



# **Manage S3 service group configuration**

ONTAP 9.11.1 REST API reference

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April 02, 2024

# Table of Contents

- Manage S3 service group configuration . . . . . 1
  - Protocols S3 services svm.uuid groups endpoint overview . . . . . 1
  - Retrieve an S3 group configuration . . . . . 5
  - Create an S3 group configuration . . . . . 12
  - Delete the S3 group configuration for an SVM . . . . . 21
  - Retrieve the S3 group configuration for an SVM . . . . . 23
  - Update the S3 group configuration for an SVM . . . . . 28
  - Retrieve S3 protocol historical performance metrics . . . . . 34

# Manage S3 service group configuration

## Protocols S3 services svm.uuid groups endpoint overview

### Overview

An S3 group consists of one or many users. Policies are attached to the S3 group to have access control over S3 resources at group level.

### Examples

#### Retrieving all fields for all S3 groups of an SVM

```
# The API:
/api/protocols/s3/services/{svm.uuid}/groups:

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/groups?fields=*&return_records=true&return_timeout=15" -H "accept: application/json"

# The response:
{
  "records": [
    {
      "comment": "Admin group",
      "id": 5,
      "name": "Admin-Group",
      "policies": [
        { "name": "Policy1" },
        { "name": "Policy2" },
        { "name": "Policy3" }
      ],
      "svm": {
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "users": [
        { "name": "User1" },
        { "name": "User2" },
        { "name": "User3" }
      ]
    },
    {
      "comment": "Admin group",
```

```
"id": 6,  
"name": "Admin-Group1",  
"policies": [  
  { "name": "Policy1" },  
  { "name": "Policy2" },  
  { "name": "Policy3" }  
],  
"svm": {  
  "name": "svm1",  
  "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"  
},  
"users": [  
  { "name": "User1" },  
  { "name": "User2" },  
  { "name": "User6" }  
]  
}  
],  
"num_records": 2  
}
```

**Retrieving the specified group in the SVM**

```
# The API:
/api/protocols/s3/services/{svm.uuid}/groups/{group_id}:

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/groups/5?fields=*" -H "accept: application/json"

# The response:
{
  "comment": "Admin group",
  "id": 5,
  "name": "Admin-Group",
  "policies": [
    { "name": "Policy1" },
    { "name": "Policy2" },
    { "name": "Policy3" }
  ],
  "svm": {
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": [
    { "name": "User1" },
    { "name": "User2" },
    { "name": "User3" }
  ]
}
```

### Creating an S3 group for an SVM

```

# The API:
/api/protocols/s3/services/{svm.uuid}/groups

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/groups?return_records=true" -H "accept: application/json" -H "authorization: Basic YWRtaW46bmV0YXBwMSE=" -H "Content-Type: application/json" -d "{ \"comment\": \"Admin group\", \"name\": \"Admin-Group\", \"policies\": [ { \"name\": \"Policy1\" }, { \"name\": \"Policy2\" }, { \"name\": \"Policy3\" } ], \"users\": [ { \"name\": \"User1\" }, { \"name\": \"User2\" }, { \"name\": \"User3\" } ]}"

# The response:
HTTP/1.1 202 Accepted
Date: Mon, 16 Mar 2020 11:32:27 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 289
Content-Type: application/json
{
  "num_records": 1,
  "records": [
    {
      "comment": "Admin group",
      "id": 5,
      "name": "Admin-Group",
      "policies": [
        { "name": "Policy1" },
        { "name": "Policy2" },
        { "name": "Policy3" }
      ],
      "svm": {
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "users": [
        { "name": "User1" },
        { "name": "User2" },
        { "name": "User3" }
      ]
    }
  ]
}

```

## Updating an S3 group for an SVM

```
# The API:
/api/protocols/s3/services/{svm.uuid}/groups/{group_id}:

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/groups/5" -H "accept: application/json" -H
"authorization: Basic YWRtaW46bmV0YXBwMSE=" -H "Content-Type:
application/json" -d "{ \"comment\": \"Admin group\", \"name\": \"Admin-
Group\", \"policies\": [ { \"name\": \"Policy1\" } ], \"users\": [ {
\"name\": \"user-1\" } ]}"

# The response:
HTTP/1.1 202 Accepted
Date: Mon, 16 Mar 2020 11:32:27 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 189
Content-Type: application/json
```

## Deleting an S3 group for a specified SVM

```
# The API:
/api/protocols/s3/services/{svm.uuid}/groups/{group_id}:

# The call:
curl -X DELETE "https://<mgmt-ip>/api/protocols/s3/services/12f3ba4c-7ae0-11e9-8c06-0050568ea123/groups/5" -H "accept: application/json"

# The response:
HTTP/1.1 202 Accepted
Date: Mon, 16 Mar 2020 11:32:27 GMT
Server: libzapid-httpd
X-Content-Type-Options: nosniff
Cache-Control: no-cache,no-store,must-revalidate
Content-Length: 189
Content-Type: application/json
```

## Retrieve an S3 group configuration

```
GET /protocols/s3/services/{svm.uuid}/groups
```

Introduced In: 9.8

Retrieves the S3 group's SVM configuration.

## Related ONTAP commands

- `vserver object-store-server group show`

## Learn more

- [DOC /protocols/s3/services/{svm.uuid}/groups](#)

## Parameters

Name	Type	In	Required	Description
users.name	string	query	False	Filter by users.name <ul style="list-style-type: none"><li>• maxLength: 64</li><li>• minLength: 1</li></ul>
name	string	query	False	Filter by name <ul style="list-style-type: none"><li>• maxLength: 128</li><li>• minLength: 1</li></ul>
comment	string	query	False	Filter by comment <ul style="list-style-type: none"><li>• maxLength: 256</li><li>• minLength: 0</li></ul>
policies.name	string	query	False	Filter by policies.name <ul style="list-style-type: none"><li>• maxLength: 128</li><li>• minLength: 1</li></ul>
id	integer	query	False	Filter by id
svm.name	string	query	False	Filter by svm.name
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.



Name	Type	In	Required	Description
return_records	boolean	query	False	The default is true for GET calls. When set to false, only the number of records is returned. <ul style="list-style-type: none"> <li>• Default value: 1</li> </ul>
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached. <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
order_by	array[string]	query	False	Order results by specified fields and optional [asc

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">collection_links</a>	
num_records	integer	Number of records
records	array[ <a href="#">s3_group</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "comment": "Admin group",
    "id": 5,
    "name": "Admin-Group",
    "policies": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "Policy1"
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "users": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "user-1"
    }
  }
}
```

## Error

Status: Default, Error

Name	Type	Description
error	error	

### Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

## Definitions

## See Definitions

href

Name	Type	Description
href	string	

collection\_links

Name	Type	Description
next	<a href="#">href</a>	
self	<a href="#">href</a>	

\_links

Name	Type	Description
self	<a href="#">href</a>	

policies

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Specifies the name of the policy. A policy name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".

svm

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

users

Name	Type	Description
_links	<a href="#">_links</a>	

Name	Type	Description
name	string	Specifies the name of the user. A user name length can range from 1 to 64 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ":", "@", and "-".

### s3\_group

This is a container for S3 user groups.

Name	Type	Description
comment	string	Can contain any additional information about the group being created or modified.
id	integer	Specifies a unique group ID used to identify a particular group. This parameter should not be specified in the POST method. A group ID is automatically generated and it is retrieved using the GET method. Group id is SVM scoped.
name	string	Specifies the name of the group. A group name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ":", "@", and "-".
policies	array[policies]	Specifies a list of policies that are attached to the group. The wildcard character "*" is a valid value for specifying all policies.
svm	svm	
users	array[users]	Specifies the list of users who belong to the group.

### error\_arguments

Name	Type	Description
code	string	Argument code

Name	Type	Description
message	string	Message argument

error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Create an S3 group configuration

POST /protocols/s3/services/{svm.uuid}/groups

**Introduced In:** 9.8

Creates the S3 group configuration.

### Important notes

- Each SVM can have one or more s3 group configurations.

### Required properties

- `svm.uuid` - Existing SVM in which to create the user configuration.
- `name` - Group name that is to be created.
- `users` - List of users to be added into the group.
- `policies` - List of policies are to be attached to this group.

### Recommended optional properties

- `comment` - Short description about the S3 Group.

### Related ONTAP commands

- `vserver object-store-server group create`

## Learn more

- [DOC /protocols/s3/services/{svm.uuid}/groups](#)

## Parameters

Name	Type	In	Required	Description
return_records	boolean	query	False	The default is false. If set to true, the records are returned. <ul style="list-style-type: none"><li>• Default value:</li></ul>
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.

## Request Body

Name	Type	Description
comment	string	Can contain any additional information about the group being created or modified.
id	integer	Specifies a unique group ID used to identify a particular group. This parameter should not be specified in the POST method. A group ID is automatically generated and it is retrieved using the GET method. Group id is SVM scoped.
name	string	Specifies the name of the group. A group name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ";", ":", "@", and "-".
policies	array[policies]	Specifies a list of policies that are attached to the group. The wildcard character "*" is a valid value for specifying all policies.
svm	svm	

Name	Type	Description
users	array[users]	Specifies the list of users who belong to the group.

### Example request

```

{
  "comment": "Admin group",
  "id": 5,
  "name": "Admin-Group",
  "policies": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "Policy1"
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "user-1"
  }
}

```

### Response

Status: 201, Created



Name	Type	Description
_links	<a href="#">collection_links</a>	
num_records	integer	Number of records
records	array[ <a href="#">s3_group</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "comment": "Admin group",
    "id": 5,
    "name": "Admin-Group",
    "policies": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "Policy1"
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "users": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "user-1"
    }
  }
}
```

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
92405896	Users list cannot be empty.
92405930	Group name is not valid. Group names must have between 1 and 128 characters.
92405931	Group name contains invalid characters. Valid characters for a group name are 0-9, A-Z, a-z, "_", "+", "=", ";", ".", "@", and "-".
92405932	Creating an object store group requires an effective cluster version of 9.8 or later.
92405933	Failed to create group for SVM. Reason: "{reason of failure}".
92405934	User name specified in the user list do not exist for SVM. Use the "object-store-server user create" command to create a user.
92405935	Internal Error. Unable to generate unique ID for the group.
92405936	Query characters such as * are not supported in the user list.
92405937	Policy name specified in the policy list do not exist for SVM.
92405942	Group name already exists for SVM.
92405966	User name is present more than once in the users field.

Name	Type	Description
error	<a href="#">error</a>	

## Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

## Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
self	<a href="#">href</a>	

policies

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Specifies the name of the policy. A policy name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ";", ":", "@", and "-".

svm

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

users

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Specifies the name of the user. A user name length can range from 1 to 64 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ";", ":", "@", and "-".

s3\_group

This is a container for S3 user groups.

Name	Type	Description
comment	string	Can contain any additional information about the group being created or modified.
id	integer	Specifies a unique group ID used to identify a particular group. This parameter should not be specified in the POST method. A group ID is automatically generated and it is retrieved using the GET method. Group id is SVM scoped.
name	string	Specifies the name of the group. A group name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".
policies	array[policies]	Specifies a list of policies that are attached to the group. The wildcard character "*" is a valid value for specifying all policies.
svm	svm	
users	array[users]	Specifies the list of users who belong to the group.

collection\_links

Name	Type	Description
next	<a href="#">href</a>	
self	<a href="#">href</a>	

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Delete the S3 group configuration for an SVM

DELETE /protocols/s3/services/{svm.uuid}/groups/{id}

Introduced In: 9.8

Deletes the S3 group configuration of an SVM.

### Related ONTAP commands

- `vserver object-store-server group delete`

### Learn more

- [DOC /protocols/s3/services/{svm.uuid}/groups](#)

### Parameters

Name	Type	In	Required	Description
id	string	path	True	Group identifier that identifies the unique group.
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.

### Response

Status: 200, Ok

### Error

Status: Default, Error

Name	Type	Description
error	error	

### Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

### Definitions



## See Definitions

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Retrieve the S3 group configuration for an SVM

```
GET /protocols/s3/services/{svm.uuid}/groups/{id}
```

**Introduced In:** 9.8

Retrieves the S3 group configuration of an SVM.

### Related ONTAP commands

- `vserver object-store-server group show`

### Learn more

- [DOC /protocols/s3/services/{svm.uuid}/groups](#)

### Parameters

Name	Type	In	Required	Description
id	string	path	True	Group identifier that identifies the unique group.

Name	Type	In	Required	Description
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.
fields	array[string]	query	False	Specify the fields to return.

## Response

Status: 200, Ok

Name	Type	Description
comment	string	Can contain any additional information about the group being created or modified.
id	integer	Specifies a unique group ID used to identify a particular group. This parameter should not be specified in the POST method. A group ID is automatically generated and it is retrieved using the GET method. Group id is SVM scoped.
name	string	Specifies the name of the group. A group name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ";", ".", "@", and "-".
policies	array[policies]	Specifies a list of policies that are attached to the group. The wildcard character "*" is a valid value for specifying all policies.
svm	svm	
users	array[users]	Specifies the list of users who belong to the group.

## Example response

```
{
  "comment": "Admin group",
  "id": 5,
  "name": "Admin-Group",
  "policies": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "Policy1"
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "user-1"
  }
}
```

## Error

Status: Default, Error

Name	Type	Description
error	error	

## Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

## Definitions

## See Definitions

### href

Name	Type	Description
href	string	

### \_links

Name	Type	Description
self	<a href="#">href</a>	

### policies

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Specifies the name of the policy. A policy name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ";", ":", "@", and "-".

### svm

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

### users

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Specifies the name of the user. A user name length can range from 1 to 64 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ";", ":", "@", and "-".

### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

## Update the S3 group configuration for an SVM

PATCH `/protocols/s3/services/{svm.uuid}/groups/{id}`

**Introduced In:** 9.8

Updates the S3 group configuration of an SVM.

### Important notes

- The following fields can be modified for a group:
- `name` - Group name that needs to be modified.
- `users` - List of users present in the group.
- `policies` - List of policies to be attached to this group.

### Recommended optional properties

- `comment` - Short description about the S3 Group.

### Related ONTAP commands

- `vserver object-store-server group modify`

### Learn more

- [DOC /protocols/s3/services/{svm.uuid}/groups](#)

## Parameters

Name	Type	In	Required	Description
id	integer	path	True	Group identifier that identifies the unique group.
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.

## Request Body

Name	Type	Description
comment	string	Can contain any additional information about the group being created or modified.
id	integer	Specifies a unique group ID used to identify a particular group. This parameter should not be specified in the POST method. A group ID is automatically generated and it is retrieved using the GET method. Group id is SVM scoped.
name	string	Specifies the name of the group. A group name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ";", ":", "@", and "-".
policies	array[policies]	Specifies a list of policies that are attached to the group. The wildcard character "*" is a valid value for specifying all policies.
svm	svm	
users	array[users]	Specifies the list of users who belong to the group.

## Example request

```
{
  "comment": "Admin group",
  "id": 5,
  "name": "Admin-Group",
  "policies": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "Policy1"
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "users": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "user-1"
  }
}
```

## Response

Status: 200, Ok

## Error

Status: Default

ONTAP Error Response Codes



Error Code	Description
92405896	Users list cannot be empty.
92405930	Group name is not valid. Group names must have between 1 and 128 characters.
92405931	Group name contains invalid characters. Valid characters for a group name are 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".
92405934	User name specified in the user list do not exist for SVM. Use the "object-store-server user create" command to create a user.
92405936	Query characters such as * are not supported in the user list.
92405937	Policy name specified in the policy list do not exist for SVM.
92405966	User name is present more than once in the users field.

Name	Type	Description
error	error	

### Example error

```

{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}

```

### Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
self	<a href="#">href</a>	

policies

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Specifies the name of the policy. A policy name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ";", ":", "@", and "-".

svm

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

users

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	Specifies the name of the user. A user name length can range from 1 to 64 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ";", ":", "@", and "-".

s3\_group

This is a container for S3 user groups.

Name	Type	Description
comment	string	Can contain any additional information about the group being created or modified.
id	integer	Specifies a unique group ID used to identify a particular group. This parameter should not be specified in the POST method. A group ID is automatically generated and it is retrieved using the GET method. Group id is SVM scoped.
name	string	Specifies the name of the group. A group name length can range from 1 to 128 characters and can only contain the following combination of characters 0-9, A-Z, a-z, "_", "+", "=", ",", ".", "@", and "-".
policies	array[policies]	Specifies a list of policies that are attached to the group. The wildcard character "*" is a valid value for specifying all policies.
svm	svm	
users	array[users]	Specifies the list of users who belong to the group.

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[error_arguments]	Message arguments
code	string	Error code

Name	Type	Description
message	string	Error message
target	string	The target parameter that caused the error.

## Retrieve S3 protocol historical performance metrics

GET /protocols/s3/services/{svm.uuid}/metrics

**Introduced In:** 9.8

Retrieves historical performance metrics for the S3 protocol of an SVM.

### Parameters

Name	Type	In	Required	Description
timestamp	string	query	False	Filter by timestamp
latency.other	integer	query	False	Filter by latency.other
latency.read	integer	query	False	Filter by latency.read
latency.write	integer	query	False	Filter by latency.write
latency.total	integer	query	False	Filter by latency.total
iops.other	integer	query	False	Filter by iops.other
iops.read	integer	query	False	Filter by iops.read
iops.write	integer	query	False	Filter by iops.write
iops.total	integer	query	False	Filter by iops.total
throughput.other	integer	query	False	Filter by throughput.other
throughput.read	integer	query	False	Filter by throughput.read

Name	Type	In	Required	Description
throughput.write	integer	query	False	Filter by throughput.write
throughput.total	integer	query	False	Filter by throughput.total
status	string	query	False	Filter by status
duration	string	query	False	Filter by duration
svm.uuid	string	path	True	Unique identifier of the SVM.
interval	string	query	False	<p>The time range for the data. Examples can be 1h, 1d, 1m, 1w, 1y. The period for each time range is as follows:</p> <ul style="list-style-type: none"> <li>• 1h: Metrics over the most recent hour sampled over 15 seconds.</li> <li>• 1d: Metrics over the most recent day sampled over 5 minutes.</li> <li>• 1w: Metrics over the most recent week sampled over 30 minutes.</li> <li>• 1m: Metrics over the most recent month sampled over 2 hours.</li> <li>• 1y: Metrics over the most recent year sampled over a day.</li> <li>• Default value: 1</li> <li>• enum: ["1h", "1d", "1w", "1m", "1y"]</li> </ul>

Name	Type	In	Required	Description
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached. <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.
order_by	array[string]	query	False	Order results by specified fields and optional [asc
desc] direction. Default direction is 'asc' for ascending.	return_records	boolean	query	False

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
num_records	integer	Number of records
records	array[ <a href="#">records</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "duration": "PT15S",
    "iops": {
      "read": 200,
      "total": 1000,
      "write": 100
    },
    "latency": {
      "read": 200,
      "total": 1000,
      "write": 100
    },
    "status": "ok",
    "throughput": {
      "read": 200,
      "total": 1000,
      "write": 100
    },
    "timestamp": "2017-01-25T11:20:13Z"
  }
}
```

## Error

Status: Default, Error

Name	Type	Description
error	error	

### Example error

```
{
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  }
}
```

### Definitions



## See Definitions

href

Name	Type	Description
href	string	

\_links

Name	Type	Description
next	<a href="#">href</a>	
self	<a href="#">href</a>	

\_links

Name	Type	Description
self	<a href="#">href</a>	

iops

The rate of I/O operations observed at the storage object.

Name	Type	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Performance metric for write I/O operations.

latency

The round trip latency in microseconds observed at the storage object.

Name	Type	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Performance metric for write I/O operations.

### throughput

The rate of throughput bytes per second observed at the storage object.

Name	Type	Description
other	integer	Performance metric for other I/O operations. Other I/O operations can be metadata operations, such as directory lookups and so on.
read	integer	Performance metric for read I/O operations.
total	integer	Performance metric aggregated over all types of I/O operations.
write	integer	Performance metric for write I/O operations.

### records

Performance numbers, such as IOPS latency and throughput.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	

Name	Type	Description
duration	string	The duration over which this sample is calculated. The time durations are represented in the ISO-8601 standard format. Samples can be calculated over the following durations:
iops	iops	The rate of I/O operations observed at the storage object.
latency	latency	The round trip latency in microseconds observed at the storage object.
status	string	Errors associated with the sample. For example, if the aggregation of data over multiple nodes fails, then any partial errors might return "ok" on success or "error" on an internal uncategorized failure. Whenever a sample collection is missed but done at a later time, it is back filled to the previous 15 second timestamp and tagged with "backfilled_data". "Inconsistent_delta_time" is encountered when the time between two collections is not the same for all nodes. Therefore, the aggregated value might be over or under inflated. "Negative_delta" is returned when an expected monotonically increasing value has decreased in value. "Inconsistent_old_data" is returned when one or more nodes do not have the latest data.
throughput	throughput	The rate of throughput bytes per second observed at the storage object.
timestamp	string	The timestamp of the performance data.

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

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