

# View and update FPolicy server configuration

ONTAP 9.12.1 REST API reference

NetApp February 13, 2024

# **Table of Contents**

View and update FPolicy server configuration	 1
Protocols fpolicy svm.uuid connections endpoint overview	 1
Retrieve the status of FPolicy servers	 7
Retrieve the status of an FPolicy server	 14
Update the FPolicy server status	 19

# View and update FPolicy server configuration

# Protocols fpolicy sym.uuid connections endpoint overview

#### Overview

This API is used to display and update connection status information for external FPolicy servers. You must keep the following in mind while using these endpoints:

- If the passthrough\_read field is set to true in a GET collection call, only Fpolicy passthrough-read connections are returned.
- If the passthrough\_read field is not provided or set to false in a GET collection call, only FPolicy server connections are returned.

#### **Examples**

Retrieving the FPolicy server connections for all SVMs in the cluster

```
# The API:
GET /protocols/fpolicy/{svm.uuid}/connections
# The call:
curl -X GET "https://<mgmt-
ip>/api/protocols/fpolicy/*/connections?passthrough read=false&fields=*&re
turn records=true" -H "accept: application/json"
# The Response:
"records": [
    "node": {
      "uuid": "8ca36b68-c501-11eb-b82c-0050568e5902",
      "name": "hsaraswa-vsim4"
    },
    "svm": {
      "uuid": "9f738ac5-c502-11eb-b82c-0050568e5902",
      "name": "vs1"
    },
    "policy": {
      "name": "p1"
    },
    "server": "192.168.137.78",
    "state": "disconnected",
    "update time": "2021-06-17T16:05:15+05:30",
    "disconnected reason": {
```

```
"message": "No local lif present to connect to FPolicy server.",
   "code": 9305
 },
 "type": "primary"
} ,
 "node": {
   "uuid": "8ca36b68-c501-11eb-b82c-0050568e5902",
   "name": "hsaraswa-vsim4"
 },
 "svm": {
   "uuid": "9f738ac5-c502-11eb-b82c-0050568e5902",
   "name": "vs1"
 },
 "policy": {
   "name": "p2"
 },
 "server": "192.168.136.38",
 "state": "disconnected",
 "update time": "2021-06-17T16:05:15+05:30",
 "disconnected reason": {
   "message": "No local lif present to connect to FPolicy server.",
   "code": 9305
 },
 "type": "primary"
},
 "node": {
   "uuid": "8ca36b68-c501-11eb-b82c-0050568e5902",
   "name": "hsaraswa-vsim4"
 },
 "svm": {
   "uuid": "b6df362b-c502-11eb-b82c-0050568e5902",
   "name": "vs2"
 "policy": {
   "name": "pol1"
 "server": "192.168.129.146",
 "state": "disconnected",
 "update time": "2021-06-17T16:05:15+05:30",
 "disconnected reason": {
   "message": "No local lif present to connect to FPolicy server.",
   "code": 9305
 "type": "primary"
```

```
}
],
"num_records": 3
}
```

#### Retrieving all FPolicy passthrough read connections for all SVMs in the cluster

```
# The API:
GET /protocols/fpolicy/{svm.uuid}/connections
# The Call:
curl-X GET "https://<mgmt-</pre>
ip>/api/protocols/fpolicy/*/connections?passthrough read=true&fields=*&ret
urn records=true&return timeout=15"
# The Response:
"records": [
    "node": {
      "uuid": "55693090-c7c8-11eb-a07a-0050568ebc01",
      "name": "chiragm-vsim3",
    },
    "svm": {
      "uuid": "a69e938d-c7ca-11eb-a07a-0050568ebc01",
      "name": "vs2",
    "policy": {
      "name": "pol1",
    "server": "192.168.129.146",
    "session uuid": "2410d348-c7cb-11eb-a07a-0050568ebc01",
    "state": "connected",
  },
    "node": {
      "uuid": "55693090-c7c8-11eb-a07a-0050568ebc01",
      "name": "chiragm-vsim3",
    },
    "svm": {
      "uuid": "a69e938d-c7ca-11eb-a07a-0050568ebc01",
      "name": "vs2",
```

```
"policy": {
    "name": "pol2",
},

"server": "192.168.129.146",

"session_uuid": "288f7002-c7cb-11eb-a07a-0050568ebc01",

"state": "connected",
}
],
"num_records": 2,
}
```

#### Retrieving the FPolicy server connections for a specific SVM

```
# The API:
GET /protocols/fpolicy/{svm.uuid}/connections
# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/fpolicy/9f738ac5-c502-11eb-
0050568e5902/connections?passthrough read=false&fields=*&return records=tr
ue" -H "accept: application/json"
# The Response:
"records": [
    "node": {
      "uuid": "8ca36b68-c501-11eb-b82c-0050568e5902",
      "name": "hsaraswa-vsim4"
    },
    "svm": {
      "uuid": "9f738ac5-c502-11eb-b82c-0050568e5902",
      "name": "vs1"
    "policy": {
      "name": "p1"
    "server": "192.168.137.78",
    "state": "disconnected",
    "update time": "2021-06-17T16:05:15+05:30",
    "disconnected reason": {
```

```
"message": "No local lif present to connect to FPolicy server.",
      "code": 9305
    },
    "type": "primary"
  } ,
    "node": {
      "uuid": "8ca36b68-c501-11eb-b82c-0050568e5902",
      "name": "hsaraswa-vsim4"
    } ,
    "svm": {
      "uuid": "9f738ac5-c502-11eb-b82c-0050568e5902",
      "name": "vs1"
    },
    "policy": {
      "name": "p2"
    } ,
    "server": "192.168.136.38",
    "state": "disconnected",
    "update time": "2021-06-17T16:05:15+05:30",
    "disconnected reason": {
      "message": "No local lif present to connect to FPolicy server.",
      "code": 9305
    },
    "type": "primary"
 },
],
"num records": 2
}
```

#### Retrieving a specific FPolicy server connection

```
# The API:
GET
/protocols/fpolicy/{svm.uuid}/connections/{node.uuid}/{policy.name}/{serve
r}
# The call:
curl -X GET "https://<mgmt-ip>/api/protocols/fpolicy/9f738ac5-c502-11eb-
b82c-0050568e5902/connections/8ca36b68-c501-11eb-b82c-
0050568e5902/p1/192.168.137.78" -H "accept: application/json"
# The Response:
"node": {
  "uuid": "8ca36b68-c501-11eb-b82c-0050568e5902",
  "name": "hsaraswa-vsim4"
},
"svm": {
  "uuid": "9f738ac5-c502-11eb-b82c-0050568e5902",
 "name": "vs1"
},
"policy": {
  "name": "p1"
},
"server": "192.168.137.78",
"state": "disconnected",
"update time": "2021-06-17T16:05:15+05:30",
"disconnected reason": {
 "message": "No local lif present to connect to FPolicy server.",
 "code": 9305
} ,
"type": "primary"
}
```

#### **Updating the FPolicy server connection**

```
# The API:
PATCH
/protocols/fpolicy/{svm.uuid}/connections/{node.uuid}/{policy.name}/{server}

# The call:
curl -X PATCH "https://<mgmt-ip>/api/protocols/fpolicy/9f738ac5-c502-11eb-b82c-0050568e5902/connections/8ca36b68-c501-11eb-b82c-
0050568e5902/p1/192.168.137.78" -H "accept: application/json"
```

# Retrieve the status of FPolicy servers

GET /protocols/fpolicy/{svm.uuid}/connections

Introduced In: 9.10

Retrieves the statuses of FPolicy servers.

#### **Related ONTAP commands**

- vserver fpolicy show-engine
- vserver fpolicy show-passthrough-read-connection

#### Learn more

• DOC /protocols/fpolicy/{svm.uuid}/connections

#### **Parameters**

Name	Туре	In	Required	Description
passthrough_read	boolean	query	False	Whether to view only passthrough-read connections
server	string	query	False	Filter by server
disconnected_reaso n.message	string	query	False	Filter by disconnected_reaso n.message
disconnected_reaso n.code	integer	query	False	Filter by disconnected_reaso n.code

Name	Туре	In	Required	Description
node.uuid	string	query	False	Filter by node.uuid
node.name	string	query	False	Filter by node.name
state	string	query	False	Filter by state
session_uuid	string	query	False	Filter by session_uuid
svm.name	string	query	False	Filter by svm.name
policy.name	string	query	False	Filter by policy.name
update_time	string	query	False	Filter by update_time
type	string	query	False	Filter by type
max_records	integer	query	False	Limit the number of records returned.
svm.uuid	string	path	True	UUID of the SVM to which this object belongs.
fields	array[string]	query	False	Specify the fields to return.
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	Туре	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	Туре	Description
_links	_links	
num_records	integer	Number of records
records	array[fpolicy_connection]	

```
" links": {
  "next": {
   "href": "/api/resourcelink"
 },
 "self": {
   "href": "/api/resourcelink"
 }
},
"num records": 1,
"records": {
  " links": {
   "self": {
     "href": "/api/resourcelink"
  },
  "disconnected reason": {
   "code": 9370,
   "message": "TCP Connection to FPolicy server failed."
  },
  "node": {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
   "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "policy": {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
   },
   "name": "string"
  "server": "10.132.145.20",
  "session uuid": "5224ec64-b336-11eb-841c-0050568e14c2",
  "state": "connected",
  "svm": {
   " links": {
     "self": {
        "href": "/api/resourcelink"
```

```
}
},
"name": "svm1",
"uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
},
"type": "primary",
"update_time": "2019-06-12T11:00:16-04:00"
}
```

#### **Error**

```
Status: Default, Error
```

Name	Туре	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	Туре	Description
href	string	

\_links

Name	Туре	Description
next	href	
self	href	

\_links

Name	Туре	Description
self	href	

disconnected\_reason

Indicates the reason for FPolicy server disconnection.

Name	Туре	Description
code	integer	Reason ID for the FPolicy Server disconnection.
message	string	FPolicy server reason for disconnection message.

#### node

Name	Туре	Description
_links	_links	
name	string	
uuid	string	

#### self\_link

Name	Туре	Description
self	href	

fpolicy\_policy\_reference

Name	Туре	Description
_links	self_link	
name	string	The name of the FPolicy Policy name.

#### svm

Name	Туре	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

### fpolicy\_connection

Displays the connection status information of the FPolicy server.

Name	Туре	Description
_links	_links	
disconnected_reason	disconnected_reason	Indicates the reason for FPolicy server disconnection.
node	node	
policy	fpolicy_policy_reference	
server	string	IP address of the FPolicy server.
session_uuid	string	Unique session ID associated with each connection to the FPolicy server and it can be used to identify the established connection.
state	string	Specifies the FPolicy server connection state indicating if it is in the connected or disconnected state. The following is a list of the possible states:  • connected - Connected  • disconnected - Disconnected
svm	svm	

Name	Туре	Description
type	string	FPolicy server type. The possible values are:
		<ul><li>primary - Primary server</li><li>secondary - Secondary server</li></ul>
update_time	string	Specifies the time at which FPolicy server is connected or disconnected.

#### error\_arguments

Name	Туре	Description
code	string	Argument code
message	string	Message argument

#### error

Name	Туре	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 status of an FPolicy server

GET /protocols/fpolicy/{svm.uuid}/connections/{node.uuid}/{policy.name}/{server}

Introduced In: 9.10

Retrieves the status of an FPolicy server.

#### **Related ONTAP commands**

• vserver fpolicy show-engine

### Learn more

• DOC /protocols/fpolicy/{svm.uuid}/connections

# Response

Status: 200, Ok

Name	Туре	Description
_links	_links	
disconnected_reason	disconnected_reason	Indicates the reason for FPolicy server disconnection.
node	node	
policy	fpolicy_policy_reference	
server	string	IP address of the FPolicy server.
session_uuid	string	Unique session ID associated with each connection to the FPolicy server and it can be used to identify the established connection.
state	string	Specifies the FPolicy server connection state indicating if it is in the connected or disconnected state. The following is a list of the possible states:  • connected - Connected • disconnected - Disconnected
svm	svm	
type	string	FPolicy server type. The possible values are:  • primary - Primary server  • secondary - Secondary server
update_time	string	Specifies the time at which FPolicy server is connected or disconnected.

```
" links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
  "disconnected reason": {
   "code": 9370,
   "message": "TCP Connection to FPolicy server failed."
  },
  "node": {
   " links": {
     "self": {
       "href": "/api/resourcelink"
    "name": "node1",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "policy": {
    " links": {
     "self": {
       "href": "/api/resourcelink"
    },
   "name": "string"
 "server": "10.132.145.20",
 "session uuid": "5224ec64-b336-11eb-841c-0050568e14c2",
  "state": "connected",
  "svm": {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
    "name": "svm1",
   "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "type": "primary",
 "update time": "2019-06-12T11:00:16-04:00"
}
```

#### **Error**

```
Status: Default, Error
```

Name	Туре	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	Туре	Description
href	string	

\_links

Name	Туре	Description
self	href	

#### disconnected\_reason

Indicates the reason for FPolicy server disconnection.

Name	Туре	Description
code	integer	Reason ID for the FPolicy Server disconnection.
message	string	FPolicy server reason for disconnection message.

#### node

Name	Туре	Description
_links	_links	
name	string	
uuid	string	

### self\_link

Name	Type	Description
self	href	

#### fpolicy\_policy\_reference

Name	Туре	Description
_links	self_link	
name	string	The name of the FPolicy Policy name.

svm

Name	Туре	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

#### error\_arguments

Name	Туре	Description
code	string	Argument code
message	string	Message argument

#### error

Name	Туре	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 FPolicy server status**

#### PATCH

/protocols/fpolicy/{svm.uuid}/connections/{node.uuid}/{policy.name}/{server}

Introduced In: 9.10

Updates the status of an FPolicy server.

#### **Related ONTAP commands**

- vserver fpolicy engine-connect
- vserver fpolicy engine-disconnect

#### Learn more

• DOC /protocols/fpolicy/{svm.uuid}/connections

# Request Body

Name	Туре	Description
_links	_links	
disconnected_reason	disconnected_reason	Indicates the reason for FPolicy server disconnection.
node	node	
policy	fpolicy_policy_reference	
server	string	IP address of the FPolicy server.
session_uuid	string	Unique session ID associated with each connection to the FPolicy server and it can be used to identify the established connection.
state	string	Specifies the FPolicy server connection state indicating if it is in the connected or disconnected state. The following is a list of the possible states:  • connected - Connected • disconnected - Disconnected
svm	svm	
type	string	FPolicy server type. The possible values are:  • primary - Primary server  • secondary - Secondary server
update_time	string	Specifies the time at which FPolicy server is connected or disconnected.

```
" links": {
   "self": {
     "href": "/api/resourcelink"
   }
  },
  "disconnected reason": {
   "code": 9370,
   "message": "TCP Connection to FPolicy server failed."
  },
  "node": {
   " links": {
     "self": {
       "href": "/api/resourcelink"
    "name": "node1",
   "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "policy": {
    " links": {
     "self": {
       "href": "/api/resourcelink"
    },
   "name": "string"
  "server": "10.132.145.20",
 "session uuid": "5224ec64-b336-11eb-841c-0050568e14c2",
  "state": "connected",
  "svm": {
    " links": {
     "self": {
       "href": "/api/resourcelink"
     }
    },
    "name": "svm1",
   "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "type": "primary",
 "update time": "2019-06-12T11:00:16-04:00"
}
```

# Response

```
Status: 200, Ok
```

#### **Error**

```
Status: Default
```

#### **ONTAP Error Response Codes**

Error Code	Description
9764954	The specified policy does not exist
9764911	Failed to connect to the FPolicy server. Reason: The specified entry does not exist
9764948	The specified policy is disabled. Using a disabled policy with this command is not supported. Use the 'fpolicy enable' command to enable the policy
9764912	Failed to disconnect the FPolicy server. Reason: The specified entry does not exist

Name	Туре	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	Туре	Description
href	string	

\_links

Name	Туре	Description
self	href	

#### disconnected\_reason

Indicates the reason for FPolicy server disconnection.

Name	Туре	Description
code	integer	Reason ID for the FPolicy Server disconnection.
message	string	FPolicy server reason for disconnection message.

#### node

Name	Туре	Description
_links	_links	
name	string	
uuid	string	

### self\_link

Name	Туре	Description
self	href	

#### fpolicy\_policy\_reference

Name	Туре	Description
_links	self_link	
name	string	The name of the FPolicy Policy name.

svm

Name	Туре	Description
_links	_links	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

# fpolicy\_connection

Displays the connection status information of the FPolicy server.

Name	Туре	Description
_links	_links	
disconnected_reason	disconnected_reason	Indicates the reason for FPolicy server disconnection.
node	node	
policy	fpolicy_policy_reference	
server	string	IP address of the FPolicy server.
session_uuid	string	Unique session ID associated with each connection to the FPolicy server and it can be used to identify the established connection.
state	string	Specifies the FPolicy server connection state indicating if it is in the connected or disconnected state. The following is a list of the possible states:  • connected - Connected • disconnected - Disconnected
svm	svm	
type	string	FPolicy server type. The possible values are:  • primary - Primary server  • secondary - Secondary server

Name	Туре	Description
update_time		Specifies the time at which FPolicy server is connected or disconnected.

#### error\_arguments

Name	Туре	Description
code	string	Argument code
message	string	Message argument

#### error

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

#### Copyright information

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

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

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

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

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

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

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

#### **Trademark information**

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