Manage SVM FPolicy configuration

ONTAP 9.14.1 REST API reference

NetApp
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Overview

The FPolicy policy acts as a container for different constituents of the FPolicy such as FPolicy events and the FPolicy engine. It also provides a platform for policy management functions, such as policy enabling and disabling. As part of FPolicy policy configuration, you can specify the name of policy, the SVM to which it belongs, the FPolicy events to monitor, the FPolicy engine to which the generated notifications are sent and the policy priority. FPolicy policy configuration also allows to you to configure the file access behaviour when the primary and secondary servers are down. Under such circumstances, if the "mandatory" field is set to true, file access is denied.

Each FPolicy policy is associated with a scope which allows you to restrain the scope of the policy to specified storage objects such as volume, shares and export or to a set of file extensions such as .txt, .jpeg. An FPolicy policy can be configured to send notifications, to the FPolicy server or for native file blocking which uses the file extension specified in the policy scope. An SVM can have multiple FPolicy policies which can be enabled or disabled independently of each other.

Examples

Creating an FPolicy policy

Use the following API to create an FPolicy policy configuration. Note that the *return_records=true* query parameter used to obtain the newly created entry in the response.

```
# The API:
POST /protocols/fpolicy/{svm.uuid}/policies

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/fpolicy/a00fac5d-0164-11e9-
b64a-0050568eeb34/policies?return_records=true" -H "accept:
application/json" -H "Content-Type: application/json" -d "{ \"engine\": {
\"name\": \"engine1\" }, \"events\": [ { \"name\": \"cifs\" }, { \"name\":
\"nfs\" } ], \"mandatory\": true, \"name\": \"FPolicy_policy_0\",
\"passthrough_read\": true, \"privileged_user\": \"mydomain\\\\testuser\",
\"scope\": { \"exclude_export_policies\": [ \"export_pol1\" ],
\"exclude_extension\": [ \"txt\", \"png\" ], \"exclude_shares\": [ \"sh1\"
], \"exclude_volumes\": [ \"vol0\" ], \"include_export_policies\": [
\"export_pol10\" ], \"include_extension\": [ \"pdf\" ],
\"include_shares\": [ \"sh2\", \"sh3\" ], \"include_volumes\": [ \"vol1\",
\"vol2\" ] }}"

# The response:
{
```

```
"num_records": 1,
"records": [
  {
    "name": "FPolicy_policy_0",
    "events": [
      {
        "name": "cifs"
      },
      {
        "name": "nfs"
      }
      ],
    "engine": {
      "name": "engine1"
    },
    "scope": {
      "include_shares": [
        "sh2",
        "sh3"
      ],
      "exclude_shares": [
        "sh1"
      ],
      "include_volumes": [
        "vol1",
        "vol2"
      ],
      "exclude_volumes": [
        "vol0"
      ],
      "include_export_policies": [
        "export_pol10"
      ],
      "exclude_export_policies": [
        "export_pol1"
      ],
      "include_extension": [
        "pdf"
      ],
      "exclude_extension": [
        "txt",
        "png"
      ]
    },
    "mandatory": true,
    "privileged_user": "mydomain\\testuser",
```

```
    "passthrough_read": true
  }
]
}
```

Creating and enable an FPolicy policy

```
# The API:
POST /protocols/fpolicy/{svm.uuid}/policies

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/fpolicy/a00fac5d-0164-11e9-
b64a-0050568eeb34/policies?return_records=true" -H "accept:
application/json" -H "Content-Type: application/json" -d "{ \"priority\":
1, \"engine\": { \"name\": \"engine1\" }, \"events\": [ { \"name\":
\"cifs\" }, { \"name\": \"nfs\" } ], \"mandatory\": true, \"name\":
\"FPolicy_policy_on\", \"passthrough_read\": false, \"scope\": {
\"exclude_export_policies\": [ \"export_pol1\" ], \"exclude_extension\": [
\"txt\", \"png\" ], \"exclude_shares\": [ \"sh1\" ], \"exclude_volumes\":
[ \"vol0\" ], \"include_export_policies\": [ \"export_pol10\" ],
\"include_extension\": [ \"pdf\" ], \"include_shares\": [ \"sh2\", \"sh3\"
], \"include_volumes\": [ \"vol1\", \"vol2\" ] }}"

# The response:
{
"num_records": 1,
"records": [
  {
   "name": "FPolicy_policy_0",
   "priority": 1,
   "events": [
     {
       "name": "cifs"
     },
     {
       "name": "nfs"
     }
   ],
   "engine": {
     "name": "engine1"
   },
   "scope": {
```

```
      "include_shares": [
        "sh2",
        "sh3"
      ],
      "exclude_shares": [
        "sh1"
      ],
      "include_volumes": [
        "vol1",
        "vol2"
      ],
      "exclude_volumes": [
        "vol0"
      ],
      "include_export_policies": [
        "export_pol10"
      ],
      "exclude_export_policies": [
        "export_pol1"
      ],
      "include_extension": [
        "pdf"
      ],
      "exclude_extension": [
        "txt",
        "png"
      ]
    },
    "mandatory": true,
    "privileged_user": "mydomain\\testuser",
    "passthrough_read": true
  }
  ]
}
```


Creating an FPolicy policy with the minimum required fields and a native engine

```
# The API:
POST /protocols/fpolicy/{svm.uuid}/policies

# The call:
curl -X POST "https://<mgmt-ip>/api/protocols/fpolicy/a00fac5d-0164-11e9-
b64a-0050568eeb34/policies?return_records=true" -H "accept:
application/json" -H "Content-Type: application/json" -d "{ \"events\": [
{ \"name\": \"cifs\" }, { \"name\": \"nfs\" } ], \"name\":
\"pol_minimum_fields\", \"scope\": { \"include_volumes\": [ \"vol1\",
\"vol2\" ] }}"

# The response:
{
"num_records": 1,
"records": [
  {
    "name": "pol_minimum_fields",
    "events": [
      {
        "name": "cifs"
      },
      {
        "name": "nfs"
      }
    ],
    "scope": {
      "include_volumes": [
        "vol1",
        "vol2"
      ]
    }
  }
]
}
```

Retrieving all the FPolicy policy configurations for an SVM

```
# The API:
GET /protocols/fpolicy/{svm.uuid}/policies

# The call:
```

```
curl -X GET "https://<mgmt-ip>/api/protocols/fpolicy/a00fac5d-0164-11e9-
b64a-0050568eeb34/policies?fields=*&return_records=true&return_timeout=15"
-H "accept: application/json"

# The response:
{
"records": [
  {
    "svm": {
      "uuid": "a00fac5d-0164-11e9-b64a-0050568eeb34"
    },
    "name": "pol0",
    "enabled": false,
    "events": [
      {
        "name": "cifs"
      },
      {
        "name": "nfs"
      }
    ],
    "engine": {
      "name": "engine1"
    },
    "scope": {
      "include_shares": [
        "sh2",
        "sh3"
      ],
      "exclude_shares": [
        "sh1"
      ],
      "include_volumes": [
        "vol1",
        "vol2"
      ],
      "exclude_volumes": [
        "vol0"
      ],
      "include_export_policies": [
        "export_pol10"
      ],
      "exclude_export_policies": [
        "export_pol1"
      ],
      "include_extension": [
```

```
        "pdf"
      ],
      "exclude_extension": [
        "txt",
        "png"
      ]
    },
    "mandatory": true,
    "passthrough_read": false,
    "allow_privileged_access": false,
    "persistent_store": "ps1"
  },
  {
    "svm": {
      "uuid": "a00fac5d-0164-11e9-b64a-0050568eeb34"
    },
    "name": "FPolicy_policy_on",
    "enabled": true,
    "priority": 1,
    "events": [
      {
        "name": "cifs"
      },
      {
        "name": "nfs"
      }
    ],
    "engine": {
      "name": "engine1"
    },
     "scope": {
      "include_shares": [
        "sh2",
        "sh3"
      ],
      "exclude_shares": [
        "sh1"
      ],
      "include_volumes": [
        "vol1",
        "vol2"
      ],
      "exclude_volumes": [
        "vol0"
      ],
      "include_export_policies": [
```

```
        "export_pol10"
      ],
      "exclude_export_policies": [
        "export_pol1"
      ],
      "include_extension": [
        "pdf"
      ],
      "exclude_extension": [
        "txt",
        "png"
      ]
    },
    "mandatory": true,
    "passthrough_read": false,
    "allow_privileged_access": false,
    "persistent_store": "ps1"
  },
  {
    "svm": {
      "uuid": "a00fac5d-0164-11e9-b64a-0050568eeb34"
    },
    "name": "cluster_pol",
    "enabled": false,
    "events": [
      {
        "name": "cluster"
      }
    ],
    "engine": {
      "name": "native"
    },
    "mandatory": true,
    "passthrough_read": false,
    "allow_privileged_access": false,
    "persistent_store": "ps1"
  },
  {
    "svm": {
      "uuid": "a00fac5d-0164-11e9-b64a-0050568eeb34"
    },
    "name": "pol_minimum_fields",
    "enabled": false,
    "events": [
      {
        "name": "cifs"
```

```
      },
      {
        "name": "nfs"
      }
    ],
    "engine": {
      "name": "native"
    },
    "scope": {
      "include_volumes": [
        "vol1",
        "vol2"
      ]
    },
    "mandatory": true,
    "passthrough_read": false,
    "allow_privileged_access": false,
    "persistent_store": "ps1"
  }
],
"num_records": 4
}
```

Retrieving all of the FPolicy policy configurations for the FPolicy engine "engine1" for an SVM

```
# The API:
GET /protocols/fpolicy/{svm.uuid}/policies/{name}

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/fpolicy/a00fac5d-0164-11e9-
b64a-
0050568eeb34/policies?engine.name=engine1&fields=*&return_records=true&ret
urn_timeout=15" -H "accept: application/json"

# The response:
{
"records": [
  {
    "svm": {
      "uuid": "a00fac5d-0164-11e9-b64a-0050568eeb34"
    },
    "name": "pol0",
```

```
    "enabled": false,
    "events": [
      {
        "name": "cifs"
      },
      {
        "name": "nfs"
      }
    ],
    "engine": {
      "name": "engine1"
    },
    "scope": {
      "include_export_policies": [
        "export_pol10"
      ],
      "exclude_export_policies": [
        "export_pol1"
      ],
      "include_extension": [
        "pdf"
      ],
      "exclude_extension": [
        "txt",
        "png"
      ]
    },
    "mandatory": true,
    "passthrough_read": false,
    "allow_privileged_access": false,
    "persistent_store": "ps1"
  },
  {
    "svm": {
      "uuid": "a00fac5d-0164-11e9-b64a-0050568eeb34"
    },
    "name": "FPolicy_policy_on",
    "enabled": true,
    "priority": 1,
    "events": [
      {
        "name": "cifs"
      },
      {
        "name": "nfs"
      }
```

```
    ],
    "engine": {
      "name": "engine1"
    },
    "scope": {
      "include_shares": [
        "sh2",
        "sh3"
      ],
      "exclude_shares": [
        "sh1"
      ],
      "include_volumes": [
        "vol1",
        "vol2"
      ],
      "exclude_volumes": [
        "vol0"
      ],
      "include_export_policies": [
        "export_pol10"
      ],
      "exclude_export_policies": [
        "export_pol1"
      ],
      "include_extension": [
        "pdf"
      ],
      "exclude_extension": [
        "txt",
        "png"
      ]
    },
    "mandatory": true,
    "passthrough_read": false,
    "allow_privileged_access": false,
    "persistent_store": "ps1"
  }
],
"num_records": 2
}
```

Retrieving a particular FPolicy policy configuration for an SVM

```
# The API:
GET /protocols/fpolicy/{svm.uuid}/policies/{name}

# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/fpolicy/a00fac5d-0164-11e9-
b64a-0050568eeb34/policies/pol0" -H "accept: application/json"

# The response:
{
"svm": {
  "uuid": "a00fac5d-0164-11e9-b64a-0050568eeb34"
},
"name": "pol0",
"enabled": false,
"events": [
  {
    "name": "cifs"
  },
  {
    "name": "nfs"
  }
],
"engine": {
  "name": "engine1"
},
"scope": {
  "include_shares": [
    "sh2",
    "sh3"
  ],
  "exclude_shares": [
    "sh1"
  ],
  "include_volumes": [
    "vol1",
    "vol2"
  ],
  "exclude_volumes": [
    "vol0"
  ],
  "include_export_policies": [
    "export_pol10"
```

```
  ],
  "exclude_export_policies": [
    "export_pol1"
  ],
  "include_extension": [
     "pdf"
  ],
  "exclude_extension": [
    "txt",
    "png"
  ]
},
"mandatory": true,
"passthrough_read": false,
"allow_privileged_access": false,
"persistent_store": "ps1"
}
```

Updating a particular FPolicy policy

```
# The API:
PATCH /protocols/fpolicy/{svm.uuid}/policies/{name}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/fpolicy/a00fac5d-0164-11e9-
b64a-0050568eeb34/policies/pol0" -H "accept: application/json" -H
"Content-Type: application/json" -d "{ \"engine\": { \"name\": \"native\"
}, \"events\": [ { \"name\": \"cifs\" } ], \"mandatory\": false,
\"scope\": { \"include_volumes\": [ \"*\" ] }}"
```

Enabling a particular FPolicy policy

```
# The API:
PATCH /protocols/fpolicy/{svm.uuid}/policies/{name}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/fpolicy/a00fac5d-0164-11e9-
b64a-0050568eeb34/policies/pol0" -H "accept: application/json" -H
"Content-Type: application/json" -d "{ \"enabled\": true, \"priority\":
3}"
```

Disabling a particular FPolicy policy

```
# The API:
PATCH /protocols/fpolicy/{svm.uuid}/policies/{name}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/fpolicy/a00fac5d-0164-11e9-
b64a-0050568eeb34/policies/pol0" -H "accept: application/json" -H
"Content-Type: application/json" -d "{ \"enabled\": true }"
```

Retrieve an FPolicy configuration for an SVM

GET `/protocols/fpolicy/{svm.uuid}/policies`

Introduced In: 9.6

Retrieves the FPolicy policy configuration of an SVM. ONTAP allows the creation of a cluster level FPolicy policy that acts as a template for all the data SVMs belonging to the cluster. This cluster level FPolicy policy is also retrieved for the specified SVM.

Related ONTAP commands

- `fpolicy policy show`
- `fpolicy policy scope show`

Learn more

- DOC /protocols/fpolicy/{svm.uuid}/policies

Parameters

Name	Type	In	Required	Description
persistent_store	string	query	False	Filter by persistent_store • Introduced in: 9.14
allow_privileged_access	boolean	query	False	Filter by allow_privileged_access • Introduced in: 9.13
name	string	query	False	Filter by name
scope.exclude_volumes	string	query	False	Filter by scope.exclude_volumes
scope.include_shares	string	query	False	Filter by scope.include_shares
scope.exclude_extension	string	query	False	Filter by scope.exclude_extension
scope.include_extension	string	query	False	Filter by scope.include_extension
scope.include_volumes	string	query	False	Filter by scope.include_volumes
scope.object_monitoring_with_no_extension	boolean	query	False	Filter by scope.object_monitoring_with_no_extension • Introduced in: 9.11
scope.include_export_policies	string	query	False	Filter by scope.include_export_policies

Name	Type	In	Required	Description
scope.exclude_export_policies	string	query	False	Filter by scope.exclude_export_policies
scope.check_extensions_on_directories	boolean	query	False	Filter by scope.check_extensions_on_directories • Introduced in: 9.11
scope.exclude_shares	string	query	False	Filter by scope.exclude_shares
passthrough_read	boolean	query	False	Filter by passthrough_read • Introduced in: 9.10
events.name	string	query	False	Filter by events.name
privileged_user	string	query	False	Filter by privileged_user • Introduced in: 9.10
priority	integer	query	False	Filter by priority • Max value: 10 • Min value: 1
enabled	boolean	query	False	Filter by enabled
mandatory	boolean	query	False	Filter by mandatory
engine.name	string	query	False	Filter by engine.name
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.

Name	Type	In	Required	Description
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
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. • Max value: 120 • Min value: 0 • 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[fpolicy_policy]	

Example response


```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "engine": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      }
    },
    "events": [
      "event_cifs",
      "event_open"
    ],
    "name": "fp_policy_1",
    "persistent_store": "ps1",
    "priority": 1,
    "privileged_user": "mydomain\\testuser",
    "scope": {
      "exclude_export_policies": {
      },
      "exclude_extension": {
      },
      "exclude_shares": {
      },
      "exclude_volumes": [
        "vol1",
        "vol_svm1",
        "*"
      ],
      "include_export_policies": {
      },
      "include_extension": {
      },
      "include_shares": [
        "sh1",
```

```
          "share_cifs"
        ],
        "include_volumes": [
          "vol1",
          "vol_svm1"
        ]
      },
      "svm": {
        "uuid": "string"
      }
    }
  }
```


Error

```
Status: Default, Error
```

Name	Type	Description
error	returned_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	

fpolicy_engine_reference

FPolicy external engine

Name	Type	Description
_links	_links	
name	string	The name of the FPolicy external engine.

fpolicy_event_reference

FPolicy events

Name	Type	Description
_links	_links	
name	string	

scope

Name	Type	Description
check_extensions_on_directories	boolean	Specifies whether the file name extension checks also apply to directory objects. If this parameter is set to true, the directory objects are subjected to the same extension checks as regular files. If this parameter is set to false, the directory names are not matched for extensions and notifications are sent for directories even if their name extensions do not match. Default is false.
exclude_export_policies	array[string]	
exclude_extension	array[string]	
exclude_shares	array[string]	
exclude_volumes	array[string]	
include_export_policies	array[string]	
include_extension	array[string]	
include_shares	array[string]	
include_volumes	array[string]	
object_monitoring_with_no_extension	boolean	Specifies whether the extension checks also apply to objects with no extension. If this parameter is set to true, all objects with or without extensions are monitored. Default is false.

svm

Name	Type	Description
uuid	string	SVM UUID

fpolicy_policy

Name	Type	Description
allow_privileged_access	boolean	Specifies whether privileged access is required for FPolicy servers. Privileged access is used when the FPolicy server requires direct access to the cluster nodes. When this parameter is set to true, FPolicy servers can access files on the cluster using a separate data channel with privileged access.
enabled	boolean	Specifies if the policy is enabled on the SVM or not. If no value is mentioned for this field but priority is set, then this policy will be enabled.
engine	fpolicy_engine_reference	FPolicy external engine
events	array[fpolicy_event_reference]	
mandatory	boolean	Specifies what action to take on a file access event in a case when all primary and secondary servers are down or no response is received from the FPolicy servers within a given timeout period. When this parameter is set to true, file access events will be denied under these circumstances.
name	string	Specifies the name of the policy.
passthrough_read	boolean	Specifies whether passthrough-read should be allowed for FPolicy servers registered for the policy. Passthrough-read is a way to read data for offline files without restoring the files to primary storage. Offline files are files that have been moved to secondary storage.
persistent_store	string	Specifies the persistent storage name. This can then be used to enable persistent mode for FPolicy events.

Name	Type	Description
priority	integer	Specifies the priority that is assigned to this policy.
privileged_user	string	Specifies the privileged user name for accessing files on the cluster using a separate data channel with privileged access. The input for this field should be in "domain\username" format.
scope	scope	
svm	svm	

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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 an FPolicy configuration for an SVM

POST `/protocols/fpolicy/{svm.uuid}/policies`

Introduced In: 9.6

Creates an FPolicy policy configuration for the specified SVM. To create an FPolicy policy, you must specify the policy scope and the FPolicy events to be monitored.

Important notes:

- A single policy can monitor multiple events.

- An FPolicy engine is an optional field whose default value is set to native. A native engine can be used to simply block the file access based on the file extensions specified in the policy scope.
- To enable a policy, the policy priority must be specified. If the priority is not specified, the policy is created but it is not enabled.
- The "mandatory" field, if set to true, blocks the file access when the primary or secondary FPolicy servers are down.

Required properties

- `svm.uuid` - Existing SVM in which to create the FPolicy policy.
- `events` - Name of the events to monitior.
- `name` - Name of the FPolicy policy.
- `scope` - Scope of the policy. Can be limited to exports, volumes, shares or file extensions.
- `priority`- Priority of the policy (ranging from 1 to 10).

Default property values

- `mandatory` - *true*
- `engine` - *native*

Related ONTAP commands

- `fpolicy policy scope create`
- `fpolicy policy create`
- `fpolicy enable`

Learn more

- DOC /protocols/fpolicy/{svm.uuid}/policies

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:
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.

Request Body

Name	Type	Description
allow_privileged_access	boolean	Specifies whether privileged access is required for FPolicy servers. Privileged access is used when the FPolicy server requires direct access to the cluster nodes. When this parameter is set to true, FPolicy servers can access files on the cluster using a separate data channel with privileged access.
enabled	boolean	Specifies if the policy is enabled on the SVM or not. If no value is mentioned for this field but priority is set, then this policy will be enabled.
engine	fpolicy_engine_reference	FPolicy external engine
events	array[fpolicy_event_reference]	
mandatory	boolean	Specifies what action to take on a file access event in a case when all primary and secondary servers are down or no response is received from the FPolicy servers within a given timeout period. When this parameter is set to true, file access events will be denied under these circumstances.
name	string	Specifies the name of the policy.
passthrough_read	boolean	Specifies whether passthrough-read should be allowed for FPolicy servers registered for the policy. Passthrough-read is a way to read data for offline files without restoring the files to primary storage. Offline files are files that have been moved to secondary storage.
persistent_store	string	Specifies the persistent storage name. This can then be used to enable persistent mode for FPolicy events.

Name	Type	Description
priority	integer	Specifies the priority that is assigned to this policy.
privileged_user	string	Specifies the privileged user name for accessing files on the cluster using a separate data channel with privileged access. The input for this field should be in "domain\username" format.
scope	scope	
svm	svm	

Example request

```
{
  "engine": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "events": [
    "event_cifs",
    "event_open"
  ],
  "name": "fp_policy_1",
  "persistent_store": "ps1",
  "priority": 1,
  "privileged_user": "mydomain\\testuser",
  "scope": {
    "exclude_export_policies": {
    },
    "exclude_extension": {
    },
    "exclude_shares": {
    },
    "exclude_volumes": [
      "vol1",
      "vol_svm1",
      "*"
    ],
    "include_export_policies": {
    },
    "include_extension": {
    },
    "include_shares": [
      "sh1",
      "share_cifs"
    ],
    "include_volumes": [
      "vol1",
      "vol_svm1"
    ]
  },
  "svm": {
    "uuid": "string"
  }
}
```

Response

```
Status: 201, Created
```

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

Example response


```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "num_records": 1,
  "records": {
    "engine": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      }
    },
    "events": [
      "event_cifs",
      "event_open"
    ],
    "name": "fp_policy_1",
    "persistent_store": "ps1",
    "priority": 1,
    "privileged_user": "mydomain\\testuser",
    "scope": {
      "exclude_export_policies": {
      },
      "exclude_extension": {
      },
      "exclude_shares": {
      },
      "exclude_volumes": [
        "vol1",
        "vol_svm1",
        "*"
      ],
      "include_export_policies": {
      },
      "include_extension": {
      },
      "include_shares": [
        "sh1",
```

```
          "share_cifs"
        ],
        "include_volumes": [
          "vol1",
          "vol_svm1"
        ]
      },
      "svm": {
        "uuid": "string"
      }
    }
  }
```


Headers

Name	Description	Type
Location	Useful for tracking the resource location	string

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
9764875	An FPolicy event does not exist
9764888	An FPolicy engine does not exist
9764898	An FPolicy policy cannot be created without defining its scope
9765027	FPolicy creation is successful but it cannot be enabled as the priority is already in use by another policy
9765037	FPolicy creation failed as passthrough-read cannot be enabled for policy without privileged user
9765038	Passthrough-read policies are not supported with asynchronous external engine
9765056	The specified persistent store does not exist
9765059	Persistent store feature is not supported with native engine
9765060	Persistent store feature is not supported with synchronous engine

Error Code	Description
9765061	Persistent store feature is not supported with mandatory screening
9765065	A valid privileged user name must be in the form "domain-name\user-name"
9765066	The privileged user contains characters that are not allowed

Name	Type	Description
error	returned_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	

fpolicy_engine_reference

FPolicy external engine

Name	Type	Description
_links	_links	
name	string	The name of the FPolicy external engine.

fpolicy_event_reference

FPolicy events

Name	Type	Description
_links	_links	
name	string	

scope

Name	Type	Description
check_extensions_on_directories	boolean	Specifies whether the file name extension checks also apply to directory objects. If this parameter is set to true, the directory objects are subjected to the same extension checks as regular files. If this parameter is set to false, the directory names are not matched for extensions and notifications are sent for directories even if their name extensions do not match. Default is false.
exclude_export_policies	array[string]	

Name	Type	Description
exclude_extension	array[string]	
exclude_shares	array[string]	
exclude_volumes	array[string]	
include_export_policies	array[string]	
include_extension	array[string]	
include_shares	array[string]	
include_volumes	array[string]	
object_monitoring_with_no_extension	boolean	Specifies whether the extension checks also apply to objects with no extension. If this parameter is set to true, all objects with or without extensions are monitored. Default is false.

svm

Name	Type	Description
uuid	string	SVM UUID

fpolicy_policy

Name	Type	Description
allow_privileged_access	boolean	Specifies whether privileged access is required for FPolicy servers. Privileged access is used when the FPolicy server requires direct access to the cluster nodes. When this parameter is set to true, FPolicy servers can access files on the cluster using a separate data channel with privileged access.
enabled	boolean	Specifies if the policy is enabled on the SVM or not. If no value is mentioned for this field but priority is set, then this policy will be enabled.
engine	fpolicy_engine_reference	FPolicy external engine
events	array[fpolicy_event_reference]	

Name	Type	Description
mandatory	boolean	Specifies what action to take on a file access event in a case when all primary and secondary servers are down or no response is received from the FPolicy servers within a given timeout period. When this parameter is set to true, file access events will be denied under these circumstances.
name	string	Specifies the name of the policy.
passthrough_read	boolean	Specifies whether passthrough-read should be allowed for FPolicy servers registered for the policy. Passthrough-read is a way to read data for offline files without restoring the files to primary storage. Offline files are files that have been moved to secondary storage.
persistent_store	string	Specifies the persistent storage name. This can then be used to enable persistent mode for FPolicy events.
priority	integer	Specifies the priority that is assigned to this policy.
privileged_user	string	Specifies the privileged user name for accessing files on the cluster using a separate data channel with privileged access. The input for this field should be in "domain\username" format.
scope	scope	
svm	svm	

_links

Name	Type	Description
next	href	
self	href	

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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 an FPolicy configuration for an SVM

DELETE `/protocols/fpolicy/{svm.uuid}/policies/{name}`

Introduced In: 9.6

Deletes a particular FPolicy policy configuration for a specified SVM. To delete a policy, you must first disable the policy.

Related ONTAP commands

- `fpolicy policy scope delete`
- `fpolicy policy delete`

Learn more

- DOC /protocols/fpolicy/{svm.uuid}/policies

Parameters

Name	Type	In	Required	Description
name	string	path	True	
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
9764900	Deletion of a cluster level FPolicy policy is not supported

Name	Type	Description
error	returned_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

returned_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 an FPolicy configuration for an SVM

GET `/protocols/fpolicy/{svm.uuid}/policies/{name}`

Introduced In: 9.6

Retrieves a particular FPolicy policy configuration for a specified SVM. Cluster-level FPolicy policy configuration details cannot be retrieved for a data SVM.

Related ONTAP commands

- `fpolicy policy show`
- `fpolicy policy scope show`
- `fpolicy show`

Learn more

- DOC /protocols/fpolicy/{svm.uuid}/policies

Parameters

Name	Type	In	Required	Description
name	string	path	True	

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
allow_privileged_access	boolean	Specifies whether privileged access is required for FPolicy servers. Privileged access is used when the FPolicy server requires direct access to the cluster nodes. When this parameter is set to true, FPolicy servers can access files on the cluster using a separate data channel with privileged access.
enabled	boolean	Specifies if the policy is enabled on the SVM or not. If no value is mentioned for this field but priority is set, then this policy will be enabled.
engine	fpolicy_engine_reference	FPolicy external engine
events	array[fpolicy_event_reference]	
mandatory	boolean	Specifies what action to take on a file access event in a case when all primary and secondary servers are down or no response is received from the FPolicy servers within a given timeout period. When this parameter is set to true, file access events will be denied under these circumstances.
name	string	Specifies the name of the policy.

Name	Type	Description
passthrough_read	boolean	Specifies whether passthrough-read should be allowed for FPolicy servers registered for the policy. Passthrough-read is a way to read data for offline files without restoring the files to primary storage. Offline files are files that have been moved to secondary storage.
persistent_store	string	Specifies the persistent storage name. This can then be used to enable persistent mode for FPolicy events.
priority	integer	Specifies the priority that is assigned to this policy.
privileged_user	string	Specifies the privileged user name for accessing files on the cluster using a separate data channel with privileged access. The input for this field should be in "domain\username" format.
scope	scope	
svm	svm	

Example response

```
{
  "engine": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "events": [
    "event_cifs",
    "event_open"
  ],
  "name": "fp_policy_1",
  "persistent_store": "ps1",
  "priority": 1,
  "privileged_user": "mydomain\\testuser",
  "scope": {
    "exclude_export_policies": {
    },
    "exclude_extension": {
    },
    "exclude_shares": {
    },
    "exclude_volumes": [
      "vol1",
      "vol_svm1",
      "*"
    ],
    "include_export_policies": {
    },
    "include_extension": {
    },
    "include_shares": [
      "sh1",
      "share_cifs"
    ],
    "include_volumes": [
      "vol1",
      "vol_svm1"
    ]
  },
  "svm": {
    "uuid": "string"
  }
}
```

Error

```
Status: Default, Error
```

Name	Type	Description
error	returned_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	

fpolicy_engine_reference

FPolicy external engine

Name	Type	Description
_links	_links	
name	string	The name of the FPolicy external engine.

fpolicy_event_reference

FPolicy events

Name	Type	Description
_links	_links	
name	string	

scope

Name	Type	Description
check_extensions_on_directories	boolean	Specifies whether the file name extension checks also apply to directory objects. If this parameter is set to true, the directory objects are subjected to the same extension checks as regular files. If this parameter is set to false, the directory names are not matched for extensions and notifications are sent for directories even if their name extensions do not match. Default is false.
exclude_export_policies	array[string]	

Name	Type	Description
exclude_extension	array[string]	
exclude_shares	array[string]	
exclude_volumes	array[string]	
include_export_policies	array[string]	
include_extension	array[string]	
include_shares	array[string]	
include_volumes	array[string]	
object_monitoring_with_no_extension	boolean	Specifies whether the extension checks also apply to objects with no extension. If this parameter is set to true, all objects with or without extensions are monitored. Default is false.

svm

Name	Type	Description
uuid	string	SVM UUID

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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 an FPolicy configuration for an SVM

PATCH `/protocols/fpolicy/{svm.uuid}/policies/{name}`

Introduced In: 9.6

Updates a particular FPolicy policy configuration for a specified SVM. PATCH can be used to enable or disable the policy. When enabling a policy, you must specify the policy priority. The policy priority of the policy is not required when disabling the policy. If the policy is enabled, the FPolicy policy engine cannot be modified.

Related ONTAP commands

- `fpolicy policy modify`
- `fpolicy policy scope modify`
- `fpolicy enable`
- `fpolicy disable`

Learn more

- DOC /protocols/fpolicy/{svm.uuid}/policies

Parameters

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

Request Body

Name	Type	Description
allow_privileged_access	boolean	Specifies whether privileged access is required for FPolicy servers. Privileged access is used when the FPolicy server requires direct access to the cluster nodes. When this parameter is set to true, FPolicy servers can access files on the cluster using a separate data channel with privileged access.

Name	Type	Description
enabled	boolean	Specifies if the policy is enabled on the SVM or not. If no value is mentioned for this field but priority is set, then this policy will be enabled.
engine	fpolicy_engine_reference	FPolicy external engine
events	array[fpolicy_event_reference]	
mandatory	boolean	Specifies what action to take on a file access event in a case when all primary and secondary servers are down or no response is received from the FPolicy servers within a given timeout period. When this parameter is set to true, file access events will be denied under these circumstances.
name	string	Specifies the name of the policy.
passthrough_read	boolean	Specifies whether passthrough-read should be allowed for FPolicy servers registered for the policy. Passthrough-read is a way to read data for offline files without restoring the files to primary storage. Offline files are files that have been moved to secondary storage.
persistent_store	string	Specifies the persistent storage name. This can then be used to enable persistent mode for FPolicy events.
priority	integer	Specifies the priority that is assigned to this policy.
privileged_user	string	Specifies the privileged user name for accessing files on the cluster using a separate data channel with privileged access. The input for this field should be in "domain\username" format.
scope	scope	
svm	svm	

Example request

```
{
  "engine": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    }
  },
  "events": [
    "event_cifs",
    "event_open"
  ],
  "name": "fp_policy_1",
  "persistent_store": "ps1",
  "priority": 1,
  "privileged_user": "mydomain\\testuser",
  "scope": {
    "exclude_export_policies": {
    },
    "exclude_extension": {
    },
    "exclude_shares": {
    },
    "exclude_volumes": [
      "vol1",
      "vol_svm1",
      "*"
    ],
    "include_export_policies": {
    },
    "include_extension": {
    },
    "include_shares": [
      "sh1",
      "share_cifs"
    ],
    "include_volumes": [
      "vol1",
      "vol_svm1"
    ]
  },
  "svm": {
    "uuid": "string"
  }
}
```

Response

```
Status: 200, Ok
```

Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
9764875	An FPolicy event does not exist
9764888	An FPolicy engine does not exist
9765026	The priority must be specified when enabling the FPolicy policy
9765025	Cannot disable an FPolicy policy when the priority is specified
9764899	Cannot modify an FPolicy engine when the policy is enabled
9764899	Deletion of a cluster policy is not supported
9764907	An FPolicy policy is already enabled
9764908	An FPolicy policy is already disabled
9765029	An FPolicy was modified but disable/enable failed as the policy is already disabled/enabled
9765036	Cannot modify an FPolicy policy as passthrough-read policies are not supported without privileged user
9765038	Passthrough-read policies are not supported with an external engine of type "asynchronous"
9765039	Passthrough-read policies are not supported with native engine
9765040	Cannot modify an FPolicy policy as passthrough-read could not be enabled/disabled when the policy is enabled
9765056	The specified persistent store does not exist
9765062	Policy with persistent store does not support mandatory screening
9765065	A valid privileged user name must be in the form "domain-name\user-name"
9765066	The privileged user contains characters that are not allowed

Name	Type	Description
error	returned_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	

fpolicy_engine_reference

FPolicy external engine

Name	Type	Description
_links	_links	
name	string	The name of the FPolicy external engine.

fpolicy_event_reference

FPolicy events

Name	Type	Description
_links	_links	
name	string	

scope

Name	Type	Description
check_extensions_on_directories	boolean	Specifies whether the file name extension checks also apply to directory objects. If this parameter is set to true, the directory objects are subjected to the same extension checks as regular files. If this parameter is set to false, the directory names are not matched for extensions and notifications are sent for directories even if their name extensions do not match. Default is false.
exclude_export_policies	array[string]	

Name	Type	Description
exclude_extension	array[string]	
exclude_shares	array[string]	
exclude_volumes	array[string]	
include_export_policies	array[string]	
include_extension	array[string]	
include_shares	array[string]	
include_volumes	array[string]	
object_monitoring_with_no_extension	boolean	Specifies whether the extension checks also apply to objects with no extension. If this parameter is set to true, all objects with or without extensions are monitored. Default is false.

svm

Name	Type	Description
uuid	string	SVM UUID

fpolicy_policy

Name	Type	Description
allow_privileged_access	boolean	Specifies whether privileged access is required for FPolicy servers. Privileged access is used when the FPolicy server requires direct access to the cluster nodes. When this parameter is set to true, FPolicy servers can access files on the cluster using a separate data channel with privileged access.
enabled	boolean	Specifies if the policy is enabled on the SVM or not. If no value is mentioned for this field but priority is set, then this policy will be enabled.
engine	fpolicy_engine_reference	FPolicy external engine
events	array[fpolicy_event_reference]	

Name	Type	Description
mandatory	boolean	Specifies what action to take on a file access event in a case when all primary and secondary servers are down or no response is received from the FPolicy servers within a given timeout period. When this parameter is set to true, file access events will be denied under these circumstances.
name	string	Specifies the name of the policy.
passthrough_read	boolean	Specifies whether passthrough-read should be allowed for FPolicy servers registered for the policy. Passthrough-read is a way to read data for offline files without restoring the files to primary storage. Offline files are files that have been moved to secondary storage.
persistent_store	string	Specifies the persistent storage name. This can then be used to enable persistent mode for FPolicy events.
priority	integer	Specifies the priority that is assigned to this policy.
privileged_user	string	Specifies the privileged user name for accessing files on the cluster using a separate data channel with privileged access. The input for this field should be in "domain\username" format.
scope	scope	
svm	svm	

error_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

returned_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.