



# Manage S3 audit configurations

ONTAP 9.14.1 REST API reference

NetApp  
April 02, 2024

# Table of Contents

- Manage S3 audit configurations ..... 1
  - Protocols audit svm.uuid object-store endpoint overview ..... 1
  - Delete an S3 audit configuration ..... 9
  - Retrieve an S3 audit configurations ..... 12
  - Update an S3 audit configuration for an SVM ..... 21
  - Create an S3 audit configuration ..... 31

# Manage S3 audit configurations

## Protocols audit svm.uuid object-store endpoint overview

### Overview

S3 events auditing is a security measure that enables you to track and log certain S3 events on storage virtual machines (SVMs). You can track potential security problems and provides evidence of any security breaches.

### Examples

---

#### Creating an S3 audit entry with log rotation size and log retention count

To create an S3 audit entry with log rotation size and log retention count, use the following API. Note the *return\_records=true* query parameter is used to obtain the newly created entry in the response.

---

```

# The API:
POST /api/protocols/audit/{svm.uuid}/object-store/

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/audit/ec650e97-156e-11e9-
abcb-005056bbd0bf/object-store?return_records=true" -H "accept:
application/json" -H "Content-Type: application/json" -d "{ \"enabled\":
true, \"events\": { \"data\": false, \"management\": false}, \"log\": {
\"format\": \"json\", \"retention\": { \"count\": 10 }, \"rotation\": {
\"size\": 2048000 }}, \"log_path\": \"/\"}"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "ec650e97-156e-11e9-abcb-005056bbd0bf",
        "name": "vs1"
      },
      "enabled": true,
      "events": {
        "data": false,
        "management": false
      },
      "log": {
        "format": "json",
        "rotation": {
          "size": 2048000
        },
        "retention": {
          "count": 10,
          "duration": "0s"
        }
      },
      "log_path": "/"
    }
  ],
  "num_records": 1
}

```

### Creating an S3 audit entry with log rotation schedule and log retention duration

To create an S3 audit entry with log rotation schedule and log retention duration, use the following API. Note that the *return\_records=true* query parameter is used to obtain the newly created entry in the response.

```

# The API:
POST /api/protocols/audit/{svm.uuid}/object-store/

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/audit/a8d64674-13fc-11e9-87b1-005056a7ae7e/object-store?return_records=true" -H "accept: application/json" -H "Content-Type: application/json" -d "{ \"enabled\": false, \"events\": { \"data\": true, \"management\": true }, \"log\": { \"format\": \"json\", \"retention\": { \"duration\": \"P4DT12H30M5S\" }, \"rotation\": { \"schedule\": { \"days\": [1, 5, 10, 15], \"hours\": [0, 1, 6, 12, 18, 23], \"minutes\": [10, 15, 30, 45, 59], \"months\": [0], \"weekdays\": [0, 2, 5] } } }, \"log_path\": \"/\"/>"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "a8d64674-13fc-11e9-87b1-005056a7ae7e",
        "name": "vs3"
      },
      "enabled": true,
      "events": {
        "data": true,
        "management": true
      },
      "log": {
        "format": "json",
        "rotation": {
          "schedule": {
            "minutes": [
              10,
              15,
              30,
              45,
              59
            ],
            "hours": [
              0,
              1,
              6,
              12,
              18,
              23
            ]
          }
        }
      }
    }
  ]
}

```

```

        "weekdays": [
            0,
            2,
            5
        ],
        "days": [
            1,
            5,
            10,
            15
        ],
        "months": [
            0
        ]
    }
},
"retention": {
    "count": 0,
    "duration": "P4DT12H30M5S"
}
},
"log_path": "/"
}
],
"num_records": 1
}

```

## Retrieving an S3 audit configuration for all SVMs in the cluster

```

# The API:
GET /api/protocols/audit/{svm.uuid}/object-store/

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/audit/*/object-store?fields=*&return_records=true&return_timeout=15" -H "accept: application/json"

# The response:
{
  "records": [
    {
      "svm": {

```

```
    "uuid": "ec650e97-156e-11e9-abcb-005056bbd0bf",
    "name": "vs1"
  },
  "enabled": true,
  "events": {
    "data": false,
    "management": false
  },
  "log": {
    "format": "json",
    "rotation": {
      "size": 2048000
    },
    "retention": {
      "count": 10,
      "duration": "0s"
    }
  },
  "log_path": "/"
},
{
  "svm": {
    "uuid": "a8d64674-13fc-11e9-87b1-005056a7ae7e",
    "name": "vs3"
  },
  "enabled": true,
  "events": {
    "data": true,
    "management": true
  },
  "log": {
    "format": "json",
    "rotation": {
      "schedule": {
        "minutes": [
          10,
          15,
          30,
          45,
          59
        ],
        "hours": [
          0,
          1,
          6,
          12,
```

```
        18,  
        23  
    ],  
    "weekdays": [  
        0,  
        2,  
        5  
    ],  
    "days": [  
        1,  
        5,  
        10,  
        15  
    ],  
    "months": [  
        0  
    ]  
    }  
},  
"retention": {  
    "count": 0,  
    "duration": "P4DT12H30M5S"  
}  
},  
"log_path": "/"  
}  
],  
"num_records": 2  
}
```

---

### Retrieving specific entries with event list as data and management event for an SVM

The configuration returned is identified by the events in the list of S3 audit configurations of an SVM.

---



```
# The API:
GET /api/protocols/audit/{svm.uuid}/object-store/

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/audit/*/object-
store?events.data=true&events.management=true&return_records=true&return_t
imeout=15" -H "accept: application/json"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "ec650e97-156e-11e9-abcb-005056bbd0bf",
        "name": "vs1"
      },
      "events": {
        "data": true,
        "management": true
      }
    },
    {
      "svm": {
        "uuid": "a8d64674-13fc-11e9-87b1-005056a7ae7e",
        "name": "vs3"
      },
      "events": {
        "data": true,
        "management": true
      }
    }
  ],
  "num_records": 2
}
```

---

### Retrieving a specific S3 audit configuration of an SVM

The configuration returned is identified by the UUID of its SVM.

---

```
# The API:
GET /api/protocols/audit/{svm.uuid}/object-store/

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/audit/ec650e97-156e-11e9-
abcb-005056bbd0bf/object-store/" -H "accept: application/json"

# The response:
{
  "svm": {
    "uuid": "ec650e97-156e-11e9-abcb-005056bbd0bf",
    "name": "vs1"
  },
  "enabled": true,
  "events": {
    "data": false,
    "management": false
  },
  "log": {
    "format": "json",
    "rotation": {
      "size": 2048000
    },
    "retention": {
      "count": 10,
      "duration": "0s"
    }
  },
  "log_path": "/"
}
```

---

### Updating a specific S3 audit configuration of an SVM

The configuration is identified by the UUID of its SVM and the provided information is updated.

---

```
# The API:
PATCH /api/protocols/audit/{svm.uuid}/object-store/

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/audit/ec650e97-156e-11e9-
abcb-005056bbd0bf/object-store/" -H "accept: application/json" -H
"Content-Type: application/json" -d '{"enabled": false}'
```

## Deleting a specific S3 audit configuration of an SVM

The entry to be deleted is identified by the UUID of its SVM.

```
# The API:
DELETE /api/protocols/audit/{svm.uuid}/object-store/

# The call:
curl -X DELETE "https://<mgmt-ip>/api/protocols/audit/ec650e97-156e-11e9-
abcb-005056bbd0bf/object-store" -H "accept: application/json"
```

## Delete an S3 audit configuration

```
DELETE /protocols/audit/{svm.uuid}/object-store
```

**Introduced In:** 9.10

Deletes an S3 audit configuration.

### Related ONTAP commands

- `vserver object-store-server audit disable`
- `vserver object-store-server audit delete`

### Learn more

- [DOC /protocols/audit/{svm.uuid}/object-store](#)

### Parameters

Name	Type	In	Required	Description
force	boolean	query	False	Indicates whether a force deletion of the audit configuration is enabled.
return_timeout	integer	query	False	<p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.

## Response

```
Status: 200, Ok
```

## Response

Status: 202, Accepted

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
140902420	Failed to delete audit configuration for the SVM.
140902421	Failed to delete audit configuration for the SVM because audit is enabled for the SVM.
140902422	Failed to delete audit configuration for the SVM because final consolidation is in progress. Wait a few minutes, and try the operation again.

Also see the table of common errors in the [Response body](#) overview section of this documentation.

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

### 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

returned\_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 an S3 audit configurations

GET /protocols/audit/{svm.uuid}/object-store

**Introduced In:** 9.10

Retrieves S3 audit configurations.

### Related ONTAP commands

- `vserver object-store-server audit show`

### Learn more

- [DOC /protocols/audit/{svm.uuid}/object-store](#)

### Parameters

Name	Type	In	Required	Description
events.management	boolean	query	False	Filter by events.management
events.data	boolean	query	False	Filter by events.data

Name	Type	In	Required	Description
log_path	string	query	False	Filter by log_path
log.rotation.size	integer	query	False	Filter by log.rotation.size
log.rotation.schedule.hours	integer	query	False	Filter by log.rotation.schedule.hours <ul style="list-style-type: none"> <li>• Max value: 23</li> <li>• Min value: 0</li> </ul>
log.rotation.schedule.days	integer	query	False	Filter by log.rotation.schedule.days <ul style="list-style-type: none"> <li>• Max value: 31</li> <li>• Min value: 1</li> </ul>
log.rotation.schedule.weekdays	integer	query	False	Filter by log.rotation.schedule.weekdays <ul style="list-style-type: none"> <li>• Max value: 6</li> <li>• Min value: 0</li> </ul>
log.rotation.schedule.minutes	integer	query	False	Filter by log.rotation.schedule.minutes <ul style="list-style-type: none"> <li>• Max value: 59</li> <li>• Min value: 0</li> </ul>
log.rotation.schedule.months	integer	query	False	Filter by log.rotation.schedule.months <ul style="list-style-type: none"> <li>• Max value: 12</li> <li>• Min value: 1</li> </ul>
log.format	string	query	False	Filter by log.format
log.retention.count	integer	query	False	Filter by log.retention.count

Name	Type	In	Required	Description
log.retention.duration	string	query	False	Filter by log.retention.duration
enabled	boolean	query	False	Filter by enabled
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.
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>• Max value: 120</li> <li>• Min value: 0</li> <li>• Default value: 1</li> </ul>
order_by	array[string]	query	False	Order results by specified fields and optional [asc



## Response

Status: 200, Ok

Name	Type	Description
enabled	boolean	Specifies whether or not auditing is enabled on the SVM.
events	<a href="#">events</a>	
log	<a href="#">s3_log</a>	
log_path	string	The audit log destination path where consolidated audit logs are stored.
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

## Example response

```
{
  "log": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "format": "json",
    "retention": {
      "duration": "P4DT12H30M5S"
    },
    "rotation": {
      "schedule": {
        "days": {
        },
        "hours": {
        },
        "minutes": {
        },
        "months": {
        },
        "weekdays": {
        }
      }
    }
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

## Error

Status: Default, Error

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

### Example error

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

### Definitions

## See Definitions

### events

Name	Type	Description
data	boolean	Data events
management	boolean	Management events

### href

Name	Type	Description
href	string	

### \_links

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

### retention

Name	Type	Description
count	integer	Determines how many audit log files to retain before rotating the oldest log file out. This is mutually exclusive with "duration".
duration	string	Specifies an ISO-8601 format date and time to retain the audit log file. The audit log files are deleted once they reach the specified date/time. This is mutually exclusive with "count".

### audit\_schedule

Rotates the audit logs based on a schedule by using the time-based rotation parameters in any combination. The rotation schedule is calculated by using all the time-related values.

Name	Type	Description
days	array[integer]	Specifies the day of the month schedule to rotate audit log. Leave empty for all.

Name	Type	Description
hours	array[integer]	Specifies the hourly schedule to rotate audit log. Leave empty for all.
minutes	array[integer]	Specifies the minutes schedule to rotate the audit log.
months	array[integer]	Specifies the months schedule to rotate audit log. Leave empty for all.
weekdays	array[integer]	Specifies the weekdays schedule to rotate audit log. Leave empty for all.

### rotation

Audit event log files are rotated when they reach a configured threshold log size or are on a configured schedule. When an event log file is rotated, the scheduled consolidation task first renames the active converted file to a time-stamped archive file, and then creates a new active converted event log file.

Name	Type	Description
now	boolean	Manually rotates the audit logs. Optional in PATCH only. Not available in POST.
schedule	<a href="#">audit_schedule</a>	Rotates the audit logs based on a schedule by using the time-based rotation parameters in any combination. The rotation schedule is calculated by using all the time-related values.
size	integer	Rotates logs based on log size in bytes.

### s3\_log

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

Name	Type	Description
format	string	Format in which the logs are generated by the consolidation process. Possible values are: <ul style="list-style-type: none"> <li>• json - ONTAP-specific Json log format. <ul style="list-style-type: none"> <li>◦ Default value: 1</li> <li>◦ enum: ["json"]</li> <li>◦ Introduced in: 9.10</li> <li>◦ x-nullable: true</li> </ul> </li> </ul>
retention	<a href="#">retention</a>	
rotation	<a href="#">rotation</a>	Audit event log files are rotated when they reach a configured threshold log size or are on a configured schedule. When an event log file is rotated, the scheduled consolidation task first renames the active converted file to a time-stamped archive file, and then creates a new active converted event log file.

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned\_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 an S3 audit configuration for an SVM

PATCH /protocols/audit/{svm.uuid}/object-store

**Introduced In:** 9.10

Updates an S3 audit configuration for an SVM.

### Important notes

- `events` - Not specifying either data or management is equivalent to setting it to false.

### Related ONTAP commands

- `vserver object-store-server audit modify`

### Learn more

- [DOC /protocols/audit/{svm.uuid}/object-store](#)

### Parameters

Name	Type	In	Required	Description
return_timeout	integer	query	False	<p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.

## Request Body

Name	Type	Description
enabled	boolean	Specifies whether or not auditing is enabled on the SVM.
events	<a href="#">events</a>	
log	<a href="#">s3_log</a>	



Name	Type	Description
log_path	string	The audit log destination path where consolidated audit logs are stored.
svm	svm	SVM, applies only to SVM-scoped objects.

## Example request

```
{
  "log": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "format": "json",
    "retention": {
      "duration": "P4DT12H30M5S"
    },
    "rotation": {
      "schedule": {
        "days": {
        },
        "hours": {
        },
        "minutes": {
        },
        "months": {
        },
        "weekdays": {
        }
      }
    }
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

## Response

Status: 200, Ok

## Response

Status: 202, Accepted

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
140902401	Failed to create an audit configuration for the SVM.
140902402	Audit configuration is already present.
140902402	Audit configuration is already enabled.
140902403	Failed to create staging volume.
140902415	Failed to modify an audit configuration because no audit configuration exists for SVM.
140902416	Failed to modify audit configuration for SVM.
140902422	Final consolidation is in progress, audit delete failed.
140902423	Failed to delete the audit configuration for the SVM.
140902425	Audit configuration is not available for disabling.
140902430	Audit configuration is not available for enabling.
140902431	Audit enable failed, audit configuration already enabled for the SVM.
140902432	Final consolidation is in progress, audit enable failed.
140902445	Audit disable failed, audit configuration does not exist for the SVM.
140902446	Audit configuration is already disabled.
140902446	Audit disable failed, audit configuration does not exist for the SVM.
140902456	The specified log_path does not exist.
140902457	The log_path must be a directory.
140902458	The log_path must be a canonical path in the SVM's namespace.
140902459	The log_path cannot be empty.
140902460	Rotate size must be greater than or equal to 1024 KB.
140902461	The destination path must not contain a symbolic link.

Error Code	Description
140902470	The log_path exceeds a maximum supported length of characters.
140902471	The log_path contains an unsupported read-only (DP/LS) volume.
140902472	The log_path is not a valid destination for the SVM.
140902474	The log_path contains an unsupported Snaplock volume.
140902478	The log_path validation failed.
140902478	The log_path cannot be accessed for validation.
140902479	No other fields can be specified when "enabled" is specified.
140902490	Audit configuration is absent for rotate.
140902491	Failed to rotate audit log.
140902492	Cannot rotate audit log, auditing is not enabled for this SVM.

Also see the table of common errors in the [Response body](#) overview section of this documentation. ONTAP Error Response Codes

Error Code	Description
9699340	SVM UUID lookup failed
9699407	Additional fields are provided

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

### Example error

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

# Definitions

## See Definitions

### events

Name	Type	Description
data	boolean	Data events
management	boolean	Management events

### href

Name	Type	Description
href	string	

### \_links

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

### retention

Name	Type	Description
count	integer	Determines how many audit log files to retain before rotating the oldest log file out. This is mutually exclusive with "duration".
duration	string	Specifies an ISO-8601 format date and time to retain the audit log file. The audit log files are deleted once they reach the specified date/time. This is mutually exclusive with "count".

### audit\_schedule

Rotates the audit logs based on a schedule by using the time-based rotation parameters in any combination. The rotation schedule is calculated by using all the time-related values.

Name	Type	Description
days	array[integer]	Specifies the day of the month schedule to rotate audit log. Leave empty for all.

Name	Type	Description
hours	array[integer]	Specifies the hourly schedule to rotate audit log. Leave empty for all.
minutes	array[integer]	Specifies the minutes schedule to rotate the audit log.
months	array[integer]	Specifies the months schedule to rotate audit log. Leave empty for all.
weekdays	array[integer]	Specifies the weekdays schedule to rotate audit log. Leave empty for all.

### rotation

Audit event log files are rotated when they reach a configured threshold log size or are on a configured schedule. When an event log file is rotated, the scheduled consolidation task first renames the active converted file to a time-stamped archive file, and then creates a new active converted event log file.

Name	Type	Description
now	boolean	Manually rotates the audit logs. Optional in PATCH only. Not available in POST.
schedule	<a href="#">audit_schedule</a>	Rotates the audit logs based on a schedule by using the time-based rotation parameters in any combination. The rotation schedule is calculated by using all the time-related values.
size	integer	Rotates logs based on log size in bytes.

### s3\_log

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

Name	Type	Description
format	string	Format in which the logs are generated by the consolidation process. Possible values are: <ul style="list-style-type: none"> <li>• json - ONTAP-specific Json log format. <ul style="list-style-type: none"> <li>◦ Default value: 1</li> <li>◦ enum: ["json"]</li> <li>◦ Introduced in: 9.10</li> <li>◦ x-nullable: true</li> </ul> </li> </ul>
retention	<a href="#">retention</a>	
rotation	<a href="#">rotation</a>	Audit event log files are rotated when they reach a configured threshold log size or are on a configured schedule. When an event log file is rotated, the scheduled consolidation task first renames the active converted file to a time-stamped archive file, and then creates a new active converted event log file.

## svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

## s3\_audit

Auditing for NAS events is a security measure that enables you to track and log certain S3 events on SVMs.



Name	Type	Description
enabled	boolean	Specifies whether or not auditing is enabled on the SVM.
events	<a href="#">events</a>	
log	<a href="#">s3_log</a>	
log_path	string	The audit log destination path where consolidated audit logs are stored.
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### returned\_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 audit configuration

POST /protocols/audit/{svm.uuid}/object-store

**Introduced In:** 9.10

Creates an S3 audit configuration.

### Required properties

- `log_path` - Path in the owning SVM namespace that is used to store audit logs.

## Default property values

If not specified in POST, the following default property values are assigned:

- `enabled` - *true*
- `events.data` - *true*
- `events.management` - *false*
- `log.format` - *json*
- `log.retention.count` - *0*
- `log.retention.duration` - *PT0S*
- `log.rotation.size` - *100MB*
- `log.rotation.now` - *false*

## Related ONTAP commands

- `vserver object-store-server audit create`
- `vserver object-store-server audit enable`

## Learn more

- [DOC /protocols/audit/{svm.uuid}/object-store](#)

## Parameters

Name	Type	In	Required	Description
return_timeout	integer	query	False	<p>The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.</p> <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.

## Request Body

Name	Type	Description
enabled	boolean	Specifies whether or not auditing is enabled on the SVM.
events	<a href="#">events</a>	
log	<a href="#">s3_log</a>	

Name	Type	Description
log_path	string	The audit log destination path where consolidated audit logs are stored.
svm	svm	SVM, applies only to SVM-scoped objects.

## Example request

```
{
  "log": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "format": "json",
    "retention": {
      "duration": "P4DT12H30M5S"
    },
    "rotation": {
      "schedule": {
        "days": {
        },
        "hours": {
        },
        "minutes": {
        },
        "months": {
        },
        "weekdays": {
        }
      }
    }
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  }
}
```

## Response

Status: 202, Accepted

Name	Type	Description
_links	<a href="#">_links</a>	
num_records	integer	Number of records
records	array[ <a href="#">s3_audit</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "log": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "format": "json",
      "retention": {
        "duration": "P4DT12H30M5S"
      },
      "rotation": {
        "schedule": {
          "days": {
          },
          "hours": {
          },
          "minutes": {
          },
          "months": {
          },
          "weekdays": {
          }
        }
      }
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  }
}
```

```
}  
}  
}
```

## Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

## Response

Status: 201, Created

## Error

Status: Default

## ONTAP Error Response Codes

Error Code	Description
140902401	Failed to create an audit configuration for the SVM.
140902402	Audit configuration is already present.
140902402	Audit configuration is already enabled.
140902403	Failed to create staging volume.
140902415	Failed to modify an audit configuration because no audit configuration exists for the SVM.
140902416	Failed to modify audit configuration for SVM.
140902422	Final consolidation is in progress, audit delete failed.
140902423	Failed to delete the audit configuration for the SVM.
140902425	Audit configuration is not available for disabling.
140902430	Audit configuration is not available for enabling.
140902431	Audit enable failed, audit configuration already enabled for the SVM.
140902432	Final consolidation is in progress, audit enable failed.
140902445	Audit disable failed, audit configuration does not exist for the SVM.



Error Code	Description
140902446	Audit disable failed, audit configuration does not exist for the SVM.
140902447	Audit disable failed.
140902456	The specified log_path does not exist.
140902457	The log_path must be a directory.
140902458	The log_path must be a canonical path in the SVM's namespace.
140902459	The log_path cannot be empty.
140902460	Rotate size must be greater than or equal to 1024 KB.
140902461	The destination path must not contain a symbolic link.
140902470	The log_path exceeds a maximum supported length of characters.
140902471	The log_path contains an unsupported read-only (DP/LS) volume.
140902472	The log_path is not a valid destination for the SVM.
140902474	The log_path contains an unsupported Snaplock volume.
140902478	The log_path validation failed.
140902478	The log_path cannot be accessed for validation.
140902490	Audit configuration is absent for rotate.
140902491	Failed to rotate audit log.
140902492	Cannot rotate audit log, auditing is not enabled for this SVM.

Also see the table of common errors in the [Response body](#) overview section of this documentation. ONTAP Error Response Codes

Error Code	Description
9699340	SVM UUID lookup failed
9699407	Additional fields are provided

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

## Example error

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

## Definitions

## See Definitions

### events

Name	Type	Description
data	boolean	Data events
management	boolean	Management events

### href

Name	Type	Description
href	string	

### \_links

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

### retention

Name	Type	Description
count	integer	Determines how many audit log files to retain before rotating the oldest log file out. This is mutually exclusive with "duration".
duration	string	Specifies an ISO-8601 format date and time to retain the audit log file. The audit log files are deleted once they reach the specified date/time. This is mutually exclusive with "count".

### audit\_schedule

Rotates the audit logs based on a schedule by using the time-based rotation parameters in any combination. The rotation schedule is calculated by using all the time-related values.

Name	Type	Description
days	array[integer]	Specifies the day of the month schedule to rotate audit log. Leave empty for all.

Name	Type	Description
hours	array[integer]	Specifies the hourly schedule to rotate audit log. Leave empty for all.
minutes	array[integer]	Specifies the minutes schedule to rotate the audit log.
months	array[integer]	Specifies the months schedule to rotate audit log. Leave empty for all.
weekdays	array[integer]	Specifies the weekdays schedule to rotate audit log. Leave empty for all.

### rotation

Audit event log files are rotated when they reach a configured threshold log size or are on a configured schedule. When an event log file is rotated, the scheduled consolidation task first renames the active converted file to a time-stamped archive file, and then creates a new active converted event log file.

Name	Type	Description
now	boolean	Manually rotates the audit logs. Optional in PATCH only. Not available in POST.
schedule	<a href="#">audit_schedule</a>	Rotates the audit logs based on a schedule by using the time-based rotation parameters in any combination. The rotation schedule is calculated by using all the time-related values.
size	integer	Rotates logs based on log size in bytes.

### s3\_log

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

Name	Type	Description
format	string	Format in which the logs are generated by the consolidation process. Possible values are: <ul style="list-style-type: none"> <li>• json - ONTAP-specific Json log format. <ul style="list-style-type: none"> <li>◦ Default value: 1</li> <li>◦ enum: ["json"]</li> <li>◦ Introduced in: 9.10</li> <li>◦ x-nullable: true</li> </ul> </li> </ul>
retention	<a href="#">retention</a>	
rotation	<a href="#">rotation</a>	Audit event log files are rotated when they reach a configured threshold log size or are on a configured schedule. When an event log file is rotated, the scheduled consolidation task first renames the active converted file to a time-stamped archive file, and then creates a new active converted event log file.

## svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	The name of the SVM. This field cannot be specified in a PATCH method.
uuid	string	The unique identifier of the SVM. This field cannot be specified in a PATCH method.

## s3\_audit

Auditing for NAS events is a security measure that enables you to track and log certain S3 events on SVMs.

Name	Type	Description
enabled	boolean	Specifies whether or not auditing is enabled on the SVM.
events	<a href="#">events</a>	
log	<a href="#">s3_log</a>	
log_path	string	The audit log destination path where consolidated audit logs are stored.
svm	<a href="#">svm</a>	SVM, applies only to SVM-scoped objects.

#### [\\_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

#### returned\_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.

## Copyright information

Copyright © 2024 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

## Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.