values: **4**

addresses.public.addr = *string*

Public IP address of this server

addresses.private.version - *number*

IP version of this address. Values: **4**

addresses.private.addr - *string*

Private IP address of this server

### 87.2.1.3 image

image.name - *string*

The display name of the image this server is based on.

image.links - *list*

[Hypermedia](#) for the image.

image.id - *string*  
Unique identifier for image this server is based on.

#### 87.2.1.4 flavor

flavor.name - *string*  
The display name of the flavor this server is based on.

flavor.links - *list*  
[Hypermedia](#) for the flavor.

flavor.id - *string*  
Unique identifier for flavor this server is based on.

#### 87.2.1.5 securityGroup

securityGroup.id - *string*  
the name of the security group that is assigned to this server

securityGroup.links - *list*  
[Hypermedia](#) for the securityGroup.

## 87.3 Response Codes

Success  
*HTTP/1.1 202 Accepted*  
Request is accepted.

Failure  
*HTTP/1.1 400 Bad Request*  
The resource used for creating server is not found.

Failure  
*HTTP/1.1 404 Bad Request*  
The resource does not exist (when account number is not valid)

## 87.4 Examples

### Successfully create a new server

**POST** `http://{api_server}/accounts/{accountId}/flexcloud/servers`

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "server" :
  {
    "flavorRef" : "http://{api_server}/accounts/{accountId}/flexcloud/flavors/1",
    "securityGroupRef":"http://{server_name}/accounts/{accountId}/flexcloud/os-security-groups/{security_group_id}/",
    "name" : "test_server_create",
    "imageRef" : "http://{api_server}/accounts/{accountId}/flexcloud/images/test_public_image",
    "zone": "AUS001"
  }
}
```

#### Response Code:

HTTP/1.1 202 Accepted

#### Response Body:

```
{
  "server":
  {
    "status": "BUILD",
    "updated": null,
    "hostId": "",
    "addresses":
    {
      "public": [
        {
          "version": 4,
          "addr": "{ip_address}"
        }
      ],
      "private": [
        {
          "version": 4,
          "addr": "{ip_address}"
        }
      ]
    },
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/167/",
        "rel": "self"
      }
    ],
    "imageRef":
    {

```

```

        "name": "CentOS 5 Plesk",
        "links": [
            {
                "href": "http://{api_server}/accounts/{accountId}/flexcloud/images/test_public_image/",
                "rel": "self"
            }
        ],
        "id": "test_public_image"
    },
    "securityGroup":
    {
        "id": "group2012Nov02_jD6NX8BsK",
        "links": [
            {
                "href": "http://{server_name}/accounts/{accountId}/flexcloud/os-security-groups/group2012Nov02_jD6NX8BsK/",
                "rel": "self"
            }
        ],
    },
    "userId": "{user_account_id}",
    "flavorRef":
    {
        "name": "",
        "links": [
            {
                "href": "http://{api_server}/accounts/{accountId}/flexcloud/flavors/1/",
                "rel": "self"
            }
        ],
        "id": "1"
    },
    "id": "167",
    "zone": "AUS001",
    "name": "test_server_create",
    "adminPass": "{auto_generated_password}",
    "created": "",
    "tenantId": null,
    "accessIPv4": "{ip_address}",
    "accessIPv6": null,
    "progress": 0,
    "metadata": {}
}
}

```

- When a server is in pending status (has not completed the provisioning process), the creation timestamp and hostId that are returned will be empty strings.

### Failure while trying to create a server with a bad request body

**POST** http://{api\_server}/accounts/{accountId}/flexcloud/servers

#### Request Headers:

```

Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string

```

#### Request Body:

```

{
  "server" :
  {
    "flavorRef" : "http://{api_server}/accounts/{accountId}/flexcloud/flavors/{flavor_id}",
    "securityGroupRef" : "http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/{security_group_id}",
    "name" : "{display_server_name}",
    "imageRef" : "http://{api_server}/accounts/{accountId}/flexcloud/images/{fake_image_id}",
    "zone": "AUS001"
  }
}

```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```

{
  "computeFault":
  {
    "message": "Bad imageRef",
    "code": 400,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}

```

### Failure while trying to pass invalid account number

**POST** http(s)://{api\_server}/accounts/fake/flexcloud/servers

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```

{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
  }
}

```

```
    "details": "",  
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
  }  
}
```

## 87.5 Alternative URI /servers

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
POST /servers
```

## 88 ServerList

This operation returns a list of all [servers](#).

## 89 GET

**/accounts/{accountId}/flexcloud/servers?name=serverName&status=serverStatus&image=...**

### 89.1 Parameters

accountId - *string*

The selected account Id.

name - *string*

Optional Server name to search for.

status - *string*

Server status to search for. Values: **BUILD, ACTIVE, SUSPENDED, DELETED, STOPPED, PROCESSING** without status filtering, return servers with **ACTIVE, PROCESSING** or **STOPPED**

image - *string*

Optional Absolute URL of the image to filter servers by. e.g. `http(s)://{api_server}/images/{image_id}/`

zone - *string*

Optional Zone textkey

region - *string*

Optional Region textkey

### 89.2 Result

#### 89.2.1 JSON

```
{
  "servers": [
    {
      "id": "{server_id}",
      "zone": "{zone_textkey}",
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/",
          "rel": "self"
        }
      ]
    },
    {
      "id": "{server_id}",
      "zone": "{zone_textkey}",
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/",
          "rel": "self"
        }
      ]
    }
  ]
}
```

id - *string*

Unique identifier for this server.

zone

Zone text key

links - *array*

[Hypermedia](#) for this resource.

### 89.3 Response Codes

Success

*HTTP/1.1 200 OK*

Failure

*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

*HTTP/1.1 404 Not Found* : Resource does not exist

### 89.4 Examples

#### Successfully list servers

**GET** `http(s)://{api_server}/accounts/{accountId}/flexcloud/servers`

*Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

*Response Code:*

`HTTP/1.1 200 OK`

*Response Body:*

```

{
  "servers" : [
    {
      "id": "test_server_0001",
      "zone": "AUS001",
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/test_server_0001/",
          "rel": "self"
        }
      ]
    },
    {
      "id": "test_server_0013",
      "zone": "zone",
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/test_server_0013/",
          "rel": "self"
        }
      ]
    },
    {
      "id": "test_server_0015",
      "zone": "AUS001",
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/test_server_0015/",
          "rel": "self"
        }
      ]
    }
  ]
}

```

### Failure while trying to make unauthorized access

GET http://{api\_server}/accounts/{accountId}/flexcloud/servers

#### Request Headers:

```

Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string

```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```

401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.

```

### Failure while trying to pass invalid account number

GET http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers

#### Request Headers:

```

Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string

```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```

{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}

```

## 89.5 Alternative URI /servers

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

GET /servers

## 90 ServerListDetails

This operation will list all `servers` including their details.

## 91 GET

**/accounts/{accountId}/flexcloud/servers/detail?name=serverName&status=serverStatus**

### 91.1 Parameters

accountId - *string*

The selected account Id.

name - *string*

Server name to search for.

status - *string*

Server status to search for. Values: **BUILD, ACTIVE, SUSPENDED, DELETED, STOPPED, PROCESSING** without status filtering, return servers with **ACTIVE, PROCESSING** or **STOPPED**

image - *string*

Absolute URL of the image to filter servers by. e.g. [http://api\\_server/accounts/{accountId}/flexcloud/images/{image\\_id}/](http://api_server/accounts/{accountId}/flexcloud/images/{image_id}/)

zone - *string*

Zone text key

region - *string*

optional, region text key

### 91.2 Result

#### 91.2.1 JSON

```
{
  "servers": [
    {
      "status": "{state_status}",
      "updated": "",
      "hostId": "{host_id}",
      "addresses": {
        "public": [
          {
            "version": 4,
            "addr": "{ip_address}"
          }
        ],
        "private": [
          {
            "version": 4,
            "addr": "{ip_address}"
          }
        ]
      },
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/",
          "rel": "self"
        }
      ],
      "image": {
        "name": "{display_image_name}",
        "links": [
          {
            "href": "http://{api_server}/accounts/{accountId}/flexcloud/images/{image_id}/",
            "rel": "self"
          }
        ],
        "id": "{image_id}"
      },
      "userId": "{user_account_id}",
      "flavor": {
        "name": "{display_flavor_name}",
        "links": [
          {
            "href": "http://{api_server}/accounts/{accountId}/flexcloud/flavors/{flavor_id}/",
            "rel": "self"
          }
        ],
        "id": "{flavor_id}"
      },
      "securityGroup": {
        "id": "{security_group_id}",
        "links": [
          {
            "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/{security_group_id}/",
            "rel": "self"
          }
        ]
      },
      "id": "{server_id}",
      "zone": "{zone_textkey}",
      "name": "{display_server_name}",
      "created": "2011-12-05T12:51:28",
      "tenantId": "",
      "accessIPv4": "{ip_address}",
      "accessIPv6": "",
      "progress": 100,
      "metadata": {
      }
    }
  ],
  "status": "{state_status}",
  "updated": "",
  "hostId": "{host_id}",
}
```



Unused - always null.

updated  
Unused - always null.

zone  
zone text key

### 91.2.1.2 addresses

addresses.public.version - *number*  
IP version of this address. Values: 4

addresses.public.addr - *string*  
Public IP address of this server

addresses.private.version - *number*  
IP version of this address. Values: 4

addresses.private.addr - *string*  
Private IP address of this server

### 91.2.1.3 image

image.name - *string*  
The display name of the image this server is based on.

image.links - *list*  
[Hypermedia](#) for the image.

image.id - *string*  
Unique identifier for image this server is based on.

### 91.2.1.4 flavor

flavor.name - *string*  
The display name of the flavor this server is based on.

flavor.links - *list*  
[Hypermedia](#) for the flavor.

flavor.id - *string*  
Unique identifier for flavor this server is based on.

### 91.2.1.5 securityGroup

securityGroup.id - *string*  
the id of the securityGroup that is assigned to this server

securityGroup.links - *list*  
[Hypermedia](#) for the securityGroup.

## 91.3 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

Failure  
*HTTP/1.1 404 Not Found* : Resource does not exist

## 91.4 Examples

### Successfully get server list with details

**GET** /accounts/{accountId}/flexcloud/servers/detail

- *Response: OK (200)*:

```
{
  "servers": [
    {
      "status": "ACTIVE",
      "updated": "",
      "hostId": "{host_id}",
      "addresses": {
        "public": [
          {
            "version": 4,
            "addr": "{ip_address}"
          }
        ],
        "private": [
          {
            "version": 4,
            "addr": "{ip_address}"
          }
        ]
      }
    }
  ],
  "links": [
```

```

    {
      "href":"http://{server_name}/accounts/{accountId}/flexcloud/servers/test_server_0013/",
      "rel":"self"
    }
  ],
  "image":{
    "name":"Ubuntu 10.10 x64",
    "links":[
      {
        "href":"http://{server_name}/accounts/{accountId}/flexcloud/images/test_ubuntu_image/",
        "rel":"self"
      }
    ]
  },
  "id":"test_ubuntu_image"
},
"userId":{"user_account_id"},
"flavor":{
  "name":"1024MB Server3",
  "links":[
    {
      "href":"http://{server_name}/accounts/{accountId}/flexcloud/flavors/3/",
      "rel":"self"
    }
  ]
},
"id":3
},
"securityGroup":{
  "id":"group2012Nov02_jD6NX8BsK",
  "links":[
    {
      "href":"http://{server_name}/accounts/{accountId}/flexcloud/os-security-groups/group2012Nov02_jD6NX8BsK/",
      "rel":"self"
    }
  ]
}
},
"id":"test_server_0013",
"zone": "AUS001",
"name":"test_server_updated",
"created":"2011-12-05T12:51:28",
"tenantId":"",
"accessIPv4":{"ip_address"},
"accessIPv6":"",
"progress":100,
"metadata":{
}
},
{
  "status":"ACTIVE",
  "updated":"",
  "hostId":{"host_id"},
  "addresses":{
    "public":[
      {
        "version":4,
        "addr":{"ip_address"}
      }
    ],
    "private":[
      {
        "version":4,
        "addr":{"ip_address"}
      }
    ]
  }
},
"links":[
  {
    "href":"http://{server_name}/accounts/{accountId}/flexcloud/servers/test_server_0015/",
    "rel":"self"
  }
]
},
"image":{
  "name":"Windows 2008 R2 Standard",
  "links":[
    {
      "href":"http://{server_name}/accounts/{accountId}/flexcloud/images/test_windows_image/",
      "rel":"self"
    }
  ]
},
"id":"test_windows_image"
},
"userId":{"user_account_id"},
"flavor":{
  "name":"1024MB Server3",
  "links":[
    {
      "href":"http://{server_name}/accounts/{accountId}/flexcloud/flavors/3/",
      "rel":"self"
    }
  ]
},
"id":3
},
"securityGroup":{
  "id":"group2012Nov02_jD6NX8BsK",
  "links":[
    {
      "href":"http://{server_name}/accounts/{accountId}/flexcloud/os-security-groups/group2012Nov02_jD6NX8BsK/",
      "rel":"self"
    }
  ]
}
},
"id":"test_server_0015",
"zone": "AUS001",
"name":"test_server_created",
"created":"2011-11-17T10:14:58",
"tenantId":"",
"accessIPv4":{"ip_address"},
"accessIPv6":"",

```

```
    "progress":100,
    "metadata":{
    }
  }
]
}
```

#### **Failure while trying to make an unauthorized call - Response: Unauthorized (401):**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### **Failure while trying to pass invalid account number**

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/detail

##### *Response Code:*

HTTP/1.1 404 Not Found

##### *Response Body:*

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

### **91.5 Alternative URI /servers/detail**

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

GET /servers/detail

## 92 ServerMonitoringDetails

The following server metrics can be monitored on a [Server](#).

### 92.1 CPU

The amount of allocated CPU cores that are currently in use on the server.

[ServerMonitoringDetailsCPU](#)

### 92.2 Disk

The amount of allocated Disk space that is currently in use on the server.

[ServerMonitoringDetailsDisk](#)

### 92.3 Bandwidth

The amount of Bandwidth that is currently in use on the server.

[ServerMonitoringDetailsBandwidth](#)

## 93 ServerMonitoringDetailsBandwidth

This operation will list Bandwidth monitoring details for a specific [Server](#).

## 94 GET

**/accounts/{accountId}/flexcloud/servers/{id}/monitoring/bandwidth?scope=monitoring**

### 94.1 Parameters

accountId - *string*

The selected account Id.

id

The unique identifier of the server.

scope

The monitoring scope used. Possible values: **receive** and **transmit**.

startDate

Start date for monitoring details report in format **yyyy-mm-dd**.

endDate

End date for monitoring details report in format **yyyy-mm-dd**.

period

The time period in seconds used for data interval. Possible values: **3600**(one hour) or **86400**(one day).

method

Statistics method used. Possible values: **avg,sum,min** and **max**.

### 94.2 Date Format

All dates are interpreted and represented in UTC with **ISO 8601 format**

### 94.3 Result

#### 94.3.1 JSON

```
[
  {
    "count": 143,
    "date": "2012-05-07 00:00:00",
    "values": 344130.30069930002
  },
  {
    "count": 144,
    "date": "2012-05-08 00:00:00",
    "values": 658.34027777777999
  }
]
```

count - *integer*

The count of bandwidth operations for the period specified.

date - *string*

The date and time stamp for the period specified.

values - *float*

The sample value calculated depending on statistics method used.

### 94.4 Response Codes

Success

**HTTP/1.1 200 OK**

The request is accepted for processing.

Failure

**HTTP/1.1 400 Bad Request**

**HTTP/1.1 401 Unauthorized** - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

**HTTP/1.1 404 Not Found** - The resource does not exist.

### 94.5 Examples

#### Successfully get Bandwidth usage monitoring data

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/bandwidth?scope=usage&startDate=2012-05-07&endDate=2012-05-08

*Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

*Response Code:*

HTTP/1.1 200 OK

*Response Body:*

```
[
  {
    "count": 143,
```

```

    "date": "2012-05-07 00:00:00",
    "values": 344130.30069930002
  },
  {
    "count": 144,
    "date": "2012-05-08 00:00:00",
    "values": 658.3402777777999
  },
  {
    "count": 144,
    "date": "2012-05-09 00:00:00",
    "values": 2.1111111111111001
  }
]

```

#### Failure while trying to get Bandwidth usage monitoring data with a bad scope parameter

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/bandwidth?scope=fake-scope&startDate=2012-05-07&endDate=2012-05-07

#### Request Headers:

```

Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string

```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```

{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": "The bandwidth monitoring scope is not supported",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}

```

#### Failure while trying to get Bandwidth usage monitoring data with a bad date parameter

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/bandwidth?scope=usage&startDate=fake-date&endDate=2012-05-07

#### Request Headers:

```

Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string

```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```

{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "startDate": "Invalid date"
    },
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}

```

#### Failure while trying to get Bandwidth usage monitoring data with a bad period parameter

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/bandwidth?scope=usage&startDate=2012-05-07&endDate=2012-05-07&period=fake-period

#### Request Headers:

```

Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string

```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```

{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "period": "\"fake-period\" is not a number"
    },
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}

```

#### Failure while trying to get Bandwidth usage monitoring data with a bad method parameter

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/bandwidth?scope=usage&startDate=2012-05-07&endDate=2012-05-10

**Request Headers:**

Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": "Invalid statistics_method",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to get Bandwidth usage monitoring data with a missing scope parameter**

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/bandwidth?startDate=2012-05-07&endDate=2012-05-10&period=86400

**Request Headers:**

Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": "The bandwidth monitoring scope is missing",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to get Bandwidth usage monitoring data with a missing date parameter**

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/bandwidth?scope=usage&endDate=2012-05-10&period=86400

**Request Headers:**

Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "startDate": "Required"
    },
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to get Bandwidth usage monitoring data with a missing period parameter**

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/bandwidth?scope=usage&startDate=2012-05-07&endDate=2012-05-10

**Request Headers:**

Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
```

```
    "message": "Bad request",
    "code": 400,
    "details": {
      "period": "Required"
    },
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Failure while trying to get Bandwidth usage monitoring data with a missing method parameter

**GET**

`http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{server_name}/monitoring/bandwidth?scope=usage&startDate=2012-05-07&endDate=2012-05-07`

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "method": "Required"
    },
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Failure while trying to get Bandwidth usage monitoring data for a non-existent server

**GET**

`http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{fake-server_name}/monitoring/bandwidth?scope=usage&startDate=2012-05-07&endDate=2012-05-07`

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Unauthorized access

**GET**

`http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{server_name}/monitoring/bandwidth?scope=usage&startDate=2012-05-07&endDate=2012-05-07`

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

#### Failure while trying to pass invalid account number

**GET**

`http(s)://{api_server}/accounts/fake/flexcloud/servers/{server_name}/monitoring/bandwidth?scope=usage&startDate=2012-05-07&endDate=2012-05-07`

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 94.6 Alternative URI `/servers/{id}/monitoring/bandwidth`

An alternative way to execute this call is to omit the `accountId` portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /servers/{id}/monitoring/bandwidth
```

## 95 ServerMonitoringDetailsCPU

This operation will list CPU monitoring details for a specific [Server](#).

## 96 GET

**/accounts/{accountId}/flexcloud/servers/{id}/monitoring/cpu?startDate=startDate&endDate=endDate**

### 96.1 Parameters

accountId - *string*

The selected account Id.

id

The unique identifier of the server.

startDate

Start date for monitoring details report in format **yyyy-mm-dd**.

endDate

End date for monitoring details report in format **yyyy-mm-dd**.

period

The time period in seconds used for data interval. Possible values: **3600**(one hour) or **86400**(one day).

method

Statistics method used. Possible values: **avg,sum,min** and **max**.

### 96.2 Result

#### 96.2.1 JSON

```
[
  {
    "count": 144,
    "date": "2012-05-07 00:00:00",
    "values": 0.0
  },
  {
    "count": 143,
    "date": "2012-05-08 00:00:00",
    "values": 0.0
  }
]
```

count - *integer*

The count of CPU operations for the period specified.

date - *string*

The date and time stamp for the period specified.

values - *float*

The sample value calculated depending on statistics method used.

### 96.3 Response Codes

Success

**HTTP/1.1 200 OK**

The request is accepted for processing.

Failure

**HTTP/1.1 400 Bad Request**

**HTTP/1.1 401 Unauthorized** - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

**HTTP/1.1 404 Not Found** - The resource does not exist.

### 96.4 Examples

#### Successfully get CPU usage monitoring data

**GET**

**http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/cpu?startDate=2012-05-07&endDate=2012-05-10&period=86400**

*Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

*Response Code:*

**HTTP/1.1 200 OK**

*Response Body:*

```
[
  {
    "count": 144,
    "date": "2012-05-07 00:00:00",
    "values": 0.0
  },
  {
    "count": 143,
    "date": "2012-05-08 00:00:00",
    "values": 0.0
  }
]
```

```
    "count": 144,  
    "date": "2012-05-09 00:00:00",  
    "values": 0.0  
  }  
]
```

#### Failure while trying to get CPU usage monitoring data with a bad date parameter

GET

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/cpu?startDate=fake-date&endDate=2012-05-10&period=86400

#### Request Headers:

```
Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```
{  
  "badRequest": {  
    "message": "Bad request",  
    "code": 400,  
    "details": {  
      "startDate": "Invalid date"  
    },  
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
  }  
}
```

#### Failure while trying to get CPU usage monitoring data with a bad period parameter

GET

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/cpu?startDate=2012-05-07&endDate=2012-05-10&period=fake

#### Request Headers:

```
Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```
{  
  "badRequest": {  
    "message": "Bad request",  
    "code": 400,  
    "details": {  
      "period": "\"fake-period\" is not a number"  
    },  
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
  }  
}
```

#### Failure while trying to get CPU usage monitoring data with a bad method parameter

GET

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/cpu?startDate=2012-05-07&endDate=2012-05-10&period=86400

#### Request Headers:

```
Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```
{  
  "badRequest": {  
    "message": "Bad request",  
    "code": 400,  
    "details": "Invalid statistics_method",  
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
  }  
}
```

#### Failure while trying to get CPU usage monitoring data with a missing date parameter

GET

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/cpu?endDate=2012-05-10&period=86400&method=avg

#### Request Headers:

```
Content-Type:application/json  
Charset=UTF-8
```

Authorization:Base64-encoded username & password string

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "startDate": "Required"
    }
  },
  "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
}
```

**Failure while trying to get CPU usage monitoring data with a missing period parameter**

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/cpu?startDate=2012-05-07&endDate=2012-05-10&method=avg

**Request Headers:**

Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "period": "Required"
    }
  },
  "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
}
```

**Failure while trying to get CPU usage monitoring data with a missing method parameter**

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/cpu?startDate=2012-05-07&endDate=2012-05-10&period=86400

**Request Headers:**

Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "method": "Required"
    }
  },
  "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
}
```

**Failure while trying to get CPU usage monitoring data for a non-existent server**

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{fake\_server\_name}/monitoring/cpu?startDate=2012-05-07&endDate=2012-05-10&period=86400

**Request Headers:**

Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

```
}  
}
```

### Unauthorized access

#### GET

```
http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{server_name}/monitoring/cpu?startDate=2012-05-07&endDate=2012-05-10&period=86400
```

#### Request Headers:

```
Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

```
HTTP/1.1 401 Unauthorized
```

#### Response Body:

```
401 Unauthorized  
This server could not verify that you are authorized to  
access the document you requested. Either you supplied the  
wrong credentials (e.g., bad password), or your browser  
does not understand how to supply the credentials required.
```

### Failure while trying to pass invalid account number

#### GET

```
http(s)://{api_server}/accounts/fake/flexcloud/servers/{server_name}/monitoring/cpu?startDate=2012-05-07&endDate=2012-05-10&period=86400&method=cpu
```

#### Response Code:

```
HTTP/1.1 404 Not Found
```

#### Response Body:

```
{  
  "itemNotFound" : {  
    "message": "Resource not found",  
    "code": 404,  
    "details": "",  
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
  }  
}
```

## 96.5 Alternative URI /servers/{id}/monitoring/cpu

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /servers/{id}/monitoring/cpu
```

## 97 ServerMonitoringDetailsDisk

This operation will list Disk monitoring details for a specific [Server](#).

## 98 GET

**/accounts/{accountId}/flexcloud/servers/{id}/monitoring/disk?scope=monitoringScope**

### 98.1 Parameters

- accountId** - *string*  
The selected account Id
- id**  
The unique identifier of the server.
- scope**  
The monitoring scope used. Possible values: **usage**, **read\_count**, **write\_count**, **read\_bytes** and **write\_bytes**.
- startDate**  
Start date for monitoring details report in format **yyyy-mm-dd**.
- endDate**  
End date for monitoring details report in format **yyyy-mm-dd**.
- period**  
The time period in seconds used for data interval. Possible values: **3600**(one hour) or **86400**(one day).
- method**  
Statistics method used. Possible values: **avg**, **sum**, **min** and **max**.

### 98.2 Result

#### 98.2.1 JSON

```
[
  {
    "count": 144,
    "date": "2012-05-07 00:00:00",
    "values": 3.2083333333333002
  },
  {
    "count": 143,
    "date": "2012-05-08 00:00:00",
    "values": 6.0
  }
]
```

- count** - *integer*  
The count of disk operations for the period specified.
- date** - *string*  
The date and time stamp for the period specified.
- values** - *float*  
The sample value calculated depending on statistics method used.

### 98.3 Response Codes

- Success**  
*HTTP/1.1 200 OK*  
The request is accepted for processing.
- Failure**  
*HTTP/1.1 400 Bad Request*  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 98.4 Examples

#### Successfully get Disk usage monitoring data

##### GET

**http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/disk?scope=usage&startDate=2012-05-07&endDate=2012-05-**

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Response Code:

**HTTP/1.1 200 OK**

##### Response Body:

```
[
  {
    "count": 144,
    "date": "2012-05-07 00:00:00",
    "values": 3.2083333333333002
  },
  {
    "count": 143,
```

```
    "date": "2012-05-08 00:00:00",
    "values": 6.0
  },
  {
    "count": 144,
    "date": "2012-05-09 00:00:00",
    "values": 6.0
  }
]
```

#### Failure while trying to get Disk usage monitoring data with a bad scope parameter

**GET**

`http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{server_name}/monitoring/disk?scope=fake-scope&startDate=2012-05-07&endDate=2012-05-07`

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Response Code:

HTTP/1.1 400 Bad Request

##### Response Body:

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": "The disk monitoring scope is not supported",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Failure while trying to get Disk usage monitoring data with a bad date parameter

**GET**

`http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{server_name}/monitoring/disk?scope=usage&startDate=fake-date&endDate=2012-05-10`

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Response Code:

HTTP/1.1 400 Bad Request

##### Response Body:

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "startDate": "Invalid date"
    },
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Failure while trying to get Disk usage monitoring data with a bad period parameter

**GET**

`http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{server_name}/monitoring/disk?scope=usage&startDate=2012-05-07&endDate=2012-05-10&period=fake-period`

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

##### Response Code:

HTTP/1.1 400 Bad Request

##### Response Body:

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "period": "\"fake-period\" is not a number"
    },
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

#### Failure while trying to get Disk usage monitoring data with a bad method parameter

**GET**

`http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{server_name}/monitoring/disk?scope=usage&startDate=2012-05-07&endDate=2012-05-10&method=fake-method`

##### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": "Invalid statistics_method",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to get Disk usage monitoring data with a missing scope parameter**

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/disk?startDate=2012-05-07&endDate=2012-05-10&period=86400

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": "The disk monitoring scope is missing",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to get Disk usage monitoring data with a missing date parameter**

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/disk?scope=usage&endDate=2012-05-10&period=86400&method=usage

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "startDate": "Required"
    },
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to get Disk usage monitoring data with a missing period parameter**

**GET**

http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_name}/monitoring/disk?scope=usage&startDate=2012-05-07&endDate=2012-05-10

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 400 Bad Request

**Response Body:**

```
{
  "badRequest": {
    "message": "Bad request",
    "code": 400,
    "details": {
      "period": "Required"
    },
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

```
}  
}
```

### Failure while trying to get Disk usage monitoring data with a missing method parameter

**GET**

`http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{server_name}/monitoring/disk?scope=usage&startDate=2012-05-07&endDate=2012-05-10`

#### Request Headers:

```
Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 400 Bad Request

#### Response Body:

```
{  
  "badRequest": {  
    "message": "Bad request",  
    "code": 400,  
    "details": {  
      "method": "Required"  
    },  
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
  },  
}
```

### Failure while trying to get disk usage monitoring data for a non-existent server

**GET**

`http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{fake-server_name}/monitoring/disk?scope=usage&startDate=2012-05-07&endDate=2012-05-10`

#### Request Headers:

```
Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string
```

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{  
  "itemNotFound": {  
    "message": "Resource not found",  
    "code": 404,  
    "details": "",  
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
  },  
}
```

### Unauthorized access

**GET**

`http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/{server_name}/monitoring/disk?scope=usage&startDate=2012-05-07&endDate=2012-05-10`

#### Request Headers:

```
Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded fake_authentication_string
```

#### Response Code:

HTTP/1.1 401 Unauthorized

#### Response Body:

```
401 Unauthorized  
This server could not verify that you are authorized to  
access the document you requested. Either you supplied the  
wrong credentials (e.g., bad password), or your browser  
does not understand how to supply the credentials required.
```

### Failure while trying to pass invalid account number

**GET**

`http(s)://{api_server}/accounts/fake/flexcloud/servers/{server_name}/monitoring/disk?scope=usage&startDate=2012-05-07&endDate=2012-05-10&period=1`

#### Response Code:

HTTP/1.1 404 Not Found

#### Response Body:

```
{  
  "itemNotFound" : {  
    "message": "Resource not found",  
    "code": 404,  
    "details": "",  
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
  },  
}
```

```
} }
```

## 98.5 Alternative URI `/servers/{id}/monitoring/disk`

An alternative way to execute this call is to omit the `accountId` portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /servers/{id}/monitoring/disk
```

## 99 ServerSnapshot

This article describes operations for getting details of a server snapshot. Other types of operations on a server snapshot are: [ServerSnapshotCreate](#), [ServerSnapshotActions](#), etc.

## 100 GET

**/accounts/{accountId}/flexcloud/servers/{server\_id}/snapshots/{snapshot\_id}**

This operation will return details of a single server.

### 100.1 Parameters

accountId - *string*

The selected account Id.

server\_id

The unique identifier of the server.

snapshot\_id

The unique identifier of the server snapshot to get

### 100.2 Result

#### 100.2.1 JSON

```
{
  "snapshot": {
    "id": "{snapshot_id}",
    "name": "{snapshot_name}",
    "description": "{description}",
    "status": "{status}",
    "guid": "{guid}",
    "parent_guid": "{parent_guid}",
    "relation_guid": "{relation_guid}",
    "create_time": "{create_time}",
    "links": [{"href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/snapshots/{snapshot_id}/",
              "rel": "self"}],
  }
}
```

id - *string*

Unique identifier for this server snapshot.

name - *string*

Display name of this server snapshot.

description - *string*

Description of this server snapshot.

guid - *string*

GUID of this server snapshot.

parent\_guid - *string*

Parent GUID of this server snapshot.

relation\_guid - *string*

Relation GUID of this server snapshot.

status - *string*

Status of this server snapshot; Values: 'ACTIVE', 'BUILD', 'DELETED'

create\_time - *string*

Created time of this server snapshot

links - *array*

[Hypermedia](#) for this resource.

### 100.3 Response Codes

Success

OK (200)

Failure

Unauthorized (401) : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.

ItemNotFound (404) : The resource requested is not found.

### 100.4 Examples

#### Successfully get server details

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/snapshots/snapshot\_jello614636-USOTE-0214\_2012Jul19\_m5yf9Bz8a

- *Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

- *Response: OK (200):*

```
{
  "snapshot": {
    "id": "snapshot_jello614636-USOTE-0214_2012Jul19_m5yf9Bz8a",
    "name": "fitness snapshot"
  }
}
```

```
"description": "fitnesse test snapshot",
"status": "ACTIVE",
"guid": "a4e76fdf-8696-4848-ba81-cfe090e1401d",
"parent_guid": "491aee4b-34bc-45e5-ac47-7ef9fb96c4c4",
"relation_guid": "42130087-f34c-4823-885d-8a908017ed8d",
"create_time": "2012-07-19 16:28:09",
"links": [{"href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/jello614636-USOTE-0214/snapshots/snapshot_jello614636-"}
}
```

- When a server is in pending status (has not completed the provisioning process), the creation timestamp and hostId that are returned will be empty strings.

**Failure while trying to get server details without proper authorization - Response: Unauthorized (401):**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to get server details for a non-existent server id - Response: ItemNotFound (404):**

```
{
  "itemNotFound":
  {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 101 DELETE

### /accounts/{accountId}/flexcloud/servers/{server\_id}/snapshots/{snapshot\_id}

This operation will delete a single server snapshot.

#### 101.1 Parameters

`accountId` - *string*  
The selected account Id.

`server_id` - *string*  
The selected server Id.

`snapshot_id` - *string*  
Id of the server snapshot to delete.

#### 101.2 Response Codes

Success  
*HTTP/1.1 202 Accepted* or *HTTP/1.1 204 No Content*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* : The resource requested is not found.

#### 101.3 Examples

##### Successfully delete a specific server

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/123/snapshots/567
```

*Response Code:*

*HTTP/1.1 202 Accepted*

##### Failure while trying to update a non-existent server

```
DELETE http(s)://{api_server}/accounts/{accountId}/flexcloud/servers/123/snapshots/{fake_server_id}
```

*Response Code:*

*HTTP/1.1 404 Not Found*

##### Failure while trying to update server with a wrong account number

```
DELETE http(s)://{api_server}/accounts/fake/flexcloud/servers/123/snapshots/567
```

*Response Code:*

*HTTP/1.1 404 Not Found*

#### 101.4 Alternative URI /servers/{server\_id}/snapshots/{snapshot\_id}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /servers/{server_id}/snapshots/{snapshot_id}
```

## 102 ServerSnapshotActionRestore

The stop action is used for stopping a [Server](#). Stopping a server changes its status from ACTIVE to STOPPED.

## 103 POST

**/accounts/{accountId}/flexcloud/servers/{server\_id}/snapshots/{snapshot\_id}/actions**

### 103.1 Parameters

accountId - *string*  
The selected account Id.

server\_id  
The unique identifier of the server to be restored.

snapshot\_id  
The unique identifier of the server snapshot to restore

#### 103.1.1 JSON

```
{  
  "action": "restore"  
}
```

### 103.2 Response Codes

Success  
*HTTP/1.1 202 Accepted* : The request is accepted for processing.

Failure  
*HTTP/1.1 400 Bad Request* : An error occurred.  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* : The resource requested is not found.

### 103.3 Alternative URI /servers/{server\_id}/snapshots/{snapshot\_id}/action

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

POST /servers/{server\_id}/snapshots/{snapshot\_id}/action

## 104 ServerSnapshotActions

The following action can be performed on a [ServerSnapshot](#).

### 104.1 Restore

This operation will restore a server from a snapshot. [ServerSnapshotActionRestore](#)

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## 105 ServerSnapshotCreate

This operation will create a new server snapshot of a server. Server snapshot creation is asynchronous, the progress can be checked with the URL in the response Location header or the self link in the body.

## 106 POST /accounts/{accountId}/flexcloud/servers/{server\_id}/snapshots

This operation will create a new server snapshot. Server snapshot creation is asynchronous, the progress can be checked with the URL in the response Location header or the self link in the body.

### 106.1 Parameters

accountId - *string*

The selected account Id.

server\_id

The unique identifier of the server.

#### 106.1.1 JSON

```
{
  "snapshot": {
    "name": "{name}",
    "description": "{description}"
  }
}
```

name - *string*

Display name for this server snapshot

description - *string*

Description for this server snapshot

### 106.2 Result

#### 106.2.1 JSON

```
{
  "snapshot": {
    "id": "{snapshot_id}",
    "name": "{snapshot_name}",
    "description": "{description}",
    "status": "{status}",
    "guid": "{guid}",
    "parent_guid": "{parent_guid}",
    "relation_guid": "{relation_guid}",
    "create_time": "{create_time}",
    "links": [{"href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/snapshots/{snapshot_id}/",
              "rel": "self"}],
  }
}
```

- When a server snapshot is in pending status (has not completed the provisioning process), the create\_time, guid, parent\_guid, and relation\_guid will be empty strings.

id - *string*

Unique identifier for this server snapshot.

name - *string*

Display name of this server snapshot.

description - *string*

Description of this server snapshot.

guid - *string*

GUID of this server snapshot.

parent\_guid - *string*

Parent GUID of this server snapshot.

relation\_guid - *string*

Relation GUID of this server snapshot.

status - *string*

Status of this server snapshot; Values: 'ACTIVE', 'BUILD', 'DELETED'

create\_time - *string*

Created time of this server snapshot

links - *array*

[Hypermedia](#) for this resource.

### 106.3 Response Codes

Success

*HTTP/1.1 202 Accepted*

Request is accepted.

Failure

*HTTP/1.1 400 Bad Request*

The snapshot cannot be created because the server contains extra volumes.

*HTTP/1.1 404 itemNotFound*

The resource does not exist

#### HTTP/1.1 409 Conflict

The snapshot name must be unique in a server.

#### HTTP/1.1 413 Request entity too large

The snapshot can be created up to 3 in a server.

## 106.4 Examples

### Successfully create a new server

**POST** `http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/snapshots`

#### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

#### Request Body:

```
{
  "snapshot": {
    "name": "fitnesse snapshot",
    "description": "fitnesse test snapshot"
  }
}
```

#### Response Code:

HTTP/1.1 202 Accepted

#### Response Body:

```
{
  "snapshot": {
    "id": "snapshot_jello614636-USOTE-0214_2012Jul19_m5yf9Bz8a",
    "name": "test snapshot",
    "description": "test snapshot description",
    "status": "BUILD",
    "guid": "",
    "parent_guid": "",
    "relation_guid": "",
    "create_time": "0000-00-00 00:00:00",
    "links": [
      {"href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/snapshots/snapshot_jello614636-USOTE-0214_2012Jul19_m5yf9Bz8a",
       "rel": "self"}]
  }
}
```

### Failure while trying to update server with a wrong account number

**POST** `http://{api_server}/accounts/fake/flexcloud/servers/{server_id}/snapshots`

#### Response Code:

HTTP/1.1 404 Not Found

## 106.5 Alternative URI /servers/{server\_id}/snapshots

An alternative way to execute this call is to omit the `accountId` portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

**POST** `/servers/{server_id}/snapshots`

## 107 ServerSnapshotList

This operation returns a list of all [server snapshots](#).

## 108 GET

**/accounts/{accountId}/flexcloud/servers/{server\_id}/snapshots/{snapshot\_id}**

### 108.1 Parameters

**accountId** - *string*  
The selected account Id.

**server\_id**  
The unique identifier of the server.

**snapshot\_id**  
The unique identifier of the server snapshot

### 108.2 Result

#### 108.2.1 JSON

```
{
  'snapshots': [
    {
      "id": "{snapshot_id}",
      "name": "{display_name}",
      "description": "{description}",
      "guid": "{guid}",
      "parent_guid": "{parent_guid}",
      "relation_guid": "{releation_guid}",
      "status": '{status}',
      "create_time": "{create_time}",
      "links": [{"href": 'http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/', 'rel': 'self'}],
    },
    {
      "id": "{snapshot_id}",
      "name": "{display_name}",
      "description": "{description}",
      "guid": "{guid}",
      "parent_guid": "{parent_guid}",
      "relation_guid": "{releation_guid}",
      "status": '{status}',
      "create_time": "{create_time}",
      "links": [{"href": 'http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/', 'rel': 'self'}],
    }
  ]
}
```

**id** - *string*  
Unique identifier for this server snapshot.

**name** - *string*  
Display name of this server snapshot.

**description** - *string*  
Description of this server snapshot.

**guid** - *string*  
GUID of this server snapshot.

**parent\_guid** - *string*  
Parent GUID of this server snapshot.

**relation\_guid** - *string*  
Relation GUID of this server snapshot.

**status** - *string*  
Status of this server snapshot; one out of 'ACTIVE', 'BUILD', 'DELETED'

**create\_time** - *string*  
Created time of this server snapshot

**links** - *array*  
[Hypermedia](#) for this resource.

### 108.3 Response Codes

Success  
*HTTP/1.1 202 ACCEPTED*

Failure  
*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 108.4 Examples

#### Successfully list server snapshots

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_id}/snapshots/

*Request Headers:*

Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded username & password string

**Response Code:**

HTTP/1.1 200 OK

**Response Body:**

```
{
  'snapshots': [
    {
      "id": "snapshot_jello614636-USOTE-0214_2012Jul18_Fkmm7a2ZM",
      "name": "fitnesse snapshot",
      "description": "fitnesse test snapshot",
      "status": "ACTIVE",
      "guid": "5c51c729-2cbe-4eb8-a116-6fef5a5f5c12",
      "parent_guid": "e039d899-4207-4984-a408-7400a3eaf27b",
      "relation_guid": "491aee4b-34bc-45e5-ac47-7ef9fb96c4c4",
      "create_time": "2012-07-18 15:48:12",
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/servers/{server_id}/snapshots/snapshot_jello614636-USOTE-0214",
          "rel": "self"
        }
      ]
    },
    {
      "id": "snapshot_jello614636-USOTE-0214_2012Jul19_Hzxp5LHGz",
      "name": "fitnesse snapshot",
      "description": "fitnesse test snapshot",
      "status": "DELETED",
      "guid": "cdc39fc9-cda9-4eae-aeb9-274e5f8d1642",
      "parent_guid": "491aee4b-34bc-45e5-ac47-7ef9fb96c4c4",
      "relation_guid": "b4833231-b685-415b-9977-42d7424d6646",
      "create_time": "2012-07-19 12:36:55",
      "links": [
        {
          "href": "http://10.10.150.59:6543/accounts/{accountId}/flexcloud/servers/{server_id}/snapshots/snapshot_jello614636-USOTE",
          "rel": "self"
        }
      ]
    },
    {
      "id": "snapshot_jello614636-USOTE-0214_2012Jul19_m5yf9Bz8a",
      "name": "fitnesse snapshot",
      "description": "fitnesse test snapshot",
      "status": "ACTIVE",
      "guid": "a4e76fdf-8696-4848-ba81-cfe090e1401d",
      "parent_guid": "491aee4b-34bc-45e5-ac47-7ef9fb96c4c4",
      "relation_guid": "42130087-f34c-4823-885d-8a908017ed8d",
      "create_time": "2012-07-19 16:28:09",
      "links": [
        {
          "href": "http://10.10.150.59:6543/accounts/{accountId}/flexcloud/servers/{server_id}/snapshots/snapshot_jello614636-USOT",
          "rel": "self"
        }
      ]
    }
  ]
}
```

**Failure while trying to make unauthorized access**

GET http(s)://{api\_server}/accounts/{accountId}/flexcloud/servers/{server\_id}/snapshots/

**Request Headers:**

Content-Type:application/json  
Charset=UTF-8  
Authorization:Base64-encoded fake\_authentication\_string

**Response Code:**

HTTP/1.1 401 Unauthorized

**Response Body:**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to pass invalid account number**

GET http(s)://{api\_server}/accounts/fake/flexcloud/servers/{server\_id}/snapshots/

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 108.5 Alternative URI /servers/{server\_id}/snapshots/{snapshot\_id}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /servers/{server_id}/snapshots/{snapshot_id}
```

## 109 View Allocated Flexible IP

This operation will list details of the specific allocated flexible IP address.

## 110 GET /accounts/{accountId}/flexcloud/os-floating-ips/{ip\_address}

List details of the specific allocated flexible IP address.

### 110.1 Parameters

accountId - *string*  
The selected account Id.

ip\_address - *string*

### 110.2 Response

#### 110.2.1 JSON

```
{
  "floating_ip" : [
    {
      "instance_id" : {instance_id},
      "ip": "{ip_address}",
      "fixed_ip": null,
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip_address}/",
          "rel": "self"
        }
      ],
      "pool": "default"
    }
  ]
}
```

##### 110.2.1.1 floating\_ip

instance\_id - *string*  
Unique instance identifier floating IP is assigned to.

ip - *string*  
IP address allocated.

fixed\_ip - *string*  
Fixed IP address.

links - *list*  
[Hypermedia](#) for this resource.

pool - *string*  
Name of the pool IP address belongs to.

### 110.3 Response Codes

Success  
*HTTP/1.1 200 OK*

Failure  
*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist

### 110.4 Examples

View detailed information for the specified allocated floating IP address

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip\_address}

*Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

*Response Code:*

HTTP/1.1 200 OK

*Response Body:*

```
{
  "floating_ip" : [
    {
      "instance_id": "test_server_0013",
      "ip": "{ip_address}",
      "fixed_ip": null,
      "links": [
        {
          "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip_address}/",
          "rel": "self"
        }
      ],
      "pool": "default"
    }
  ]
}
```

## Unauthorized access

```
GET http(s)://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{ip_address}
```

### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

### Response Code:

```
HTTP/1.1 401 Unauthorized
```

### Response Body:

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

## Failure while trying to view details for a non-existent flexible IP address

```
GET http(s)://{api_server}/accounts/{accountId}/flexcloud/os-floating-ips/{fake_ip_address}
```

### Request Headers:

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

### Response Code:

```
HTTP/1.1 404 Not Found
```

## Failure while trying to pass invalid account number

```
GET http(s)://{api_server}/accounts/fake/flexcloud/os-floating-ips/{ip_address}
```

### Response Code:

```
HTTP/1.1 404 Not Found
```

### Response Body:

```
{
  "itemNotFound" : {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 110.5 Alternative URI /os-floating-ips/{ip\_address}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /os-floating-ips/{ip_address}
```

## 111 View Firewall Group Details

This operation will list the details for the specified firewall group.

## 112 GET /accounts/{accountId}/flexcloud/os-security-groups/{id}

This operation will list the details for the specified firewall group.

### 112.1 Parameters

accountId - *string*

The selected account Id.

id

The unique identifier of the firewall group.

### 112.2 Response

#### 112.2.1 JSON

```
{
  "securityGroup" : {
    "displayName" : "{firewall_group_display_name}",
    "description" : "{firewall_group_description}",
    "links" : [
      {
        "href" : "http://{api-server}/accounts/{accountId}/flexcloud/os-security-groups/{firewall_group_name}/",
        "rel" : "self"
      }
    ],
    "rules" : [
      {
        "fromPort" : "{start_port}",
        "toPort" : "{end_port}",
        "protocol" : "{ip_protocol}",
        "cidr" : "0.0.0.0/0",
        "id" : "145"
      },
      {
        "fromPort" : "{start_port}",
        "toPort" : "{end_port}",
        "protocol" : "{ip_protocol}",
        "cidr" : "127.0.0.1/0",
        "id" : "169"
      }
    ],
    "servers" : ["{server_id}"],
    "accountNumber" : "{user_account_number}",
    "id" : "{firewall_group_id}"
  }
}
```

##### 112.2.1.1 securityGroup

displayName - *string*

The display name of the firewall group.

description - *string*

Text describing the firewall group.

links - *list*

[Hypermedia](#) for this resource.

rules - *list*

List describing all defined security rules for the group.

servers - *list*

List of server ids this firewall group is assigned to.

accountNumber - *string*

Identifies an account that owns the firewall group.

id - *string*

The id of this firewall group.\*(Unique identifier for this firewall group.)

### 112.3 Response Codes

Success

*HTTP/1.1 200 OK*

Failure

*HTTP/1.1 401 Unauthorized* : This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 112.4 Examples

#### Successfully list details for specified firewall group

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012May11\_OK30Zs7Ju

*Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 200 OK

**Response Body:**

```
{
  "securityGroup" : {
    "displayName": "Test Firewall Group 1",
    "description": "Test firewall group 1 description.",
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012May11_OK30Zs7Ju/",
        "rel": "self"
      }
    ],
    "rules": [
      {
        'toPort': 1111,
        'fromPort': 1111,
        'protocol': 'TCP',
        'id': 145,
        'cidr': '0.0.0.0/0'
      },
      {
        'toPort': 80,
        'fromPort': 80,
        'protocol': 'TCP',
        'id': 196,
        'cidr': '127.0.0.1/24'
      }
    ],
    "id": "group2012May11_OK30Zs7Ju",
    "accountNumber": "test_account_120761",
    "servers": ["test-server-0003"]
  }
}
```

**Failure while trying to request details for a firewall group that does not exist**

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups/{fake\_firewall\_group\_name}

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to make unauthorized access**

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/os-security-groups/group2012May11\_OK30Zs7Ju

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

**Response Code:**

HTTP/1.1 401 Unauthorized

**Response Body:**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to pass invalid account number**

**GET** http(s)://{api\_server}/accounts/fake/flexcloud/os-security-groups/group2012May11\_OK30Zs7Ju

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound" : {
    "message": "Resource not found",
  }
}
```

```
"code": 404,  
"details": "",  
"errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"  
}
```

## 112.5 Alternative URI /os-security-groups/{name}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /os-security-groups/{name}
```

## 113 View Single Volume

This operation will return details of a single volume.

## 114 GET /accounts/{accountId}/flexcloud/volumes/{id}

This operation will return details of a single volume.

### 114.1 Request Parameters

accountId - *string*

The selected account Id.

id

The unique identifier of the volume.

### 114.2 Result

#### 114.2.1 JSON

```
{
  "volume" : {
    "id": "{volume_id}",
    "display_name" : "{display_volume_name}",
    "display_description" : "{display_volume_description}",
    "size" : {size_quantity},
    "volume_type" : "{volume_type_id}",
    "metadata" : {},
    "availability_zone" : "{availability_zone_id}",
    "attachments": [],
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/{volume_id}/",
        "rel": "self"
      }
    ],
    "snapshot_id": "",
    "created_at": "2012-05-03 11:35:44"
  }
}
```

##### 114.2.1.1 volume

id - *string*

Identifier of the volume instance.

display\_name - *string*

Display name for this volume.

display\_description - *string*

Descriptive information for this volume.

size - *int*

Volume size.

volume\_type - *string*

Identifier of the volume type used. \*(Not used in the current version).

metadata - *string*

Additional metadata info.

availability\_zone - *string*

Identifier of the availability zone into which this volume was created.

attachments - *list*

List of attachments this volume is associated with.

links - *array*

[Hypermedia](#) for this resource.

snapshot\_id - *string*

Identifier of the snapshot associated with this volume if exists.

created\_at - *string*

Volume creation timestamp.

### 114.3 Response Codes

Success

*HTTP/1.1 200 OK*

Failure

*HTTP/1.1 401 Unauthorized* - This server could not verify that you are authorized to access the document you requested. Either you supplied incorrect credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.  
*HTTP/1.1 404 Not Found* - The resource does not exist.

### 114.4 Examples

#### Successfully get single volume details

**GET** http://{api\_server}/accounts/{accountId}/flexcloud/volumes/hbs2012May03\_00xRg0Jz7

*Request Headers:*

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 200 OK

**Response Body:**

```
{
  "volume": {
    "display_name": "vol-test-003",
    "attachments": [],
    "links": [
      {
        "href": "http://{api_server}/accounts/{accountId}/flexcloud/volumes/hbs2012May03_00xRg0Jz7/",
        "rel": "self"
      }
    ],
    "availability_zone": "test_zone",
    "created_at": "2012-05-03 11:35:44",
    "volume_type": "",
    "display_description": "Another test volume.",
    "snapshot_id": "",
    "metadata": {},
    "id": "hbs2012May03_00xRg0Jz7",
    "size": "30GB"
  }
}
```

**Failure while trying to request for a volume that does not exist**

**GET** http(s)://{api\_server}/accounts/{accountId}/flexcloud/volumes/{fake\_volume\_id}

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded username & password string
```

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

**Failure while trying to make an unauthorized request**

**GET** http://{api\_server}/accounts/{accountId}/flexcloud/volume/{volume\_id}

**Request Headers:**

```
Content-Type:application/json
Charset=UTF-8
Authorization:Base64-encoded fake_authentication_string
```

**Response Code:**

HTTP/1.1 401 Unauthorized

**Response Body:**

```
401 Unauthorized
This server could not verify that you are authorized to
access the document you requested. Either you supplied the
wrong credentials (e.g., bad password), or your browser
does not understand how to supply the credentials required.
```

**Failure while trying to pass invalid account number**

**GET** http://{api\_server}/accounts/fake/flexcloud/volume/{volume\_id}

**Response Code:**

HTTP/1.1 404 Not Found

**Response Body:**

```
{
  "itemNotFound": {
    "message": "Resource not found",
    "code": 404,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 114.5 Alternative URI /volumes/{id}

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /volumes/{id}
```

## 115 Zone

## 116 GET /accounts/{accountId}/flexcloud/zone

Returns all available zones for the specified account.

### 116.1 Contents

- 1 GET /accounts/{accountId}/flexcloud/zone
  - ◆ 1.1 Request
    - ◇ 1.1.1 Request Parameters
  - ◆ 1.2 Response
    - ◇ 1.2.1 Status Code
    - ◇ 1.2.2 Response Body
      - 1.2.2.1 Parameters
  - ◆ 1.3 Examples
    - ◇ 1.3.1 Successfully get the zones
    - ◇ 1.3.2 Failure while trying to make an unauthorized request
    - ◇ 1.3.3 Permission denied failure
    - ◇ 1.3.4 Account Number not found
  - ◆ 1.4 Alternative URI /zones
  - ◆ 1.5 See also

### 116.2 Request

GET /accounts/{accountId}/flexcloud/zone

#### 116.2.1 Request Parameters

accountId - *string*  
The selected account id.

### 116.3 Response

#### 116.3.1 Status Code

- 200 OK  
Success
- 401 Unauthorized  
Failure - This server could not verify that you are authorized to access the document you requested. Either you supplied the wrong credentials (e.g., bad password), or your browser does not understand how to supply the credentials required.
- 403 Forbidden  
Failure - The resource is forbidden for this user
- 404 itemNotFound  
Failure - When trying to get the zones with invalid account number

#### 116.3.2 Response Body

```
{
  "account_number": [
    {
      "zone": "zone_id",
      "location": "zone_location"
    },
    {
      "zone": "zone_id",
      "location": "zone_location"
    }
  ]
}
```

##### 116.3.2.1 Parameters

account\_number - *string*  
Account for which the zones are available. There can be several accounts per response.

zone - *string*  
Zone id.

location - *string*  
Location of the zone.

### 116.4 Examples

#### 116.4.1 Successfully get the zones

##### Request

GET /accounts/smith1234/flexcloud/zone  
Authorization: Basic {Base64-encoded username:password string}

##### Response

200 OK

```
{
  "smith1234": [
    {
      "zone": "USOTE-2012-TAMPA",
      "location": "ote.2012.tampa"
    }
  ]
}
```

## 116.4.2 Failure while trying to make an unauthorized request

### Request

```
GET /accounts/smith1234/flexcloud/zone
Authorization: Basic {invalid authorization}
```

### Response

```
401 Unauthorized
```

## 116.4.3 Permission denied failure

### Request

```
GET /accounts/smith1234/flexcloud/zone
Authorization: Basic {Base64-encoded username:password string}
```

### Response

```
403 Forbidden
```

```
{
  "forbidden": {
    "message": "forbidden",
    "code": 403,
    "details": "",
    "errorid": "59e0b3dd-2173-432a-8ff5-60efe16e83bf"
  }
}
```

## 116.4.4 Account Number not found

### Request

```
GET /accounts/fake/flexcloud/zone
Authorization: Basic {Base64-encoded username:password string}
```

### Response

```
{
  "itemNotFound": {
    "guid": "23684df5-0532-4794-802d-fdc82e4e7e7c",
    "message": "Resource not found",
    "code": 404,
    "details": ""
  }
}
```

## 116.5 Alternative URI /zones

An alternative way to execute this call is to omit the *accountId* portion of the URI. In this case the system assumes the request is executed for the account identified in the [authorization header](#).

```
GET /zones
```

## 116.6 See also

- [FlexCloud Server API](#)
- [Common Features](#)

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