



## **View IPsec security associations**

ONTAP 9.11.1 REST API reference

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# View IPsec security associations

## Security IPsec security-associations endpoint overview

### Overview

- Collection Get: GET security/ipsec/security-associations
- Instance Get: GET security/ipsec/security-associations/uuid

## Retrieve IPsec and IKE security associations

GET /security/ipsec/security-associations

Introduced In: 9.8

Retrieves the IPsec and IKE (Internet Key Exchange) security associations.

### Related ONTAP commands

- `security ipsec show-ipseca`
- `security ipsec show-ikesa`

### Parameters

Name	Type	In	Required	Description
remote_address	string	query	False	Filter by remote_address
policy_name	string	query	False	Filter by policy_name
cipher_suite	string	query	False	Filter by cipher_suite
local_address	string	query	False	Filter by local_address
node.uuid	string	query	False	Filter by node.uuid
node.name	string	query	False	Filter by node.name
lifetime	integer	query	False	Filter by lifetime
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name

Name	Type	In	Required	Description
scope	string	query	False	Filter by scope
ike.authentication	string	query	False	Filter by ike.authentication
ike.is_initiator	boolean	query	False	Filter by ike.is_initiator
ike.version	integer	query	False	Filter by ike.version
ike.responder_security_parameter_index	string	query	False	Filter by ike.responder_security_parameter_index
ike.initiator_security_parameter_index	string	query	False	Filter by ike.initiator_security_parameter_index
ike.state	string	query	False	Filter by ike.state
type	string	query	False	Filter by type
uuid	string	query	False	Filter by uuid
ipsec.action	string	query	False	Filter by ipsec.action
ipsec.inbound.packets	integer	query	False	Filter by ipsec.inbound.packets
ipsec.inbound.security_parameter_index	string	query	False	Filter by ipsec.inbound.security_parameter_index
ipsec.inbound.bytes	integer	query	False	Filter by ipsec.inbound.bytes
ipsec.state	string	query	False	Filter by ipsec.state
ipsec.outbound.packets	integer	query	False	Filter by ipsec.outbound.packets

Name	Type	In	Required	Description
ipsec.outbound.security_parameter_index	string	query	False	Filter by ipsec.outbound.security_parameter_index
ipsec.outbound.bytes	integer	query	False	Filter by ipsec.outbound.bytes
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.
return_records	boolean	query	False	The default is true for GET calls. When set to false, only the number of records is returned. <ul style="list-style-type: none"> <li>• Default value: 1</li> </ul>
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When iterating over a collection, the default is 15 seconds. ONTAP returns earlier if either max records or the end of the collection is reached. <ul style="list-style-type: none"> <li>• Default value: 1</li> <li>• Max value: 120</li> <li>• Min value: 0</li> </ul>
order_by	array[string]	query	False	Order results by specified fields and optional [asc

## Response

Status: 200, Ok

Name	Type	Description
_links	<a href="#">_links</a>	
error	<a href="#">error</a>	
num_records	integer	Number of records
records	array[ <a href="#">records</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "error": {
    "arguments": {
      "code": "string",
      "message": "string"
    },
    "code": "4",
    "message": "entry doesn't exist",
    "target": "uuid"
  },
  "num_records": 1,
  "records": {
    "cipher_suite": "suite_aescbc",
    "ike": {
      "authentication": "none",
      "state": "none"
    },
    "ipsec": {
      "action": "bypass"
    },
    "node": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "node1",
      "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
    },
    "scope": "svm",
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      }
    }
  },
}
```

```
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "type": "ipsec"
}
}
```

## 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	<a href="#">href</a>	
self	<a href="#">href</a>	

### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

### error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

### ike

Objects containing parameters specific to IKE (Internet Key Exchange) security association.

Name	Type	Description
authentication	string	Authentication method for internet key exchange protocol.
initiator_security_parameter_index	string	Initiator's security parameter index for the IKE security association.

Name	Type	Description
is_initiator	boolean	Indicates whether or not IKE has been initiated by this node.
responder_security_parameter_index	string	Responder's security parameter index for the IKE security association.
state	string	State of the IKE connection.
version	integer	Internet key exchange protocol version.

#### inbound

Status for inbound parameters for the IPsec security association.

Name	Type	Description
bytes	integer	Number of inbound bytes for the IPsec security association.
packets	integer	Number of inbound packets for the IPsec security association.
security_parameter_index	string	Inbound security parameter index for the IPsec security association.

#### outbound

Status for outbound parameters for the IPsec security association.

Name	Type	Description
bytes	integer	Number of outbound bytes for the IPsec security association.
packets	integer	Number of outbound packets for the IPsec security association.
security_parameter_index	string	Outbound security parameter index for the IPsec security association.

#### ipsec

Objects containing parameters specific to IPsec security association.

Name	Type	Description
action	string	Action for the IPsec security association.
inbound	<a href="#">inbound</a>	Status for inbound parameters for the IPsec security association.
outbound	<a href="#">outbound</a>	Status for outbound parameters for the IPsec security association.
state	string	State of the IPsec security association.

[\\_links](#)

Name	Type	Description
self	<a href="#">href</a>	

node

Node with the security association.

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	
uuid	string	

svm

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

records

Security association object for IPsec security association and IKE (Internet Key Exchange) security association.

Name	Type	Description
cipher_suite	string	Cipher suite for the security association.

Name	Type	Description
ike	ike	Objects containing parameters specific to IKE (Internet Key Exchange) security association.
ipsec	ipsec	Objects containing parameters specific to IPsec security association.
lifetime	integer	Lifetime for the security association in seconds.
local_address	string	Local address of the security association.
node	node	Node with the security association.
policy_name	string	Policy name for the security association.
remote_address	string	Remote address of the security association.
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
svm	svm	
type	string	Type of security association, it can be IPsec or IKE (Internet Key Exchange).
uuid	string	Unique identifier of the security association.

## Retrieve an IPsec or IKE security association

GET /security/ipsec/security-associations/{uuid}

**Introduced In:** 9.8

Retrieves a specific IPsec or IKE (Internet Key Exchange) security association.

## Related ONTAP commands

- `security ipsec show-ipsecsa`
- `security ipsec show-ikesa`

## Parameters

Name	Type	In	Required	Description
uuid	string	path	True	UUID of IPsec or IKE security association.
fields	array[string]	query	False	Specify the fields to return.

## Response

Status: 200, Ok

Name	Type	Description
cipher_suite	string	Cipher suite for the security association.
ike	<a href="#">ike</a>	Objects containing parameters specific to IKE (Internet Key Exchange) security association.
ipsec	<a href="#">ipsec</a>	Objects containing parameters specific to IPsec security association.
lifetime	integer	Lifetime for the security association in seconds.
local_address	string	Local address of the security association.
node	<a href="#">node</a>	Node with the security association.
policy_name	string	Policy name for the security association.
remote_address	string	Remote address of the security association.

<b>Name</b>	<b>Type</b>	<b>Description</b>
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
svm	<a href="#">svm</a>	
type	string	Type of security association, it can be IPsec or IKE (Internet Key Exchange).
uuid	string	Unique identifier of the security association.

## Example response

```
{
  "cipher_suite": "suite_aescbc",
  "ike": {
    "authentication": "none",
    "state": "none"
  },
  "ipsec": {
    "action": "bypass"
  },
  "node": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "node1",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  },
  "scope": "svm",
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "type": "ipsec"
}
```

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
66257118	IPsec SA with the specified UUID was not found.
66257119	IPsec SA with the specified UUID was not found.

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

ike

Objects containing parameters specific to IKE (Internet Key Exchange) security association.

Name	Type	Description
authentication	string	Authentication method for internet key exchange protocol.
initiator_security_parameter_index	string	Initiator's security parameter index for the IKE security association.
is_initiator	boolean	Indicates whether or not IKE has been initiated by this node.
responder_security_parameter_index	string	Responder's security parameter index for the IKE security association.
state	string	State of the IKE connection.
version	integer	Internet key exchange protocol version.

inbound

Status for inbound parameters for the IPsec security association.

Name	Type	Description
bytes	integer	Number of inbound bytes for the IPsec security association.
packets	integer	Number of inbound packets for the IPsec security association.
security_parameter_index	string	Inbound security parameter index for the IPsec security association.

outbound

Status for outbound parameters for the IPsec security association.

Name	Type	Description
bytes	integer	Number of outbound bytes for the IPsec security association.
packets	integer	Number of outbound packets for the IPsec security association.
security_parameter_index	string	Outbound security parameter index for the IPsec security association.

## ipsec

Objects containing parameters specific to IPsec security association.

Name	Type	Description
action	string	Action for the IPsec security association.
inbound	<a href="#">inbound</a>	Status for inbound parameters for the IPsec security association.
outbound	<a href="#">outbound</a>	Status for outbound parameters for the IPsec security association.
state	string	State of the IPsec security association.

## href

Name	Type	Description
href	string	

## \_links

Name	Type	Description
self	<a href="#">href</a>	

## node

Node with the security association.

Name	Type	Description
_links	<a href="#">_links</a>	
name	string	

Name	Type	Description
uuid	string	

svm

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
name	string	The name of the SVM.
uuid	string	The unique identifier of the SVM.

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

Name	Type	Description
arguments	array[ <a href="#">error_arguments</a> ]	Message arguments
code	string	Error code
message	string	Error message
target	string	The target parameter that caused the error.

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