Manage role privilege path

ONTAP 9.13.1 REST API reference

NetApp
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Security roles owner.uuid name privileges path endpoint overview

Overview

A role can comprise of multiple tuples and each tuple consists of a REST API path or command/command directory path and its access level. If the tuple refers to a command/command directory path, it may optionally be associated with a query. These APIs can be used to retrieve or modify the associated access level and optional query. They can also be used to delete one of the constituent REST API paths or command/command directory paths within a role. The REST API path can be a resource-qualified endpoint. Currently, the only supported resource-qualified endpoints are the following:

Snapshots APIs

– /api/storage/volumes/{volume.uuid}/snapshots

File System Analytics APIs

– /api/storage/volumes/{volume.uuid}/files

– /api/storage/volumes/{volume.uuid}/top-metrics/clients

– /api/storage/volumes/{volume.uuid}/top-metrics/directories

– /api/storage/volumes/{volume.uuid}/top-metrics/files

– /api/storage/volumes/{volume.uuid}/top-metrics/users

– /api/svm/svms/{svm.uuid}/top-metrics/clients

– /api/svm/svms/{svm.uuid}/top-metrics/directories

– /api/svm/svms/{svm.uuid}/top-metrics/files

– /api/svm/svms/{svm.uuid}/top-metrics/users

In the above APIs, wildcard character * could be used in place of *{volume.uuid}* or *{svm.uuid}* to denote *all* volumes or *all* SVMs, depending upon whether the REST endpoint references volumes or SVMs.

The role can be SVM-scoped or cluster-scoped.

Specify the owner UUID and the role name in the URI path. The owner UUID corresponds to the UUID of the SVM for which the role has been created and can be obtained from the response body of a GET request performed on one of the following APIs: /api/security/roles for all roles /api/security/roles/?scope=svm for SVM-scoped roles /api/security/roles/?owner.name=<svm-name></i> for roles in a specific SVM This API response contains the complete URI for each tuple of the role and can be used for GET, PATCH, or DELETE operations.</svm-name>

The access level for paths in pre-defined roles cannot be updated.

Examples

Updating the access level for a REST API path in the privilege tuple of an existing role

```
# The API:
PATCH "/api/security/roles/{owner.uuid}/{name}/privileges/{path}"

# The call:
curl -X PATCH "https://<mgmt-ip>/api/security/roles/aaef7c38-4bd3-11e9-
b238-0050568e2e25/svm_role1/privileges/%2Fapi%2Fprotocols" -d
'{"access":"all"}'
```

Updating the access level for a command/command directory path in the privilege tuple of an existing role

```
# The API:
PATCH "/api/security/roles/{owner.uuid}/{name}/privileges/{path}"

# The call:
curl -X PATCH "https://<mgmt-ip>/api/security/roles/aaef7c38-4bd3-11e9-
b238-0050568e2e25/svm_role1/privileges/netp%20port" -d
'{"access":"readonly","query":"-type if-group&#124;vlan"}'
```

Updating the access level for a resource-qualified endpoint in the privilege tuple of an existing role

```
# The API:
PATCH "/api/security/roles/{owner.uuid}/{name}/privileges/{path}"

# The call:
curl -X PATCH "https://<mgmt-ip>/api/security/roles/aaef7c38-4bd3-11e9-
b238-
0050568e2e25/svm_role1/privileges/%2Fapi%2Fstorage%2Fvolumes%2F742ef001-
24f0-4d5a-9ec1-2fdaadb282f4%2Ffiles" -d '{"access":"readonly"}'
```

Retrieving the access level for a REST API path in the privilege tuple of an existing role

```
# The API:
GET "/api/security/roles/{owner.uuid}/{name}/privileges/{path}"

# The call:
curl -X GET "https://<mgmt-ip>/api/security/roles/aaef7c38-4bd3-11e9-b238-
0050568e2e25/svm_role1/privileges/%2Fapi%2Fprotocols"

# The response:
{
"owner": {
  "uuid": "aaef7c38-4bd3-11e9-b238-0050568e2e25"
},
"name": "svm_role1",
"path": "/api/protocols",
"access": "all",
"_links": {
  "self": {
    "href": "/api/security/roles/aaef7c38-4bd3-11e9-b238-
0050568e2e25/svm_role1/privileges/%2Fapi%2Fprotocols"
  }
}
}
```

Retrieving the access level for a command/command directory path in the privilege tuple of an existing role

```
# The API:
GET "/api/security/roles/{owner.uuid}/{name}/privileges/{path}"

# The call:
curl -X GET "https://<mgmt-ip>/api/security/roles/aaef7c38-4bd3-11e9-b238-
0050568e2e25/svm_role1/privileges/net%20port"

# The response:
{
"owner": {
  "uuid": "aaef7c38-4bd3-11e9-b238-0050568e2e25"
},
"name": "svm_role1",
"path": "net port",
"query":"-type if-group&#124;vlan",
"access": "readonly",
"_links": {
  "self": {
    "href": "/api/security/roles/aaef7c38-4bd3-11e9-b238-
0050568e2e25/svm_role1/privileges/net%20port"
  }
}
}
```

Retrieving the access level for a resource-qualified endpoint in the privilege tuple of an existing role

```
# The API:
GET "/api/security/roles/{owner.uuid}/{name}/privileges/{path}"

# The call:
curl -X GET "https://<mgmt-ip>/api/security/roles/aaef7c38-4bd3-11e9-b238-
0050568e2e25/svm_role1/privileges/%2Fapi%2Fstorage%2Fvolumes%2Fd0f3b91a-
4ce7-4de4-afb9-7eda668659dd%2F%2Fsnapshots"

# The response:
{
"owner": {
  "uuid": "aaef7c38-4bd3-11e9-b238-0050568e2e25"
},
"name": "svm_role1",
"path": "/api/storage/volumes/d0f3b91a-4ce7-4de4-afb9-
7eda668659dd/snapshots",
"access": "all",
"_links": {
  "self": {
    "href": "/api/security/roles/aaef7c38-4bd3-11e9-b238-
0050568e2e25/svm_role1/privileges/%2Fapi%2Fstorage%2Fvolumes%2Fd0f3b91a-
4ce7-4de4-afb9-7eda668659dd%2Fsnapshots"
  }
}
}
```

Deleting a privilege tuple, containing a REST API path, from an existing role

```
# The API:
DELETE "/api/security/roles/{owner.uuid}/{name}/privileges/{path}"

# The call:
curl -X DELETE "https://<mgmt-ip>/api/security/roles/aaef7c38-4bd3-11e9-
b238-0050568e2e25/svm_role1/privileges/%2Fapi%2Fprotocols"
```

Deleting a privilege tuple, containing a command/command directory path, from an existing role

```
# The API:
DELETE "/api/security/roles/{owner.uuid}/{name}/privileges/{path}"

# The call:
curl -X DELETE "https://<mgmt-ip>/api/security/roles/aaef7c38-4bd3-11e9-
b238-0050568e2e25/svm_role1/privileges/net%20port"
```

Deleting a privilege tuple, containing a resource-qualified endpoint, from an existing role

```
# The API:
DELETE "/api/security/roles/{owner.uuid}/{name}/privileges/{path}"

# The call:
/api/svm/svms/{svm.uuid}/top-metrics/files
curl -X DELETE "https://<mgmt-ip>/api/security/roles/aaef7c38-4bd3-11e9-
b238-0050568e2e25/svm_role1/privileges/%2Fapi%2Fstorage%2Fsvm%2F6e000659-
9a16-11ec-819e-005056bb1a7c%2Ftop-metrics%2Ffiles"
```

Delete a privilege tuple from the role

DELETE `/security/roles/{owner.uuid}/{name}/privileges/{path}`

Introduced In: 9.6

Deletes a privilege tuple (of REST URI or command/command directory path, its access level and an optional query) from the role. The REST URI can be a resource-qualified endpoint. Currently, the only supported resource-qualified endpoints are the following:

Snapshots APIs

– /api/storage/volumes/{volume.uuid}/snapshots

File System Analytics APIs

– /api/storage/volumes/{volume.uuid}/files

– /api/storage/volumes/{volume.uuid}/top-metrics/clients

– /api/storage/volumes/{volume.uuid}/top-metrics/directories

– /api/storage/volumes/{volume.uuid}/top-metrics/files

– /api/storage/volumes/{volume.uuid}/top-metrics/users

– /api/svm/svms/{svm.uuid}/top-metrics/clients

– /api/svm/svms/{svm.uuid}/top-metrics/directories

– /api/svm/svms/{svm.uuid}/top-metrics/files

– /api/svm/svms/{svm.uuid}/top-metrics/users

In the above APIs, wildcard character * could be used in place of *{volume.uuid}* or *{svm.uuid}* to denote *all* volumes or *all* SVMs, depending upon whether the REST endpoint references volumes or SVMs.

Required parameters

- `owner.uuid` - UUID of the SVM which houses this role.
- `name` - Name of the role to be updated.
- `path` - Constituent REST API path or command/command directory path to be deleted from this role. Can be a resource-qualified endpoint (example: */api/svm/svms/43256a71-be02-474d-a2a9-9642e12a6a2c/top-metrics/users*). Currently, resource-qualified endpoints are limited to the *Snapshots* and *File System Analytics* endpoints listed above in the description.

Related ONTAP commands

- `security login rest-role delete`
- `security login role delete`

Learn more

- DOC /security/roles/{owner.uuid}/{name}/privileges/{path}
- DOC /security/roles

Parameters

Name	Type	In	Required	Description
owner.uuid	string	path	True	Role owner UUID
name	string	path	True	Role name
path	string	path	True	REST API path or command/command directory path

Response

```
Status: 200, Ok
```

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
1263347	Cannot modify pre-defined roles.

Error Code	Description
5636169	Specified URI path is invalid or not supported. Resource-qualified endpoints are not supported.
5636170	URI does not exist.
5636172	User accounts detected with this role assigned. Update or delete those accounts before deleting this role.
5636173	This feature requires an effective cluster version of 9.6 or later.
5636184	Expanded REST roles for granular resource control feature is currently disabled.
5636185	The specified UUID was not found.
5636186	Expanded REST roles for granular resource control requires an effective cluster version of 9.10.1 or later.
13434890	Vserver-ID failed for Vserver roles.
13434893	The SVM does not exist.

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[error_arguments]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

Retrieve the access level for a REST API path or command/command directory path for a role

GET `/security/roles/{owner.uuid}/{name}/privileges/{path}`

Introduced In: 9.6

Retrieves the access level for a REST API path or command/command directory path for the specified role. Optionally retrieves the query, if 'path' refers to a command/command directory path. The REST API path can be a resource-qualified endpoint. Currently, the only supported resource-qualified endpoints are the following:

Snapshots APIs

– /api/storage/volumes/{volume.uuid}/snapshots

File System Analytics APIs

– /api/storage/volumes/{volume.uuid}/files

– /api/storage/volumes/{volume.uuid}/top-metrics/clients

– /api/storage/volumes/{volume.uuid}/top-metrics/directories

– /api/storage/volumes/{volume.uuid}/top-metrics/files

– /api/storage/volumes/{volume.uuid}/top-metrics/users

– /api/svm/svms/{svm.uuid}/top-metrics/clients

– /api/svm/svms/{svm.uuid}/top-metrics/directories

– /api/svm/svms/{svm.uuid}/top-metrics/files

– /api/svm/svms/{svm.uuid}/top-metrics/users

In the above APIs, wildcard character * could be used in place of *{volume.uuid}* or *{svm.uuid}* to denote *all* volumes or *all* SVMs, depending upon whether the REST endpoint references volumes or SVMs.

Related ONTAP commands

- `security login rest-role show`
- `security login role show`

Learn more

- DOC /security/roles/{owner.uuid}/{name}/privileges/{path}
- DOC /security/roles

Parameters

Name	Type	In	Required	Description
owner.uuid	string	path	True	Role owner UUID
name	string	path	True	Role name
path	string	path	True	REST API path or command/command directory path
fields	array[string]	query	False	Specify the fields to return.

Response

```
Status: 200, Ok
```

Name	Type	Description
_links	_links	

Name	Type	Description
access	string	Access level for the REST endpoint or command/command directory path. If it denotes the access level for a command/command directory path, the only supported enum values are 'none','readonly' and 'all'.
path	string	Either of REST URI/endpoint OR command/command directory path.
query	string	Optional attribute that can be specified only if the "path" attribute refers to a command/command directory path. The privilege tuple implicitly defines a set of objects the role can or cannot access at the specified access level. The query further reduces this set of objects to a subset of objects that the role is allowed to access. The query attribute must be applicable to the command/command directory specified by the "path" attribute. It is defined using one or more parameters of the command/command directory path specified by the "path" attribute.

Example response


```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access": "all",
  "path": "volume move start",
  "query": "-vserver vs1|vs2|vs3 -destination-aggregate aggr1|aggr2"
}
```


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	href	

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
message	string	Error message
target	string	The target parameter that caused the error.

Update the access level for a REST API path or command/command directory path

PATCH `/security/roles/{owner.uuid}/{name}/privileges/{path}`

Introduced In: 9.6

Updates the access level for a REST API path or command/command directory path. Optionally updates the query, if 'path' refers to a command/command directory path. The REST API path can be a resource-qualified endpoint. Currently, the only supported resource-qualified endpoints are the following:

Snapshots APIs

– /api/storage/volumes/{volume.uuid}/snapshots

File System Analytics APIs

– /api/storage/volumes/{volume.uuid}/files

– /api/storage/volumes/{volume.uuid}/top-metrics/clients

– /api/storage/volumes/{volume.uuid}/top-metrics/directories

– /api/storage/volumes/{volume.uuid}/top-metrics/files

– /api/storage/volumes/{volume.uuid}/top-metrics/users

– /api/svm/svms/{svm.uuid}/top-metrics/clients

– /api/svm/svms/{svm.uuid}/top-metrics/directories

– /api/svm/svms/{svm.uuid}/top-metrics/files

– /api/svm/svms/{svm.uuid}/top-metrics/users

In the above APIs, wildcard character * could be used in place of *{volume.uuid}* or *{svm.uuid}* to denote *all* volumes or *all* SVMs, depending upon whether the REST endpoint references volumes or SVMs.

Required parameters

- `owner.uuid` - UUID of the SVM that houses this role.
- `name` - Name of the role to be updated.
- `path` - Constituent REST API path or command/command directory path, whose access level and/or query are/is to be updated. Can be a resource-qualified endpoint (example: */api/storage/volumes/43256a71-be02-474d-a2a9-9642e12a6a2c/snapshots*). Currently, resource-qualified endpoints are limited to the *Snapshots* and *File System Analytics* endpoints listed above in the description.
- `access` - Access level for the path.

Optional parameters

- `query` - Optional query, if the path refers to a command/command directory path.

Related ONTAP commands

- `security login rest-role modify`
- `security login role modify`

Learn more

- DOC /security/roles/{owner.uuid}/{name}/privileges/{path}
- DOC /security/roles

Parameters

Name	Type	In	Required	Description
owner.uuid	string	path	True	Role owner UUID
name	string	path	True	Role name
path	string	path	True	REST API path or command/command directory path

Request Body

Name	Type	Description
_links	_links	
access	string	Access level for the REST endpoint or command/command directory path. If it denotes the access level for a command/command directory path, the only supported enum values are 'none','readonly' and 'all'.
path	string	Either of REST URI/endpoint OR command/command directory path.
query	string	Optional attribute that can be specified only if the "path" attribute refers to a command/command directory path. The privilege tuple implicitly defines a set of objects the role can or cannot access at the specified access level. The query further reduces this set of objects to a subset of objects that the role is allowed to access. The query attribute must be applicable to the command/command directory specified by the "path" attribute. It is defined using one or more parameters of the command/command directory path specified by the "path" attribute.

Example request


```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "access": "all",
  "path": "volume move start",
  "query": "-vserver vs1|vs2|vs3 -destination-aggregate aggr1|aggr2"
}
```


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

href

Name	Type	Description
href	string	

_links

Name	Type	Description
self	href	

role_privilege

A tuple containing a REST endpoint or a command/command directory path and the access level assigned to that endpoint or command/command directory. If the "path" attribute refers to a command/command directory path, the tuple could additionally contain an optional query. The REST endpoint can be a resource-qualified endpoint. At present, the only supported resource-qualified endpoints are the following

Snapshots APIs

- */api/storage/volumes/{volume.uuid}/snapshots*

File System Analytics APIs

- */api/storage/volumes/{volume.uuid}/files*
- */api/storage/volumes/{volume.uuid}/top-metrics/clients*
- */api/storage/volumes/{volume.uuid}/top-metrics/directories*
- */api/storage/volumes/{volume.uuid}/top-metrics/files*
- */api/storage/volumes/{volume.uuid}/top-metrics/users*
- */api/svm/svms/{svm.uuid}/top-metrics/clients*
- */api/svm/svms/{svm.uuid}/top-metrics/directories*
- */api/svm/svms/{svm.uuid}/top-metrics/files*
- */api/svm/svms/{svm.uuid}/top-metrics/users*

In the above APIs, wildcard character * could be used in place of *{volume.uuid}* or *{svm.uuid}* to denote *all* volumes or *all* SVMs, depending upon whether the REST endpoint references volumes or SVMs.

Name	Type	Description
_links	_links	

Name	Type	Description
access	string	Access level for the REST endpoint or command/command directory path. If it denotes the access level for a command/command directory path, the only supported enum values are 'none','readonly' and 'all'.
path	string	Either of REST URI/endpoint OR command/command directory path.
query	string	Optional attribute that can be specified only if the "path" attribute refers to a command/command directory path. The privilege tuple implicitly defines a set of objects the role can or cannot access at the specified access level. The query further reduces this set of objects to a subset of objects that the role is allowed to access. The query attribute must be applicable to the command/command directory specified by the "path" attribute. It is defined using one or more parameters of the command/command directory path specified by the "path" attribute.

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.

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