



Manage Vscan configuration

ONTAP 9.13.1 REST API reference

NetApp
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Manage Vscan configuration

Protocols Vscan server-status endpoint overview

Overview

This API is used to display connection status information for the external virus-scanning servers or "Vscan servers".

Examples

Retrieving all fields for the Vscan server status

```
# The API:
/api/protocols/vscan/server-status/

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/vscan/server-status?fields=*"
-H "accept: application/hal+json"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "66f8564d-ae5c-11eb-bd8c-0050568e8ed1",
        "name": "vs1"
      },
      "node": {
        "uuid": "ce2463d9-ae5c-11eb-bd8c-0050568e8ed1",
        "name": "chiragm-vsim1"
      },
      "ip": "10.140.132.141",
      "type": "primary",
      "state": "connected",
      "update_time": "2021-05-07T21:35:02+05:30",
      "vendor": "mighty master anti-evil scanner",
      "version": "5.643",
      "extended_stats": [
        "ts=10:15:28 PM May 07,2021",
        "scans=sent:0,compok:0,comperr:0,compnotfnd:0,ms/comp:0",
        "avshim-version=1.0.5.0",
        "mempage/s=0, procs=52, threads=2063, %cpu=0.22, procqlen=0,
        diskio/s=0, smbbytes/s=52, ",

```

```

    "ifmac=FA:16:3E:F0:70:88,
tcpstat=retrans:7538,connfail:2137,connreset:52018,inerr:0",
    "cfg=Host Name:SCSPB2271817001",
    "OS Name:Microsoft Windows Server 2012 R2 Standard",
    "OS Version:6.3.9600 N/A Build 9600",
    "System Boot Time:5/6/2021, 9:01:42 PM",
    "System Manufacturer:RDO",
    "System Model:OpenStack Compute",
    "System Type:x64-based PC",
    "Processor(s):2 Processor(s) Installed.",
    "[01]:Intel64 Family 6 Model 94 Stepping 3 GenuineIntel ~2400 Mhz"
],
"interface": {
    "name": "vs1.data",
    "uuid": "6911e7c6-aefc-11eb-bd8c-0050568e8ed1",
    "ip": {
        "address": "10.140.69.165"
    }
}
},
{
    "svm": {
        "uuid": "a776e8f2-aef9-11eb-8530-0050568e8ed1",
        "name": "vs2"
    },
    "node": {
        "uuid": "ce2463d9-aef6-11eb-bd8c-0050568e8ed1",
        "name": "chiragm-vs1m1"
    },
    "ip": "10.140.128.163",
    "type": "primary",
    "state": "connected",
    "update_time": "2021-05-07T21:35:43+05:30",
    "vendor": "mighty master anti-evil scanner",
    "version": "5.643",
    "extended_stats": [
        "ts=10:15:26 PM May 07,2021",
        "scans=sent:0,compok:0,comperr:0,compnotfnd:0,ms/comp:0",
        "avshim-version=1.0.5.0",
        "mempage/s=0, procs=46, threads=1947, %cpu=0.07, procqlen=0,
diskio/s=1, smbbytes/s=181, ",
        "ifmac=FA:16:3E:06:9F:D6,
tcpstat=retrans:123453,connfail:6864,connreset:13188,inerr:0",
        "cfg=Host Name:SCSPB2271815001",
        "OS Name:Microsoft Windows Server 2012 R2 Standard",
        "OS Version:6.3.9600 N/A Build 9600",

```

```

    "System Boot Time:4/20/2021, 5:23:29 PM",
    "System Manufacturer:RDO",
    "System Model:OpenStack Compute",
    "System Type:x64-based PC",
    "Processor(s):2 Processor(s) Installed.",
    "[01]:Intel64 Family 6 Model 94 Stepping 3 GenuineIntel ~2400 Mhz"
  ],
  "interface": {
    "name": "vs2.data",
    "uuid": "c070b4c2-aef9-11eb-8530-0050568e8ed1",
    "ip": {
      "address": "10.140.70.154"
    }
  }
},
"num_records": 2
}

```

Retrieving the server status information for the server with IP address 10.141.46.173

```

# The API:
/api/protocols/vscan/server-status

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/vscan/server-
status?ip=10.140.132.141&fields=*" -H "accept: application/hal+json"

# The response:
{
  "records": [
    {
      "svm": {
        "uuid": "66f8564d-aefc-11eb-bd8c-0050568e8ed1",
        "name": "vs1"
      },
      "node": {
        "uuid": "ce2463d9-aef6-11eb-bd8c-0050568e8ed1",
        "name": "chiragm-vs1m1"
      },
      "ip": "10.140.132.141",
      "type": "primary",

```

```

"state": "connected",
"update_time": "2021-05-07T23:08:21+05:30",
"vendor": "mighty master anti-evil scanner",
"version": "5.643",
"extended_stats": [
  "ts=12:07:30 AM May 08,2021",
  "scans=sent:0,compok:0,comperr:0,compnotfnd:0,ms/comp:0",
  "avshim-version=1.0.5.0",
  "mempage/s=0, procs=52, threads=2108, %cpu=0.07, procqlen=0,
diskio/s=0, smbbytes/s=230, ",
  "ifmac=FA:16:3E:F0:70:88,
tcpstat=retrans:8249,connfail:2174,connreset:52243,inerr:0",
  "cfg=Host Name:SCSPB2271817001",
  "OS Name:Microsoft Windows Server 2012 R2 Standard",
  "OS Version:6.3.9600 N/A Build 9600",
  "System Boot Time:5/6/2021, 9:01:42 PM",
  "System Manufacturer:RDO",
  "System Model:OpenStack Compute",
  "System Type:x64-based PC",
  "Processor(s):2 Processor(s) Installed.",
  "[01]:Intel64 Family 6 Model 94 Stepping 3 GenuineIntel ~2400 Mhz"
],
"interface": {
  "name": "vs1.data",
  "uuid": "6911e7c6-aefc-11eb-bd8c-0050568e8ed1",
  "ip": {
    "address": "10.140.69.165"
  }
}
},
"num_records": 1
}

```

Retrieve the Vscan server status

GET /protocols/vscan/server-status

Introduced In: 9.6

Retrieves a Vscan server status.

Related ONTAP commands

- `vserver vscan connection-status show-all`

Learn more

- [DOC /protocols/vscan/server-status](#)

Parameters

| Name | Type | In | Required | Description |
|----------------------|--------|-------|----------|---|
| update_time | string | query | False | Filter by update_time |
| disconnected_reason | string | query | False | Filter by disconnected_reason |
| vendor | string | query | False | Filter by vendor |
| svm.uuid | string | query | False | Filter by svm.uuid |
| svm.name | string | query | False | Filter by svm.name |
| ip | string | query | False | Filter by ip |
| type | string | query | False | Filter by type |
| state | string | query | False | Filter by state |
| node.uuid | string | query | False | Filter by node.uuid |
| node.name | string | query | False | Filter by node.name |
| version | string | query | False | Filter by version |
| interface.ip.address | string | query | False | Filter by interface.ip.address <ul style="list-style-type: none">• Introduced in: 9.10 |
| interface.name | string | query | False | Filter by interface.name <ul style="list-style-type: none">• Introduced in: 9.10 |

| Name | Type | In | Required | Description |
|----------------|---------------|-------|----------|---|
| interface.uuid | string | query | False | Filter by interface.uuid <ul style="list-style-type: none"> • Introduced in: 9.10 |
| 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"> • Default value: 1 |
| 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"> • Default value: 1 • Max value: 120 • Min value: 0 |
| 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[vscan_server_status] | |

Example response

A large, empty rectangular box with a thin, dashed border, occupying most of the page. It is intended for an example response.

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "interface": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ip": {
        "address": "10.10.10.7"
      },
      "name": "lif1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "type": "primary"
  }
}
```

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 | href | |
| self | href | |

_links

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

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------|
| address | string | IPv4 or IPv6 address |

interface

Address of the interface used for the Vscan connection.

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| ip | ip | IP information |
| name | string | The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in. |
| uuid | string | The UUID that uniquely identifies the interface. |

node

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

svm

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

vscan_server_status

Displays the connection status information of the external virus-scanning servers.

| Name | Type | Description |
|---------------------|--------|---|
| disconnected_reason | string | <p>Specifies the server disconnected reason. The following is a list of the possible reasons:</p> <ul style="list-style-type: none"> • unknown - Disconnected, unknown reason. • vscan_disabled - Disconnected, Vscan is disabled on the SVM. • no_data_lif - Disconnected, SVM does not have data LIF. • session_uninitialized - Disconnected, session is not initialized. • remote_closed - Disconnected, server has closed the connection. • invalid_protocol_msg - Disconnected, invalid protocol message received. • invalid_session_id - Disconnected, invalid session ID received. • inactive_connection - Disconnected, no activity on connection. • invalid_user - Connection request by an invalid user. • server_removed - Disconnected, server has been removed from the active Scanners List. enum: <ul style="list-style-type: none"> • unknown • vscan_disabled • no_data_lif • session_uninitialized • remote_closed • invalid_protocol_msg • invalid_session_id • inactive_connection • invalid_user • server_removed |

| Name | Type | Description |
|-------------|---------------------------|---|
| interface | interface | Address of the interface used for the Vscan connection. |
| ip | string | IP address of the Vscan server. |
| node | node | |
| state | string | Specifies the server connection state indicating if it is in the connected or disconnected state. The following is a list of the possible states: <ul style="list-style-type: none"> • connected - Connected • disconnected - Disconnected enum: • connected • disconnected |
| svm | svm | |
| type | string | Server type. The possible values are: <ul style="list-style-type: none"> • primary - Primary server • backup - Backup server |
| update_time | string | Specifies the time the server is in the connected or disconnected state. |
| vendor | string | Name of the connected virus-scanner vendor. |
| version | string | Version of the connected virus-scanner. |

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. |

Delete a Vscan configuration

DELETE /protocols/vscan/{svm.uuid}

Introduced In: 9.6

Deletes a Vscan configuration.

Important notes:

- The Vscan DELETE endpoint deletes all of the Vscan configuration of an SVM. It first disables the Vscan and then deletes all of the SVM scanner-pools, On-Access policies, and On-Demand policies.
- Disable the active Vscan On-Access policy on an SVM before performing the Vscan delete operation on that SVM.

Related ONTAP commands

- `vserver vscan scanner-pool delete`
- `vserver vscan on-access-policy delete`
- `vserver vscan on-demand-policy delete`

Learn more

- [DOC /protocols/vscan](#)
- [DOC /protocols/vscan/{svm.uuid}/scanner-pools](#)

Parameters

| Name | Type | In | Required | Description |
|----------|--------|------|----------|---|
| svm.uuid | string | path | True | UUID of the SVM to which this object belongs. |

Response

Status: 200, Ok

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|--|
| 10027259 | A scanner-pool, an On-Access policy, or an On-Demand policy might fail to get deleted due to either a systematic error or some hardware failure. The error code returned details the failure along with the reason for the failure. For example, "Failed to delete On-Access policy "sp1". Reason: "Failed to delete policy. Reason: policy must be disabled before being deleted.". Retry the operation." |

| 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 Vscan configuration for an SVM

```
GET /protocols/vscan/{svm.uuid}
```

Introduced In: 9.6

Retrieves the Vscan configuration for a specified SVM. This includes scanner-pools, On-Access policies, On-Demand policies, and information about whether a Vscan is enabled or disabled on an SVM.

Important note:

- You can enable only one Vscan configuration at a time for an SVM.

Related ONTAP commands

- `vserver vscan show`
- `vserver vscan scanner-pool show`
- `vserver vscan scanner-pool servers show`
- `vserver vscan scanner-pool privileged-users show`
- `vserver vscan on-access-policy show`
- `vserver vscan on-access-policy file-ext-to-exclude show`
- `vserver vscan on-access-policy file-ext-to-include show`

- `vserver vscan on-access-policy paths-to-exclude show`
- `vserver vscan on-demand-task show`

Learn more

- [DOC /protocols/vscan](#)
- [DOC /protocols/vscan/{svm.uuid}/scanner-pools](#)

Parameters

| 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 |
|------------------------|---|---|
| _links | _links | |
| cache_clear | boolean | Discards the cached information of the files that have been successfully scanned. Once the cache is cleared, files are scanned again when they are accessed. PATCH only |
| enabled | boolean | Specifies whether or not Vscan is enabled on the SVM. |
| on_access_policies | array[vscan_on_access] | |
| on_demand_policies | array[vscan_on_demand_policy] | |
| scanner_pools | array[scanner_pool] | |
| svm | svm | |

Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "on_access_policies": {
    "name": "on-access-test",
    "scope": {
      "exclude_extensions": [
        "mp*",
        "txt"
      ],
      "exclude_paths": [
        "\\dir1\\dir2\\name",
        "\\vol\\a b",
        "\\vol\\a,b\\"
      ],
      "include_extensions": [
        "mp*",
        "txt"
      ],
      "max_file_size": 2147483648
    }
  },
  "on_demand_policies": {
    "log_path": "/vol0/report_dir",
    "name": "task-1",
    "scan_paths": [
      "/vol1/",
      "/vol2/cifs/"
    ],
    "schedule": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "weekly",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "scope": {
      "exclude_extensions": [
        "mp3",

```

```

        "mp4"
    ],
    "exclude_paths": [
        "/voll/cold-files/",
        "/voll/cifs/names"
    ],
    "include_extensions": [
        "vmdk",
        "mp*"
    ],
    "max_file_size": 10737418240
    }
},
"scanner_pools": {
    "cluster": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "cluster1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "name": "scanner-1",
    "privileged_users": [
        "cifs\\u1",
        "cifs\\u2"
    ],
    "role": "primary",
    "servers": [
        "1.1.1.1",
        "10.72.204.27",
        "vmwin204-27.fsct.nb"
    ]
},
"svm": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
}

```

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 | |

scope

| Name | Type | Description |
|------------------------|---------------|--|
| exclude_extensions | array[string] | List of file extensions for which scanning is not performed. |
| exclude_paths | array[string] | List of file paths for which scanning must not be performed. |
| include_extensions | array[string] | List of file extensions to be scanned. |
| max_file_size | integer | Maximum file size, in bytes, allowed for scanning. |
| only_execute_access | boolean | Scan only files opened with execute-access. |
| scan_readonly_volumes | boolean | Specifies whether or not read-only volume can be scanned. |
| scan_without_extension | boolean | Specifies whether or not files without any extension can be scanned. |

vscan_on_access

An On-Access policy that defines the scope of an On-Access scan. Use On-Access scanning to check for viruses when clients open, read, rename, or close files over CIFS. By default, ONTAP creates an On-Access policy named "default_CIFS" and enables it for all the SVMs in a cluster.

| Name | Type | Description |
|---------|---------|--------------------------------------|
| enabled | boolean | Status of the On-Access Vscan policy |

| Name | Type | Description |
|-----------|-----------------------|---|
| mandatory | boolean | Specifies if scanning is mandatory. File access is denied if there are no external virus-scanning servers available for virus scanning. |
| name | string | On-Access policy name |
| scope | scope | |

schedule

Schedule of the task.

| Name | Type | Description |
|------------------------|------------------------|-------------------|
| _links | _links | |
| name | string | Job schedule name |
| uuid | string | Job schedule UUID |

scope

| Name | Type | Description |
|------------------------|---------------|--|
| exclude_extensions | array[string] | List of file extensions for which scanning is not performed. |
| exclude_paths | array[string] | List of file paths for which scanning must not be performed. |
| include_extensions | array[string] | List of file extensions to be scanned. |
| max_file_size | integer | Maximum file size, in bytes, allowed for scanning. |
| scan_without_extension | boolean | Specifies whether or not files without any extension can be scanned. |

vscan_on_demand_policy

Use On-Demand scanning to check files for viruses on a schedule. An On-Demand policy defines the scope of an On-Demand scan.

| Name | Type | Description |
|------------|--------------------------|--|
| log_path | string | The path from the Vserver root where the task report is created. |
| name | string | On-Demand task name |
| scan_paths | array[string] | List of paths that need to be scanned. |
| schedule | schedule | Schedule of the task. |
| scope | scope | |

cluster_reference

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

scanner_pool

Scanner pool is a set of attributes which are used to validate and manage connections between clustered ONTAP and external virus-scanning server, or "Vscan server".

| Name | Type | Description |
|---------|-----------------------------------|---|
| cluster | cluster_reference | |
| name | string | Specifies the name of the scanner pool. Scanner pool name can be up to 256 characters long and is a string that can only contain any combination of ASCII-range alphanumeric characters a-z, A-Z, 0-9), "_", "-" and ".". |

| Name | Type | Description |
|------------------|---------------|---|
| privileged_users | array[string] | Specifies a list of privileged users. A valid form of privileged user-name is "domain-name\user-name". Privileged user-names are stored and treated as case-insensitive strings. Virus scanners must use one of the registered privileged users for connecting to clustered Data ONTAP for exchanging virus-scanning protocol messages and to access file for scanning, remedying and quarantining operations. <ul style="list-style-type: none"> • example: ["cifs\u1", "cifs\u2"] • Introduced in: 9.10 |
| role | string | Specifies the role of the scanner pool. The possible values are: <ul style="list-style-type: none"> • primary - Always active. • secondary - Active only when none of the primary external virus-scanning servers are connected. • idle - Always inactive. |
| servers | array[string] | Specifies a list of IP addresses or FQDN for each Vscan server host names which are allowed to connect to clustered ONTAP. <ul style="list-style-type: none"> • example: ["1.1.1.1", "10.72.204.27", "vmwin204-27.fsct.nb"] • Introduced in: 9.10 |

svm

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

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 Vscan configuration for an SVM

PATCH /protocols/vscan/{svm.uuid}

Introduced In: 9.6

Updates the Vscan configuration of an SVM. Allows you to either enable or disable a Vscan, and allows you to clear the Vscan cache that stores the past scanning data for an SVM.

Important note:

- The Vscan PATCH endpoint does not allow you to modify scanner-pools, On-Demand policies or On-Access policies. Those modifications can only be done through their respective endpoints.

Related ONTAP commands

- `vserver vscan enable`
- `vserver vscan disable`
- `vserver vscan reset`

Learn more

- [DOC /protocols/vscan](#)
- [DOC /protocols/vscan/{svm.uuid}/scanner-pools](#)

Parameters

| Name | Type | In | Required | Description |
|----------|--------|------|----------|---|
| svm.uuid | string | path | True | UUID of the SVM to which this object belongs. |

Request Body

| Name | Type | Description |
|--------------------|---|---|
| _links | _links | |
| cache_clear | boolean | Discards the cached information of the files that have been successfully scanned. Once the cache is cleared, files are scanned again when they are accessed. PATCH only |
| enabled | boolean | Specifies whether or not Vscan is enabled on the SVM. |
| on_access_policies | array[vscan_on_access] | |
| on_demand_policies | array[vscan_on_demand_policy] | |
| scanner_pools | array[scanner_pool] | |
| svm | svm | |

Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "on_access_policies": {
    "name": "on-access-test",
    "scope": {
      "exclude_extensions": [
        "mp*",
        "txt"
      ],
      "exclude_paths": [
        "\\dir1\\dir2\\name",
        "\\vol\\a b",
        "\\vol\\a,b\\"
      ],
      "include_extensions": [
        "mp*",
        "txt"
      ],
      "max_file_size": 2147483648
    }
  },
  "on_demand_policies": {
    "log_path": "/vol0/report_dir",
    "name": "task-1",
    "scan_paths": [
      "/vol1/",
      "/vol2/cifs/"
    ],
    "schedule": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "weekly",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "scope": {
      "exclude_extensions": [
        "mp3",

```

```

        "mp4"
    ],
    "exclude_paths": [
        "/voll/cold-files/",
        "/voll/cifs/names"
    ],
    "include_extensions": [
        "vmdk",
        "mp*"
    ],
    "max_file_size": 10737418240
}
},
"scanner_pools": {
    "cluster": {
        "_links": {
            "self": {
                "href": "/api/resourcelink"
            }
        },
        "name": "cluster1",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "name": "scanner-1",
    "privileged_users": [
        "cifs\\u1",
        "cifs\\u2"
    ],
    "role": "primary",
    "servers": [
        "1.1.1.1",
        "10.72.204.27",
        "vmwin204-27.fsct.nb"
    ]
},
"svm": {
    "_links": {
        "self": {
            "href": "/api/resourcelink"
        }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
}
}

```

Response

Status: 200, Ok

Error

Status: Default

ONTAP Error Response Codes

| Error Code | Description |
|------------|---|
| 10027015 | Attempting to enable a Vscan but no active scanner-pool exists for the specified SVM |
| 10027011 | Attempting to enable a Vscan for an SVM for which no CIFS server exists |
| 10027023 | Attempting to enable a Vscan for an SVM for which no active Vscan On-Access policy exists |

| 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 | |

scope

| Name | Type | Description |
|------------------------|---------------|--|
| exclude_extensions | array[string] | List of file extensions for which scanning is not performed. |
| exclude_paths | array[string] | List of file paths for which scanning must not be performed. |
| include_extensions | array[string] | List of file extensions to be scanned. |
| max_file_size | integer | Maximum file size, in bytes, allowed for scanning. |
| only_execute_access | boolean | Scan only files opened with execute-access. |
| scan_readonly_volumes | boolean | Specifies whether or not read-only volume can be scanned. |
| scan_without_extension | boolean | Specifies whether or not files without any extension can be scanned. |

vscan_on_access

An On-Access policy that defines the scope of an On-Access scan. Use On-Access scanning to check for viruses when clients open, read, rename, or close files over CIFS. By default, ONTAP creates an On-Access policy named "default_CIFS" and enables it for all the SVMs in a cluster.

| Name | Type | Description |
|---------|---------|--------------------------------------|
| enabled | boolean | Status of the On-Access Vscan policy |

| Name | Type | Description |
|-----------|-----------------------|---|
| mandatory | boolean | Specifies if scanning is mandatory. File access is denied if there are no external virus-scanning servers available for virus scanning. |
| name | string | On-Access policy name |
| scope | scope | |

schedule

Schedule of the task.

| Name | Type | Description |
|--------|------------------------|-------------------|
| _links | _links | |
| name | string | Job schedule name |
| uuid | string | Job schedule UUID |

scope

| Name | Type | Description |
|------------------------|---------------|--|
| exclude_extensions | array[string] | List of file extensions for which scanning is not performed. |
| exclude_paths | array[string] | List of file paths for which scanning must not be performed. |
| include_extensions | array[string] | List of file extensions to be scanned. |
| max_file_size | integer | Maximum file size, in bytes, allowed for scanning. |
| scan_without_extension | boolean | Specifies whether or not files without any extension can be scanned. |

vscan_on_demand_policy

Use On-Demand scanning to check files for viruses on a schedule. An On-Demand policy defines the scope of an On-Demand scan.

| Name | Type | Description |
|------------|--------------------------|--|
| log_path | string | The path from the Vserver root where the task report is created. |
| name | string | On-Demand task name |
| scan_paths | array[string] | List of paths that need to be scanned. |
| schedule | schedule | Schedule of the task. |
| scope | scope | |

cluster_reference

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

scanner_pool

Scanner pool is a set of attributes which are used to validate and manage connections between clustered ONTAP and external virus-scanning server, or "Vscan server".

| Name | Type | Description |
|---------|-----------------------------------|---|
| cluster | cluster_reference | |
| name | string | Specifies the name of the scanner pool. Scanner pool name can be up to 256 characters long and is a string that can only contain any combination of ASCII-range alphanumeric characters a-z, A-Z, 0-9), "_", "-" and ".". |

| Name | Type | Description |
|------------------|---------------|--|
| privileged_users | array[string] | <p>Specifies a list of privileged users. A valid form of privileged user-name is "domain-name\user-name". Privileged user-names are stored and treated as case-insensitive strings. Virus scanners must use one of the registered privileged users for connecting to clustered Data ONTAP for exchanging virus-scanning protocol messages and to access file for scanning, remedying and quarantining operations.</p> <ul style="list-style-type: none"> • example: ["cifs\u1", "cifs\u2"] • Introduced in: 9.10 |
| role | string | <p>Specifies the role of the scanner pool. The possible values are:</p> <ul style="list-style-type: none"> • primary - Always active. • secondary - Active only when none of the primary external virus-scanning servers are connected. • idle - Always inactive. |
| servers | array[string] | <p>Specifies a list of IP addresses or FQDN for each Vscan server host names which are allowed to connect to clustered ONTAP.</p> <ul style="list-style-type: none"> • example: ["1.1.1.1", "10.72.204.27", "vmwin204-27.fsct.nb"] • Introduced in: 9.10 |

svm

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

vscan

Vscan can be used to protect data from being compromised by viruses or other malicious code. This combines best-in-class third-party antivirus software with ONTAP features that give you the flexibility you need to control which files get scanned and when. Storage systems offload scanning operations to external servers hosting antivirus software from thirdparty vendors. An Antivirus Connector on the external server handles communications between the storage system and the antivirus software.

| Name | Type | Description |
|------------------------|---|---|
| _links | _links | |
| cache_clear | boolean | Discards the cached information of the files that have been successfully scanned. Once the cache is cleared, files are scanned again when they are accessed. PATCH only |
| enabled | boolean | Specifies whether or not Vscan is enabled on the SVM. |
| on_access_policies | array[vscan_on_access] | |
| on_demand_policies | array[vscan_on_demand_policy] | |
| scanner_pools | array[scanner_pool] | |
| svm | svm | |

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 Vscan events

GET /protocols/vscan/{svm.uuid}/events

Introduced In: 9.11

Retrieves Vscan events, which are generated by the cluster to capture important events.

Related ONTAP commands

- `vserver vscan show-events`

Parameters

| Name | Type | In | Required | Description |
|----------------------|--------|-------|----------|--------------------------------|
| disconnect_reason | string | query | False | Filter by disconnect_reason |
| event_time | string | query | False | Filter by event_time |
| interface.ip.address | string | query | False | Filter by interface.ip.address |
| interface.name | string | query | False | Filter by interface.name |
| interface.uuid | string | query | False | Filter by interface.uuid |
| node.uuid | string | query | False | Filter by node.uuid |
| node.name | string | query | False | Filter by node.name |
| version | string | query | False | Filter by version |
| server | string | query | False | Filter by server |
| type | string | query | False | Filter by type |
| file_path | string | query | False | Filter by file_path |
| vendor | string | query | False | Filter by vendor |
| svm.name | string | query | False | Filter by svm.name |

| 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. |
| 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"> • Default value: 1 |
| 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"> • Default value: 1 • Max value: 120 • Min value: 0 |
| 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[vscan_event] | |

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "disconnect_reason": "na",
    "event_time": "2021-11-25 04:29:41 +0000",
    "file_path": "/1",
    "interface": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "ip": {
        "address": "10.10.10.7"
      },
      "name": "lif1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "server": "192.168.1.1",
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    }
  }
}
```

```
    },
    "type": "scanner_connected",
    "vendor": "mighty master anti-evil scanner",
    "version": "1.0"
  }
}
```

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 | href | |
| self | href | |

_links

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

ip

IP information

| Name | Type | Description |
|---------|--------|----------------------|
| address | string | IPv4 or IPv6 address |

interface

Address of the interface used for the Vscan connection.

| Name | Type | Description |
|--------|------------------------|---|
| _links | _links | |
| ip | ip | IP information |
| name | string | The name of the interface. If only the name is provided, the SVM scope must be provided by the object this object is embedded in. |
| uuid | string | The UUID that uniquely identifies the interface. |

node

| Name | Type | Description |
|--------|------------------------|-------------|
| _links | _links | |
| name | string | |
| uuid | string | |

svm

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

vscan_event

| Name | Type | Description |
|-------------------|--------|--|
| disconnect_reason | string | <p>Specifies the reason of the Vscan server disconnection. The available values are:</p> <ul style="list-style-type: none"> • na Not applicable • vscan_disabled Vscan disabled on the SVM • no_data_lif SVM does not have data lif on the node • session_uninitialized Session not initialized • remote_closed Closure from Server • invalid_protocol_msg Invalid protocol-message received • invalid_session_id Invalid session-id received • inactive_connection No activity on connection • invalid_user Connection request by invalid user • server_removed Server removed from the active scanner-pool |
| event_time | string | Specifies the Timestamp of the event. |

| Name | Type | Description |
|-----------|---------------------------|---|
| file_path | string | Specifies the file for which event happened. |
| interface | interface | Address of the interface used for the Vscan connection. |
| node | node | |
| server | string | Specifies the IP address of the Vscan server. |
| svm | svm | |
| type | string | Specifies the event type. |
| vendor | string | Specifies the scan-engine vendor. |
| version | string | Specifies the scan-engine version. |

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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