



View key information about files and volumes

ONTAP 9.11.1 REST API reference

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Table of Contents

- View key information about files and volumes 1
 - Storage SnapLock file-fingerprints endpoint overview 1
 - Retrieve fingerprint operations of an SVM and volume 1
 - Create a fingerprint computation session 7
 - Cancel a fingerprint operation 16
 - Retrieve the file fingerprint information for a specific session ID 18

View key information about files and volumes

Storage SnapLock file-fingerprints endpoint overview

Use this API to view key information about files and volumes, including the file type (regular, WORM, or WORM appendable), the volume expiration date, and so on.

Retrieve fingerprint operations of an SVM and volume

GET /storage/snaplock/file-fingerprints

Introduced In: 9.7

Retrieves a list of all the fingerprint operations of the specified SVM and volume.

Related ONTAP commands

- `volume file fingerprint show`

Example

```
GET "/api/storage/snaplock/file-fingerprints/?svm.uuid=23940494-3f3a-11e9-8675-0050568e8f89&volume.uuid=36cdb58c-3f3a-11e9-8675-0050568e8f89"
```

Learn more

- [DOC /storage/snaplock/file-fingerprints](#)

Parameters

| Name | Type | In | Required | Description |
|-------------|---------------|-------|----------|---------------------------------------|
| svm.uuid | string | query | True | SVM UUID |
| volume.uuid | string | query | True | Volume UUID |
| 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_timeout | integer | query | False | <p>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.</p> <ul style="list-style-type: none"> • Default value: 1 • Max value: 120 • Min value: 0 |
| return_records | boolean | query | False | <p>The default is true for GET calls. When set to false, only the number of records is returned.</p> <ul style="list-style-type: none"> • Default value: 1 |
| order_by | array[string] | query | False | Order results by specified fields and optional [asc |

Response

Status: 200, Ok

| Name | Type | Description |
|-------------|--|--------------------|
| _links | _links | |
| num_records | integer | Number of Records. |
| records | array[snaplock_file_fingerprint] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": [
    {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "algorithm": "sha256",
      "data_fingerprint":
"MOFJVevxNSJm3C/4Bn5oEEYH51CrudOzZYK4r5Cfy1g=",
      "file_size": 1048576,
      "file_type": "worm",
      "id": 17039367,
      "metadata_fingerprint":
"8iMjqjXINcqqXT5XuRhLiEwIrJEihDmws0hrexnjgmc=",
      "path": "/homedir/dir1",
      "scope": "data_only",
      "state": "completed",
      "svm": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "svm1",
        "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
      },
      "volume": {
        "_links": {
          "self": {
            "href": "/api/resourcelink"
          }
        },
        "name": "volume1",
        "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
      }
    }
  ]
}
```

```
}
}
]
}
```

Error

Status: Default

ONTAP Error Response codes

| Error code | Description |
|------------|--|
| 14090442 | Invalid Vserver UUID |
| 14090445 | Invalid key values. Provide Vserver UUID and Volume UUID |

| 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 | href | |
| self | href | |

_links

| Name | Type | Description |
|------|----------------------|-------------|
| self | href | |

svm

| Name | Type | Description |
|--------|------------------------|-----------------------------------|
| _links | _links | |
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

volume

| Name | Type | Description |
|--------|------------------------|--|
| _links | _links | |
| name | string | The name of the volume. |
| uuid | string | Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none">• example: 028baa66-41bd-11e9-81d5-00a0986138f7• Introduced in: 9.6 |

snaplock_file_fingerprint

| Name | Type | Description |
|------------------------|------------------------|---|
| _links | _links | |
| algorithm | string | The digest algorithm which is used for the fingerprint computation |
| data_fingerprint | string | The digest value of data of the file. The fingerprint is base64 encoded. This field is not included if the scope is metadata-only. |
| file_size | integer | The size of the file in bytes. |
| file_type | string | The type of the file. |
| id | integer | A unique identifier for the fingerprint operation |
| metadata_fingerprint | string | The digest value of metadata of the file. The metadata fingerprint is calculated for file size, file ctime, file mtime, file crtime, file retention time, file uid, file gid, and file type. The fingerprint is base64 encoded. This field is not included if the scope is data-only. |
| path | string | Specifies the path on which file fingerprint operation is running or has completed. Specifies the path relative to the output volume root, of the form "/path". The path can be path to a file or a directory. |
| scope | string | The scope of the file which is used for the fingerprint computation |
| state | string | Specifies the status of fingerprint operation. |
| svm | svm | |
| volume | volume | |

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. |

Create a fingerprint computation session

POST /storage/snaplock/file-fingerprints

Introduced In: 9.7

Creates a fingerprint computation session on the file and returns a session-id. This session-id is a unique identifier that you can use to retrieve the progress of an ongoing fingerprint operation. When the operation is complete, you can use the session-id to retrieve the complete fingerprint output for the file .

Required properties

- `svm.uuid` or `svm.name` - Name or UUID of the SVM.
- `volume.name` or `volume.uuid` - Name or UUID of the volume.
- `path` - Path of the file.

Default property values

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

- `algorithm` - `md5`

Related ONTAP commands

- `volume file fingerprint start`

Example

```
POST "/api/storage/snaplock/file-fingerprints" '{"svm":{"uuid":"23940494-3f3a-11e9-8675-0050568e8f89"},"volume":{"uuid":"26cdb58c-3f3a-11e9-8675-0050568e8f89"},"path":"/vol/a1.txt","algorithm":"md5"}'
```

Learn more

- [DOC /storage/snaplock/file-fingerprints](#)

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">• Default value: 1• Max value: 120• Min value: 0 |

| Name | Type | In | Required | Description |
|----------------|---------|-------|----------|---|
| return_records | boolean | query | False | <p>The default is false. If set to true, the records are returned.</p> <ul style="list-style-type: none"> • Default value: |

Request Body

| Name | Type | Description |
|----------------------|------------------------|---|
| _links | _links | |
| algorithm | string | The digest algorithm which is used for the fingerprint computation |
| data_fingerprint | string | The digest value of data of the file. The fingerprint is base64 encoded. This field is not included if the scope is metadata-only. |
| file_size | integer | The size of the file in bytes. |
| file_type | string | The type of the file. |
| id | integer | A unique identifier for the fingerprint operation |
| metadata_fingerprint | string | The digest value of metadata of the file. The metadata fingerprint is calculated for file size, file ctime, file mtime, file crtime, file retention time, file uid, file gid, and file type. The fingerprint is base64 encoded. This field is not included if the scope is data-only. |
| path | string | Specifies the path on which file fingerprint operation is running or has completed. Specifies the path relative to the output volume root, of the form "/path". The path can be path to a file or a directory. |
| scope | string | The scope of the file which is used for the fingerprint computation |

| Name | Type | Description |
|--------|--------|--|
| state | string | Specifies the status of fingerprint operation. |
| svm | svm | |
| volume | volume | |

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "algorithm": "sha256",
  "data_fingerprint": "MOFJVeVxNSJm3C/4Bn5oEEYH51CrudOzZYK4r5Cfy1g=",
  "file_size": 1048576,
  "file_type": "worm",
  "id": 17039367,
  "metadata_fingerprint":
"8iMjqjXINcqqXT5XuRhLiEwIrJEihDmwS0hrexnjgmc=",
  "path": "/homedir/dir1",
  "scope": "data_only",
  "state": "completed",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "volume": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "volumel",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
  }
}
```

Response

Status: 202, Accepted

| Name | Type | Description |
|------|----------|-------------|
| job | job_link | |

Example response

```

{
  "job": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "uuid": "string"
  }
}

```

Error

Status: Default

ONTAP Error Response codes

| Error code | Description |
|------------|--|
| 14090443 | Invalid volume name |
| 14090444 | Invalid Vserver name |
| 14090447 | Invalid volume UUID |
| 14090448 | Invalid key values. Provide valid Vserver name and volume name or Vserver UUID and volume UUID |

| 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 | |

svm

| Name | Type | Description |
|--------|------------------------|-----------------------------------|
| _links | _links | |
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

volume

| Name | Type | Description |
|--------|------------------------|--|
| _links | _links | |
| name | string | The name of the volume. |
| uuid | string | Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none">• example: 028baa66-41bd-11e9-81d5-00a0986138f7• Introduced in: 9.6 |

snaplock_file_fingerprint

| Name | Type | Description |
|-----------|------------------------|--|
| _links | _links | |
| algorithm | string | The digest algorithm which is used for the fingerprint computation |

| Name | Type | Description |
|----------------------|------------------------|---|
| data_fingerprint | string | The digest value of data of the file. The fingerprint is base64 encoded. This field is not included if the scope is metadata-only. |
| file_size | integer | The size of the file in bytes. |
| file_type | string | The type of the file. |
| id | integer | A unique identifier for the fingerprint operation |
| metadata_fingerprint | string | The digest value of metadata of the file. The metadata fingerprint is calculated for file size, file ctime, file mtime, file crtime, file retention time, file uid, file gid, and file type. The fingerprint is base64 encoded. This field is not included if the scope is data-only. |
| path | string | Specifies the path on which file fingerprint operation is running or has completed. Specifies the path relative to the output volume root, of the form "/path". The path can be path to a file or a directory. |
| scope | string | The scope of the file which is used for the fingerprint computation |
| state | string | Specifies the status of fingerprint operation. |
| svm | svm | |
| volume | volume | |

job_link

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| uuid | string | The UUID of the asynchronous job that is triggered by a POST, PATCH, or DELETE operation. |

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. |

Cancel a fingerprint operation

DELETE /storage/snaplock/file-fingerprints/{id}

Introduced In: 9.7

Aborts an in-progress fingerprint operation. This API takes session-id as input and aborts the fingerprint operation that is associated with the specified session-id.

Related ONTAP commands

- `volume file fingerprint abort`

Learn more

- [DOC /storage/snaplock/file-fingerprints](#)

Parameters

| Name | Type | In | Required | Description |
|------|--------|------|----------|------------------------------------|
| id | string | path | True | Unique identifier of the operation |

Response

Status: 200, Ok

Error

Status: Default

ONTAP Error Response codes

| Error code | Description |
|------------|--|
| 14090440 | File fingerprint operation has completed |
| 14090446 | Invalid session ID |

| 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 file fingerprint information for a specific session ID

GET /storage/snaplock/file-fingerprints/{id}

Introduced In: 9.7

Retrieves the file fingerprint information for a specific session ID.

Related ONTAP commands

- `volume file fingerprint dump`

Learn more

- [DOC /storage/snaplock/file-fingerprints](#)

Parameters

| Name | Type | In | Required | Description |
|------|--------|------|----------|------------------------------------|
| id | string | path | True | Unique identifier of the operation |

| Name | Type | In | Required | Description |
|--------|---------------|-------|----------|-------------------------------|
| fields | array[string] | query | False | Specify the fields to return. |

Response

Status: 200, Ok

| Name | Type | Description |
|----------------------|------------------------|---|
| _links | _links | |
| algorithm | string | The digest algorithm which is used for the fingerprint computation |
| data_fingerprint | string | The digest value of data of the file. The fingerprint is base64 encoded. This field is not included if the scope is metadata-only. |
| file_size | integer | The size of the file in bytes. |
| file_type | string | The type of the file. |
| id | integer | A unique identifier for the fingerprint operation |
| metadata_fingerprint | string | The digest value of metadata of the file. The metadata fingerprint is calculated for file size, file ctime, file mtime, file crtime, file retention time, file uid, file gid, and file type. The fingerprint is base64 encoded. This field is not included if the scope is data-only. |
| path | string | Specifies the path on which file fingerprint operation is running or has completed. Specifies the path relative to the output volume root, of the form "/path". The path can be path to a file or a directory. |
| scope | string | The scope of the file which is used for the fingerprint computation |

| Name | Type | Description |
|--------|--------|--|
| state | string | Specifies the status of fingerprint operation. |
| svm | svm | |
| volume | volume | |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "algorithm": "sha256",
  "data_fingerprint": "MOFJVeVxNSJm3C/4Bn5oEEYH51CrudOzZYK4r5Cfy1g=",
  "file_size": 1048576,
  "file_type": "worm",
  "id": 17039367,
  "metadata_fingerprint":
  "8iMjqjXINcqqXT5XuRhLiEwIrJEihDmwS0hrexnjgmc=",
  "path": "/homedir/dir1",
  "scope": "data_only",
  "state": "completed",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "volume": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "volumel",
    "uuid": "028baa66-41bd-11e9-81d5-00a0986138f7"
  }
}
```

Error

Status: Default

ONTAP Error Response codes

| Error code | Description |
|------------|--|
| 14090441 | Invalid key values. Provide session ID or Vserver UUID and volume UUID |
| 14090449 | File fingerprint operation has not completed |

| 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 | |

svm

| Name | Type | Description |
|--------|------------------------|-----------------------------------|
| _links | _links | |
| name | string | The name of the SVM. |
| uuid | string | The unique identifier of the SVM. |

volume

| Name | Type | Description |
|--------|------------------------|--|
| _links | _links | |
| name | string | The name of the volume. |
| uuid | string | Unique identifier for the volume. This corresponds to the instance-uuid that is exposed in the CLI and ONTAPI. It does not change due to a volume move. <ul style="list-style-type: none">• example: 028baa66-41bd-11e9-81d5-00a0986138f7• Introduced in: 9.6 |

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. |

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