NetApp

View and create Vscan configuration

ONTAP 9.8 REST API reference

NetApp
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Protocols Vscan endpoint overview

Overview

Use Vscan to protect data from being compromised by viruses or other malicious code. Vscan 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 third party vendors. An Antivirus Connector on the external server handles communications between the storage system and the antivirus software.

Examples

Retrieving all of the Vscan configurations

```
# The API:
/api/protocols/vscan

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

# The response:
{
"records": [
  {
    "svm": {
      "uuid": "03ce5c36-f269-11e8-8852-0050568e5298",
      "name": "vs1"
    },
    "enabled": true,
    "scanner_pools": [
      {
        "name": "scanner-1",
        "servers": [
          "1.1.1.1",
          "10.72.204.27"
        ],
        "privileged_users": [
          "cifs\\u1",
          "cifs\\u2"
        ],
        "role": "primary",
        "cluster": {
```

```
          "name": "Cluster1",
          "uuid": "0228714d-f268-11e8-8851-0050568e5298"
        }
      },
      {
        "name": "scanner-2",
        "servers": [
          "1.1.1.1",
          "10.72.204.27"
        ],
        "privileged_users": [
          "cifs\\u1",
          "cifs\\u2"
        ],
        "role": "primary",
        "cluster": {
          "name": "Cluster1",
          "uuid": "0228714d-f268-11e8-8851-0050568e5298"
        }
      }
    ],
    "on_access_policies": [
      {
        "name": "default_CIFS",
        "vsName": "vs1",
        "enabled": true,
        "mandatory": true,
        "scope": {
          "max_file_size": 2147483648,
          "include_extensions": [
            "*"
          ],
          "scan_without_extension": true,
          "scan_readonly_volumes": false,
          "only_execute_access": false
        }
      },
      {
        "name": "on-access-test1",
        "vsName": "vs1",
        "enabled": false,
        "mandatory": true,
        "scope": {
          "max_file_size": 10000,
          "exclude_paths": [
            "\\dir"
```

```
        ],
        "include_extensions": [
          "mp*",
          "txt"
        ],
        "exclude_extensions": [
          "mp*",
          "txt"
        ],
        "scan_without_extension": true,
        "scan_readonly_volumes": false,
        "only_execute_access": false
      }
    },
    {
      "name": "on-access-test2",
      "vsName": "vs1",
      "enabled": false,
      "mandatory": true,
      "scope": {
        "max_file_size": 10000,
        "exclude_paths": [
          "\\dir"
        ],
        "include_extensions": [
          "mp*",
          "txt"
        ],
        "exclude_extensions": [
          "mp*",
          "txt"
        ],
        "scan_without_extension": true,
        "scan_readonly_volumes": false,
        "only_execute_access": false
      }
    }
  ],
  "on_demand_policies": [
    {
      "name": "task-1",
      "scan_paths": [
        "/vol1"
      ],
      "log_path": "/vol1",
      "scope": {
```

```
          "max_file_size": 10000,
          "exclude_paths": [
            "/vol1"
          ],
          "include_extensions": [
            "vmdk",
            "mp*"
          ],
          "exclude_extensions": [
            "mp3",
            "mp4"
          ],
          "scan_without_extension": true
        }
      },
      {
        "name": "task-2",
        "scan_paths": [
          "/vol1"
        ],
        "log_path": "/vol2",
        "scope": {
          "max_file_size": 10000,
          "exclude_paths": [
            "/vol2"
          ],
          "include_extensions": [
            "vmdk",
            "mp*"
          ],
          "exclude_extensions": [
            "mp3",
            "mp4"
          ],
          "scan_without_extension": true
        }
      }
    ]
  },
  {
    "svm": {
      "uuid": "24c2567a-f269-11e8-8852-0050568e5298",
      "name": "vs2"
    },
    "enabled": false,
    "scanner_pools": [
```

```
    {
      "name": "sp2",
      "servers": [
        "1.1.1.1"
      ],
      "privileged_users": [
        "cifs\\u1"
      ],
      "role": "idle"
    }
  ],
  "on_access_policies": [
    {
      "name": "default_CIFS",
      "vsName": "vs2",
      "enabled": true,
      "mandatory": true,
      "scope": {
        "max_file_size": 2147483648,
        "include_extensions": [
          "*"
        ],
        "scan_without_extension": true,
        "scan_readonly_volumes": false,
        "only_execute_access": false
      }
    },
    {
      "name": "ap1",
      "vsName": "vs2",
      "enabled": false,
      "mandatory": true,
      "scope": {
        "max_file_size": 2147483648,
        "include_extensions": [
          "*"
        ],
        "scan_without_extension": true,
        "scan_readonly_volumes": false,
        "only_execute_access": false
      }
    }
  ],
  "on_demand_policies": [
    {
      "name": "t1",
```

```
          "scan_paths": [
            "/vol1"
          ],
          "log_path": "/vol1",
          "scope": {
            "max_file_size": 10737418240,
            "include_extensions": [
              "*"
            ],
            "scan_without_extension": true
          }
        }
      ]
    }
  ],
  "num_records": 2
}
```

Retrieving all Vscan configurations for a particular SVM

```
# The API:
/api/protocols/vscan/{svm.uuid}

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/vscan/24c2567a-f269-11e8-
8852-0050568e5298?fields=*" -H "accept: application/json"

# The response:
{
"svm": {
  "uuid": "24c2567a-f269-11e8-8852-0050568e5298",
  "name": "vs2"
},
"enabled": false,
"scanner_pools": [
  {
    "name": "sp2",
    "servers": [
      "1.1.1.1"
    ],
    "privileged_users": [
      "cifs\\u1"
    ],
    "role": "idle"
  }
```

```
    ],
  "on_access_policies": [
    {
      "name": "default_CIFS",
      "vsName": "vs2",
      "enabled": true,
      "mandatory": true,
      "scope": {
        "max_file_size": 2147483648,
        "include_extensions": [
          "*"
        ],
        "scan_without_extension": true,
        "scan_readonly_volumes": false,
        "only_execute_access": false
      }
    },
    {
      "name": "ap1",
      "vsName": "vs2",
      "enabled": false,
      "mandatory": true,
      "scope": {
        "max_file_size": 2147483648,
        "include_extensions": [
          "*"
        ],
        "scan_without_extension": true,
        "scan_readonly_volumes": false,
        "only_execute_access": false
      }
    }
  ],
  "on_demand_policies": [
    {
      "name": "t1",
      "scan_paths": [
        "/vol1"
      ],
      "log_path": "/vol1",
      "scope": {
        "max_file_size": 10737418240,
        "include_extensions": [
          "*"
        ],
        "scan_without_extension": true
```

```
      }
    }
  ]
}
```

Creating a Vscan configuration

```
# The API:
/api/protocols/vscan

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/vscan?return_records=true"
-H "accept: appication/json" -H "Content-Type: application/json" -d "{
\"enabled\": true, \"on_access_policies\": [ { \"enabled\": true,
\"mandatory\": true, \"name\": \"on-access-test\", \"scope\": {
\"exclude_extensions\": [ \"mp*\", \"txt\" ], \"exclude_paths\": [
\"\\\\\vol\" ], \"include_extensions\": [ \"mp*\", \"txt\" ],
\"max_file_size\": 21474, \"only_execute_access\": false,
\"scan_readonly_volumes\": false, \"scan_without_extension\": true } } ],
\"on_demand_policies\": [ { \"log_path\": \"/vol\", \"name\": \"task-1\",
\"scan_paths\": [ \"/vol\" ], \"schedule\": { \"name\": \"daily\",
\"uuid\": \"d4984822-17b7-11e9-b450-0050568ecd85\" }, \"scope\": {
\"exclude_extensions\": [ \"mp3\", \"mp4\" ], \"exclude_paths\": [
\"/vol\" ], \"include_extensions\": [ \"vmdk\", \"mp*\" ],
\"max_file_size\": 10737, \"scan_without_extension\": true } } ],
\"scanner_pools\": [ { \"cluster\": { \"name\": \"Cluster1\", \"uuid\":
\"ab746d77-17b7-11e9-b450-0050568ecd85\" }, \"name\": \"scanner-1\",
\"privileged_users\": [ \"cifs\\\\u1\", \"cifs\\\\u2\" ], \"role\":
\"primary\", \"servers\": [ \"1.1.1.1\", \"10.72.204.27\" ] } ], \"svm\":
{ \"name\": \"vs1\", \"uuid\": \"b103be27-17b8-11e9-b451-0050568ecd85\"
}}"

# The response:
{
"num_records": 1,
"records": [
  {
    "svm": {
    "uuid": "b103be27-17b8-11e9-b451-0050568ecd85",
    "name": "vs1"
    },
    "enabled": true,
    "scanner_pools": [
      {
        "name": "scanner-1",
```

```json
      "servers": [
        "1.1.1.1",
        "10.72.204.27"
      ],
      "privileged_users": [
        "cifs\\u1",
        "cifs\\u2"
      ],
      "role": "primary",
      "cluster": {
        "name": "Cluster1",
        "uuid": "ab746d77-17b7-11e9-b450-0050568ecd85"
      }
    }
  ],
  "on_access_policies": [
    {
      "name": "on-access-test",
      "enabled": true,
      "mandatory": true,
      "scope": {
        "max_file_size": 21474,
        "exclude_paths": [
          "\\vol"
        ],
        "include_extensions": [
          "mp*",
          "txt"
        ],
        "exclude_extensions": [
          "mp*",
          "txt"
        ],
        "scan_without_extension": true,
        "scan_readonly_volumes": false,
        "only_execute_access": false
      }
    }
  ],
  "on_demand_policies": [
    {
      "name": "task-1",
      "scan_paths": [
        "/vol"
      ],
      "log_path": "/vol",
```

```
          "schedule": {
            "uuid": "d4984822-17b7-11e9-b450-0050568ecd85",
            "name": "daily"
          },
          "scope": {
            "max_file_size": 10737,
            "exclude_paths": [
              "//"
            ],
            "include_extensions": [
              "vmdk",
              "mp*"
            ],
            "exclude_extensions": [
              "mp3",
              "mp4"
            ],
            "scan_without_extension": true
          }
        }
      ]
    }
  ]
}
```

Creating multiple Vscan scanner-pools for the specified SVM

```
# The API:
/api/protocols/vscan

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/vscan?return_records=true"
-H "accept: appication/json" -H "Content-Type: application/json" -d "{
\"scanner_pools\": [ { \"cluster\": { \"name\": \"Cluster1\", \"uuid\":
\"ab746d77-17b7-11e9-b450-0050568ecd85\" }, \"name\": \"scanner-1\",
\"privileged_users\": [ \"cifs\\\\u1\", \"cifs\\\\u2\" ], \"role\":
\"primary\", \"servers\": [ \"1.1.1.1\", \"10.72.204.27\" ] }, {
\"cluster\": { \"name\": \"Cluster1\", \"uuid\": \"ab746d77-17b7-11e9-
b450-0050568ecd85\" }, \"name\": \"scanner-2\", \"privileged_users\": [
\"cifs\\\\u3\", \"cifs\\\\u4\" ], \"role\": \"primary\", \"servers\": [
\"1.1.1.5\", \"10.72.3.27\" ] } ], \"svm\": { \"name\": \"vs1\", \"uuid\":
\"b103be27-17b8-11e9-b451-0050568ecd85\" }}"

# The response:
{
```

```
"num_records": 1,
"records": [
  {
    "svm": {
    "uuid": "b103be27-17b8-11e9-b451-0050568ecd85",
    "name": "vs1"
    },
    "scanner_pools": [
      {
        "name": "scanner-1",
        "servers": [
          "1.1.1.1",
          "10.72.204.27"
        ],
        "privileged_users": [
          "cifs\\u1",
          "cifs\\u2"
        ],
        "role": "primary",
        "cluster": {
          "name": "Cluster1",
          "uuid": "ab746d77-17b7-11e9-b450-0050568ecd85"
        }
      },
      {
        "name": "scanner-2",
        "servers": [
          "1.1.1.5",
          "10.72.3.27"
        ],
        "privileged_users": [
          "cifs\\u3",
          "cifs\\u4"
        ],
        "role": "primary",
        "cluster": {
          "name": "Cluster1",
          "uuid": "ab746d77-17b7-11e9-b450-0050568ecd85"
        }
      }
    ]
  }
]
}
```

Creating multiple Vscan On-access policies for a specified SVM

```
# The API:
/api/protocols/vscan

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/vscan?return_records=true"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
\"on_access_policies\": [ { \"enabled\": false, \"mandatory\": true,
\"name\": \"on-access-test11\", \"scope\": { \"exclude_extensions\": [
\"mp*\", \"txt\" ], \"exclude_paths\": [ \"\\\\vol\" ],
\"include_extensions\": [ \"mp*\", \"txt\" ], \"max_file_size\": 214748,
\"only_execute_access\": false, \"scan_readonly_volumes\": false,
\"scan_without_extension\": true } }, { \"enabled\": false, \"mandatory\":
true, \"name\": \"on-access-test10\", \"scope\": { \"exclude_extensions\":
[ \"mp*\", \"txt\" ], \"exclude_paths\": [ \"\\\\vol\" ],
\"include_extensions\": [ \"mp*\", \"txt\" ], \"max_file_size\": 21474,
\"only_execute_access\": false, \"scan_readonly_volumes\": false,
\"scan_without_extension\": true } } ], \"svm\": { \"name\": \"vs1\",
\"uuid\": \"b103be27-17b8-11e9-b451-0050568ecd85\" }}"

# The response:
{
"num_records": 1,
"records": [
  {
    "svm": {
      "uuid": "b103be27-17b8-11e9-b451-0050568ecd85",
      "name": "vs1"
    },
    "on_access_policies": [
      {
        "name": "on-access-test11",
        "enabled": false,
        "mandatory": true,
        "scope": {
          "max_file_size": 214748,
          "exclude_paths": [
            "\\vol"
          ],
          "include_extensions": [
            "mp*",
            "txt"
          ],
          "exclude_extensions": [
            "mp*",
```

```
              "txt"
            ],
            "scan_without_extension": true,
            "scan_readonly_volumes": false,
            "only_execute_access": false
          }
        },
        {
          "name": "on-access-test10",
          "enabled": false,
          "mandatory": true,
          "scope": {
            "max_file_size": 21474,
            "exclude_paths": [
              "\\vol"
            ],
            "include_extensions": [
              "mp*",
              "txt"
            ],
            "exclude_extensions": [
              "mp*",
              "txt"
            ],
            "scan_without_extension": true,
            "scan_readonly_volumes": false,
            "only_execute_access": false
          }
        }
      ]
    }
  ]
}
```

Creating multiple Vscan On-demand policies for a specified SVM

```
# The API:
/api/protocols/vscan

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/vscan?return_records=true"
-H "accept: application/json" -H "Content-Type: application/json" -d "{
\"on_demand_policies\": [ { \"log_path\": \"/vol\", \"name\": \"task-1\",
\"scan_paths\": [ \"/vol\" ], \"schedule\": { \"name\": \"daily\",
\"uuid\": \"d4984822-17b7-11e9-b450-0050568ecd85\" }, \"scope\": {
```

```
\"exclude_extensions\": [ \"mp3\", \"mp4\" ], \"exclude_paths\": [
\"/vol1\" ], \"include_extensions\": [ \"vmdk\", \"mp*\" ],
\"max_file_size\": 107374, \"scan_without_extension\": true } }, {
\"log_path\": \"/vol\", \"name\": \"task-2\", \"scan_paths\": [ \"/vol\"
], \"scope\": { \"exclude_extensions\": [ \"mp3\", \"mp4\" ],
\"exclude_paths\": [ \"/vol1\" ], \"include_extensions\": [ \"vmdk\",
\"mp*\" ], \"max_file_size\": 107374, \"scan_without_extension\": true } }
], \"svm\": { \"name\": \"vs1\", \"uuid\": \"b103be27-17b8-11e9-b451-
0050568ecd85\" }}"

# The response:
{
"num_records": 1,
"records": [
  {
    "svm": {
      "uuid": "b103be27-17b8-11e9-b451-0050568ecd85",
      "name": "vs1"
    },
    "on_demand_policies": [
      {
        "name": "task-1",
        "scan_paths": [
          "/vol"
        ],
        "log_path": "/vol",
        "schedule": {
          "uuid": "d4984822-17b7-11e9-b450-0050568ecd85",
          "name": "daily"
        },
        "scope": {
          "max_file_size": 107374,
          "exclude_paths": [
            "/vol1"
          ],
          "include_extensions": [
            "vmdk",
            "mp*"
          ],
          "exclude_extensions": [
            "mp3",
            "mp4"
          ],
          "scan_without_extension": true
        }
      },
```

```
      {
        "name": "task-2",
        "scan_paths": [
          "/vol"
        ],
        "log_path": "/vol",
        "scope": {
          "max_file_size": 107374,
          "exclude_paths": [
            "/vol1"
          ],
          "include_extensions": [
            "vmdk",
            "mp*"
          ],
          "exclude_extensions": [
            "mp3",
            "mp4"
          ],
          "scan_without_extension": true
        }
      }
    ]
  }
]
}
```

Enabling Vscan for a specified SVM

```
# The API:
/api/protocols/vscan/{svm.uuid}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/vscan/03ce5c36-f269-11e8-
8852-0050568e5298" -H "accept: application/json" -H "Content-Type:
application/json" -d "{ \"enabled\": true}"
```

Clearing the Vscan cache for the specified SVM

```
# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/vscan/03ce5c36-f269-11e8-
8852-0050568e5298" -H "accept: application/json" -H "Content-Type:
application/json" -d "{ \"cache_clear\": true}"
```

Deleting the Vscan configuration for a specified SVM

```
# The API:
/api/protocols/vscan/{svm.uuid}

# The call:
curl -X DELETE "https://<mgmt-ip>/api/protocols/vscan/03ce5c36-f269-11e8-
8852-0050568e5298" -H "accept: application/json"
```

Retrieve the Vscan configuration

GET `/protocols/vscan`

Introduced In: 9.6

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

Important notes:

- You can enable only one Vscan configuration at a time for an SVM.
- You can only query using `svm.uuid` or `svm.name`.

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 scanner-pool show-active`
- `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
on_access_policies. name	string	query	False	Filter by on_access_policies. name
on_access_policies. scope.only_execute _access	boolean	query	False	Filter by on_access_policies. scope.only_execute _access
on_access_policies. scope.include_exten sions	string	query	False	Filter by on_access_policies. scope.include_exten sions
on_access_policies. scope.exclude_exte nsions	string	query	False	Filter by on_access_policies. scope.exclude_exte nsions
on_access_policies. scope.scan_readonl y_volumes	boolean	query	False	Filter by on_access_policies. scope.scan_readonl y_volumes
on_access_policies. scope.exclude_path s	string	query	False	Filter by on_access_policies. scope.exclude_path s
on_access_policies. scope.max_file_size	integer	query	False	Filter by on_access_policies. scope.max_file_size
on_access_policies. scope.scan_without_ extension	boolean	query	False	Filter by on_access_policies. scope.scan_without _extension
on_access_policies. mandatory	boolean	query	False	Filter by on_access_policies. mandatory
on_access_policies. enabled	boolean	query	False	Filter by on_access_policies. enabled

Name	Type	In	Required	Description
enabled	boolean	query	False	Filter by enabled
on_demand_policies.scan_paths	string	query	False	Filter by on_demand_policies.scan_paths
on_demand_policies.log_path	string	query	False	Filter by on_demand_policies.log_path
on_demand_policies.scope.include_extensions	string	query	False	Filter by on_demand_policies.scope.include_extensions
on_demand_policies.scope.scan_without_extension	boolean	query	False	Filter by on_demand_policies.scope.scan_without_extension
on_demand_policies.scope.max_file_size	integer	query	False	Filter by on_demand_policies.scope.max_file_size
on_demand_policies.scope.exclude_paths	string	query	False	Filter by on_demand_policies.scope.exclude_paths
on_demand_policies.scope.exclude_extensions	string	query	False	Filter by on_demand_policies.scope.exclude_extensions
on_demand_policies.schedule.name	string	query	False	Filter by on_demand_policies.schedule.name
on_demand_policies.schedule.uuid	string	query	False	Filter by on_demand_policies.schedule.uuid
on_demand_policies.name	string	query	False	Filter by on_demand_policies.name

Name	Type	In	Required	Description
scanner_pools.cluster.name	string	query	False	Filter by scanner_pools.cluster.name
scanner_pools.cluster.uuid	string	query	False	Filter by scanner_pools.cluster.uuid
scanner_pools.role	string	query	False	Filter by scanner_pools.role
scanner_pools.privileged_users	string	query	False	Filter by scanner_pools.privileged_users
scanner_pools.name	string	query	False	Filter by scanner_pools.name
scanner_pools.servers	string	query	False	Filter by scanner_pools.servers
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
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. • Default value: 1

Name	Type	In	Required	Description
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached. • 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]	

Example response

```json
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "_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": [
        "/vol1/cold-files/",
        "/vol1/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
next	href	
self	href	

_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
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 ame
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

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	

vscan_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. • example: ["cifs\u1", "cifs\u2"] • Introduced in: 9.6 • x-omitemtpy: true
role	string	Specifies the role of the scanner pool. The possible values are: • 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. • example: ["1.1.1.1", "10.72.204.27", "vmwin204-27.fsct.nb"] • Introduced in: 9.6 • x-omitemtpy: true

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	

Name	Type	Description
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]	
scanner_pools	array[vscan_scanner_pool]	
svm	svm	SVM, applies only to SVM-scoped objects.

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[error_arguments]	Message arguments

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

Create a Vscan configuration

POST `/protocols/vscan`

Introduced In: 9.6

Creates a Vscan configuration, which includes a list of scanner-pools, Vscan On-Access policies and Vscan On-Demand policies. Defines whether the Vscan configuration you create is enabled or disabled for a specified SVM.

Important notes:

- You can enable only one Vscan configuration at a time for an SVM.
- There needs to be at least one active scanner-pool and one enabled On-Access policy to enable Vscan successfully.
- By default, a Vscan is enabled when it's created.
- By default, the Vscan On-Access policies created from this endpoint are in the disabled state. You can use the On-Access policy PATCH endpoint to enable a particular On-Access policy. In ONTAP 9.6, only one Vscan On-Access policy can be enabled and only one Vscan On-Demand policy can be scheduled on an SVM.

Required properties

- `svm.uuid` or `svm.name` - Existing SVM in which to create the Vscan configuration.

Recommended optional properties

- `scanner_pools` - There must be at least one active scanner-pool for Vscan configuration. Created either through Vscan POST operation or scanner-pools POST operation.

Default property values

If not specified in POST, the following default property value is assigned:

- `enabled` - *true*

Related ONTAP commands

- `vserver vscan enable`

- `vserver vscan scanner-pool create`

- `vserver vscan scanner-pool apply-policy`

- `vserver vscan scanner-pool servers add`

- `vserver vscan scanner-pool privileged-users add`

- `vserver vscan on-access-policy create`

- `vserver vscan on-access-policy file-ext-to-exclude add`

- `vserver vscan on-access-policy file-ext-to-include add`

- `vserver vscan on-access-policy paths-to-exclude add`

- `vserver vscan on-demand-task create`

Learn more

- DOC /protocols/vscan

- DOC /protocols/vscan/{svm.uuid}/scanner-pools

Parameters

Name	Type	In	Required	Description
return_records	boolean	query	False	The default is false. If set to true, the records are returned. • Default value:

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]	
scanner_pools	array[vscan_scanner_pool]	

Name	Type	Description
svm	svm	SVM, applies only to SVM-scoped objects.

Name	Type	Description
svm	svm	SVM, applies only to SVM-scoped objects.

Example request

```json
{
  "_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",
```

```json
        "mp4"
      ],
      "exclude_paths": [
        "/vol1/cold-files/",
        "/vol1/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: 201, Created
```

Name	Type	Description
_links	_links	
num_records	integer	Number of records
records	array[vscan]	

Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "_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": {
```

```json
            "href": "/api/resourcelink"
          }
        },
        "name": "weekly",
        "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
      },
      "scope": {
        "exclude_extensions": [
          "mp3",
          "mp4"
        ],
        "exclude_paths": [
          "/vol1/cold-files/",
          "/vol1/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
```

ONTAP Error Response Codes

Error Code	Description
10027259	A scanner-pool, an On-Access policy, or an On-Demand policy might fail to get created 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, if a scanner-pool fails due to an incorrect cluster name, then the error might read: "Failed to create scanner-pool "scanner-1". Reason: "Cluster uuid points to different cluster name instead of the cluster-name supplied.". Retry the operation."
10027260	If a scanner-pool, an On-Access policy or an On-Demand policy specified in the input already exists, then a duplicate error is returned. For example, if a scanner-pool "scanner-1" already exists for an SVM and is again specified in the input, the error message will read: " Failed to create scanner-pool "scanner-1" as the specified entry already exists. Delete the entry and retry the POST operation."
2621462	The specified SVM name is invalid
2621706	The specified svm.uuid is either invalid or belongs to a different SVM
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 exist

Name	Type	Description
error	error	

Example error

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

Definitions

See Definitions

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 ame
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

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	

vscan_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. • example: ["cifs\u1", "cifs\u2"] • Introduced in: 9.6 • x-omitemtpy: true
role	string	Specifies the role of the scanner pool. The possible values are: • 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. • example: ["1.1.1.1", "10.72.204.27", "vmwin204-27.fsct.nb"] • Introduced in: 9.6 • x-omitemtpy: true

svm

SVM, applies only to SVM-scoped objects.

Name	Type	Description
_links	_links	

Name	Type	Description
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]	
scanner_pools	array[vscan_scanner_pool]	
svm	svm	SVM, applies only to SVM-scoped objects.

_links

Name	Type	Description
next	href	
self	href	

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

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