



# **Manage Azure Key Vaults**

## **ONTAP 9.7 REST API reference**

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# Manage Azure Key Vaults

## Security azure-key-vaults endpoint overview

### Overview

Azure Key Vault (AKV) is a cloud key management service (KMS) that provides a secure store for secrets. This feature allows ONTAP to securely store its encryption keys using AKV. In order to use AKV with ONTAP, you must first deploy an Azure application with the appropriate access to an AKV and then provide ONTAP with the necessary details, such as key vault name, application ID so that ONTAP can communicate with the deployed Azure application.

### Examples

#### Creating an AKV for a cluster

The example AKV is configured at the cluster-scope. Note the *return\_records=true* query parameter is used to obtain the newly created key manager configuration.

```

# The API:
POST /api/security/azure-key-vaults

# The call:
curl -X POST 'https://<mgmt-ip>/api/security/azure-key-
vaults?return_records=true' -H 'accept: application/hal+json' -d "{
\"client_id\": \"client1\", \"tenant_id\": \"tenant1\", \"name\":
\"https://mykeyvault.azure.vault.net/\", \"key_id\": \"https://keyvault-
test.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c59540e2a74\",
\"client_secret\" : \"myclientPwd\" }"

# The response:
{
  "num_records": 1,
  "records": [
    {
      "uuid": "85619643-9a06-11ea-8d52-005056bbeba5",
      "client_id": "client1",
      "tenant_id": "tenant1",
      "name": "https://mykeyvault.azure.vault.net/",
      "key_id": "https://keyvault-
test.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c59540e2a74",
      "_links": {
        "self": {
          "href": "/api/security/azure-key-vaults/85619643-9a06-11ea-8d52-
005056bbeba5"
        }
      }
    }
  ]
}

```

---

## Creating an AKV for an SVM

The example AKV is configured for a specific SVM. Note the *return\_records=true* query parameter is used to obtain the newly created key manager configuration.

```

# The API:
POST /api/security/azure-key-vaults

# The call:
curl -X POST 'https://<mgmt-ip>/api/security/azure-key-
vaults?return_records=true' -H 'accept: application/hal+json' -d "{
  \"svm\": { \"uuid\": \"4f7abf4c-9a07-11ea-8d52-005056bbeba5\" },
  \"client_id\": \"client1\", \"tenant_id\": \"tenant1\", \"name\":
  \"https://mykeyvault.azure.vault.net/\", \"key_id\": \"https://keyvault-
test.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c59540e2a74\",
  \"client_secret\" : \"myclientPwd\" }"

# The response:
{
  "num_records": 1,
  "records": [
    {
      "uuid": "024cd3cf-9a08-11ea-8d52-005056bbeba5",
      "svm": {
        "uuid": "4f7abf4c-9a07-11ea-8d52-005056bbeba5",
        "name": "vs0"
      },
      "client_id": "client1",
      "tenant_id": "tenant1",
      "name": "https://mykeyvault.azure.vault.net/",
      "key_id": "https://keyvault-
test.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c59540e2a74",
      "_links": {
        "self": {
          "href": "/api/security/azure-key-vaults/024cd3cf-9a08-11ea-8d52-
005056bbeba5"
        }
      }
    }
  ]
}

```

## Retrieving the AKVs configured for all clusters and SVMs

The following example shows how to retrieve all configured AKVs along with their configurations.

```

# The API:
GET /api/security/azure-key-vaults

```

```

# The call:
curl -X GET 'https://<mgmt-ip>/api/security/azure-key-vaults?fields=*'

# The response:
{
  "records": [
    {
      "uuid": "024cd3cf-9a08-11ea-8d52-005056bbeba5",
      "scope": "svm",
      "svm": {
        "uuid": "4f7abf4c-9a07-11ea-8d52-005056bbeba5",
        "name": "vs0"
      },
      "client_id": "client1",
      "tenant_id": "tenant1",
      "name": "https://mykeyvault.azure.vault.net/",
      "key_id": "https://keyvault-
test.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c59540e2a74",
      "state": {
        "cluster_state": true,
        "message": "",
        "code": 0
      },
      "_links": {
        "self": {
          "href": "/api/security/azure-key-vaults/024cd3cf-9a08-11ea-8d52-
005056bbeba5"
        }
      }
    },
    {
      "uuid": "85619643-9a06-11ea-8d52-005056bbeba5",
      "scope": "cluster",
      "client_id": "client1",
      "tenant_id": "tenant1",
      "name": "https://mykeyvault.azure.vault.net/",
      "key_id": "https://keyvault-
test.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c59540e2a74",
      "state": {
        "cluster_state": true,
        "message": "",
        "code": 0
      },
      "_links": {
        "self": {

```

```
    "href": "/api/security/azure-key-vaults/85619643-9a06-11ea-8d52-005056bbeba5"
  }
}
],
"num_records": 2,
"_links": {
  "self": {
    "href": "/api/security/azure-key-vaults?fields=*"
  }
}
}
```

---

### Retrieving the AKV configured for a specific SVM

The following example retrieves a configured AKV for a specific SVM.

```
# The API:
GET /api/security/azure-key-vaults

# The call:
curl -X GET 'https://<mgmt-ip>/api/security/azure-key-vaults/85619643-9a06-11ea-8d52-005056bbeba5?fields=*'

# The response:
{
  "uuid": "85619643-9a06-11ea-8d52-005056bbeba5",
  "scope": "cluster",
  "client_id": "client1",
  "tenant_id": "tenant1",
  "name": "https://mykeyvault.azure.vault.net/",
  "key_id": "https://keyvault-test.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c59540e2a74",
  "state": {
    "cluster_state": true,
    "message": "",
    "code": 0
  },
  "_links": {
    "self": {
      "href": "/api/security/azure-key-vaults/85619643-9a06-11ea-8d52-005056bbeba5"
    }
  }
}
```

---

## Updating the client password of a specific SVM

The following example updates the client password of a configured AKV for a specific SVM.

```
# The API:
PATCH /api/security/azure-key-vaults

# The call:
curl -X PATCH 'https://<mgmt-ip>/api/security/azure-key-vaults/85619643-9a06-11ea-8d52-005056bbeba5' -d '{"client_secret": "newSecret"}'
```



## Deleting an AKV configuration for a specific SVM

The following example deletes a configured AKV for a specific SVM.

```
# The API:
DELETE /api/security/azure-key-vaults

# The call:
curl -X DELETE 'https://<mgmt-ip>/api/security/azure-key-vaults/85619643-9a06-11ea-8d52-005056bbeba5'
```

## Restoring the keys for a specific SVM configured with an AKV

The following example restores all the keys of a specific SVM configured with an AKV.

```
# The API:
POST security/azure-key-vaults/{azure_key_vault.uuid}/restore

# The call:
curl -X POST 'https://<mgmt-ip>/api/security/azure-key-vaults/85619643-9a06-11ea-8d52-005056bbeba5/restore'

# The response:
{
  "job": {
    "uuid": "6ab6946f-9a0c-11ea-8d52-005056bbeba5",
    "_links": {
      "self": {
        "href": "/api/cluster/jobs/6ab6946f-9a0c-11ea-8d52-005056bbeba5"
      }
    }
  }
}
```

## Retrieve AKVs configured for all clusters and SVMs

```
GET /security/azure-key-vaults
```

Retrieves AKVs configured for all clusters and SVMs.

## Related ONTAP commands

- `security key-manager external azure show`

## Learn more

- [DOC /security/azure-key-vaults](#)

## Parameters

Name	Type	In	Required	Description
key_id	string	query	False	Filter by key_id
svm.uuid	string	query	False	Filter by svm.uuid
svm.name	string	query	False	Filter by svm.name
client_id	string	query	False	Filter by client_id
tenant_id	string	query	False	Filter by tenant_id
uuid	string	query	False	Filter by uuid
name	string	query	False	Filter by name
state.message	string	query	False	Filter by state.message
state.cluster_state	boolean	query	False	Filter by state.cluster_state
state.code	integer	query	False	Filter by state.code
scope	string	query	False	Filter by scope
fields	array[string]	query	False	Specify the fields to return.
max_records	integer	query	False	Limit the number of records returned.

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.
return_records	boolean	query	False	The default is true for GET calls. When set to false, only the number of records is returned.
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>	
num_records	integer	Number of records
records	array[ <a href="#">azure_key_vault</a> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "client_id": "aaaaaaaa-bbbb-aaaa-bbbb-aaaaaaaaaaaa",
    "client_secret": "abcdef",
    "key_id":
    "https://keyvault1.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c5954
    0e2a74",
    "name": "https://kmip-akv-keyvault.vault.azure.net/",
    "scope": "svm",
    "state": {
      "code": 346758,
      "message": "AKV key protection is unavailable in following nodes
      - node1, node2."
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "tenant_id": "zzzzzzzz-yyyy-zzzz-yyyy-zzzzzzzzzzzz",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
}
```

## 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>	

\_links

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

state

Indicates whether the AKV key protection is available cluster wide.

Name	Type	Description
cluster_state	boolean	Set to true when AKV key protection is available on all nodes of the cluster.
code	integer	Code corresponding to the status message. Returns a 0 if AKV key protection is available in all nodes of the cluster.
message	string	Error message set when cluster availability is false.

svm

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

azure\_key\_vault

Name	Type	Description
_links	<a href="#">_links</a>	
client_id	string	Application client ID of the deployed Azure application with appropriate access to an AKV.
client_secret	string	Password used by the application to prove its identity to AKV.
key_id	string	Key Identifier of AKV key encryption key.
name	string	Name of the deployed AKV that will be used by ONTAP for storing keys. <ul style="list-style-type: none"> <li>• example: <a href="https://kmip-akv-keyvault.vault.azure.net/">https://kmip-akv-keyvault.vault.azure.net/</a></li> <li>• format: uri</li> </ul>
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
state	<a href="#">state</a>	Indicates whether the AKV key protection is available cluster wide.
svm	<a href="#">svm</a>	
tenant_id	string	Directory (tenant) ID of the deployed Azure application with appropriate access to an AKV.
uuid	string	A unique identifier for the Azure Key Vault (AKV).

#### 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.

## Create an AKV configuration for all clusters and SVMs

POST `/security/azure-key-vaults`

Configures the AKV configuration for all clusters and SVMs.

### Required properties

- `svm.uuid` or `svm.name` - Existing SVM in which to create a AKV.
- `client_id` - Application (client) ID of the deployed Azure application with appropriate access to an AKV.
- `tenant_id` - Directory (tenant) ID of the deployed Azure application with appropriate access to an AKV.
- `client_secret` - Password used by the application to prove its identity to AKV.
- `key_id` - Key Identifier of AKV encryption key.
- `name` - Name of the deployed AKV used by ONTAP for storing keys.

### Related ONTAP commands

- `security key-manager external azure enable`

### Learn more

- [DOC /security/azure-key-vaults](#)

### Parameters

Name	Type	In	Required	Description
<code>return_records</code>	boolean	query	False	The default is false. If set to true, the records are returned.



## Request Body

Name	Type	Description
_links	<a href="#">_links</a>	
client_id	string	Application client ID of the deployed Azure application with appropriate access to an AKV.
client_secret	string	Password used by the application to prove its identity to AKV.
key_id	string	Key Identifier of AKV key encryption key.
name	string	Name of the deployed AKV that will be used by ONTAP for storing keys. <ul style="list-style-type: none"><li>• example: <a href="https://kmip-akv-keyvault.vault.azure.net/">https://kmip-akv-keyvault.vault.azure.net/</a></li><li>• format: uri</li></ul>
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
state	<a href="#">state</a>	Indicates whether the AKV key protection is available cluster wide.
svm	<a href="#">svm</a>	
tenant_id	string	Directory (tenant) ID of the deployed Azure application with appropriate access to an AKV.
uuid	string	A unique identifier for the Azure Key Vault (AKV).

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "client_id": "aaaaaaaa-bbbb-aaaa-bbbb-aaaaaaaaaaaa",
  "client_secret": "abcdef",
  "key_id":
  "https://keyvault1.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c5954
  0e2a74",
  "name": "https://kmip-akv-keyvault.vault.azure.net/",
  "scope": "svm",
  "state": {
    "code": 346758,
    "message": "AKV key protection is unavailable in following nodes -
    node1, node2."
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "tenant_id": "zzzzzzzz-yyyy-zzzz-yyyy-zzzzzzzzzzzz",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```

## Response

Status: 201, Created

Name	Type	Description
<code>_links</code>	<code>_links</code>	
<code>num_records</code>	integer	Number of records
<code>records</code>	array[ <code>azure_key_vault</code> ]	

## Example response

```
{
  "_links": {
    "next": {
      "href": "/api/resourcelink"
    },
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "records": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "client_id": "aaaaaaaa-bbbb-aaaa-bbbb-aaaaaaaaaaaa",
    "client_secret": "abcdef",
    "key_id":
    "https://keyvault1.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c5954
    0e2a74",
    "name": "https://kmip-akv-keyvault.vault.azure.net/",
    "scope": "svm",
    "state": {
      "code": 346758,
      "message": "AKV key protection is unavailable in following nodes
      - node1, node2."
    },
    "svm": {
      "_links": {
        "self": {
          "href": "/api/resourcelink"
        }
      },
      "name": "svm1",
      "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
    },
    "tenant_id": "zzzzzzzz-yyyy-zzzz-yyyy-zzzzzzzzzzzz",
    "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
  }
}
```

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
3735553	Failed to create self-signed certificate.
3735664	The specified key size is not supported in FIPS mode.
3735665	The specified hash function is not supported in FIPS mode.
3735700	The specified key size is not supported.
52559972	The certificates start date is later than the current date.
65537500	A key manager has already been configured for this SVM.
65537503	Passwords do not match.
65537504	Internal error. Failed to store configuration in internal database.
65537505	One or more volume encryption keys of the given SVM are stored on a key manager configured for the admin SVM.
65537506	AKV is not supported in MetroCluster configurations.
65537512	AKV cannot be configured for the given SVM as not all nodes in the cluster have the azure.key.vault capability needed to enable the feature.
65537514	Failed to check or update the azure.key.vault feature capability.
65537518	Failed to find an interface with Cluster role.

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

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

state

Indicates whether the AKV key protection is available cluster wide.

Name	Type	Description
cluster_state	boolean	Set to true when AKV key protection is available on all nodes of the cluster.
code	integer	Code corresponding to the status message. Returns a 0 if AKV key protection is available in all nodes of the cluster.
message	string	Error message set when cluster availability is false.

svm

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

azure\_key\_vault

Name	Type	Description
_links	<a href="#">_links</a>	
client_id	string	Application client ID of the deployed Azure application with appropriate access to an AKV.

Name	Type	Description
client_secret	string	Password used by the application to prove its identity to AKV.
key_id	string	Key Identifier of AKV key encryption key.
name	string	Name of the deployed AKV that will be used by ONTAP for storing keys. <ul style="list-style-type: none"> <li>example: <a href="https://kmip-akv-keyvault.vault.azure.net/">https://kmip-akv-keyvault.vault.azure.net/</a></li> <li>format: uri</li> </ul>
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
state	state	Indicates whether the AKV key protection is available cluster wide.
svm	svm	
tenant_id	string	Directory (tenant) ID of the deployed Azure application with appropriate access to an AKV.
uuid	string	A unique identifier for the Azure Key Vault (AKV).

#### \_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.

## Restore keys for an SVM from a configured AKV

POST /security/azure-key-vaults/{azure\_key\_vault.uuid}/restore

Restore the keys for an SVM from a configured AKV.

### Related ONTAP commands

- `security key-manager external azure restore`

### Parameters



Name	Type	In	Required	Description
return_timeout	integer	query	False	The number of seconds to allow the call to execute before returning. When doing a POST, PATCH, or DELETE operation on a single record, the default is 0 seconds. This means that if an asynchronous operation is started, the server immediately returns HTTP code 202 (Accepted) along with a link to the job. If a non-zero value is specified for POST, PATCH, or DELETE operations, ONTAP waits that length of time to see if the job completes so it can return something other than 202.
return_records	boolean	query	False	The default is false. If set to true, the records are returned.
azure_key_vault.uuid	string	path	True	UUID of the existing AKV configuration.

## Response

```
Status: 202, Accepted
```

## Error

```
Status: Default
```

ONTAP Error Response Codes

Error Code	Description
65537511	AKV is not configured for the given SVM.
65537515	Failed to restore keys on some nodes in the cluster.

Name	Type	Description
error	error	

### Example error

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

### Definitions

## See Definitions

error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

error

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

## Delete an AKV configuration

```
DELETE /security/azure-key-vaults/{uuid}
```

Deletes an AKV configuration.

### Related ONTAP commands

- `security key-manager external azure disable`

### Learn more

- [DOC /security/azure-key-vaults](#)

### Parameters

Name	Type	In	Required	Description
uuid	string	path	True	

### Response

```
Status: 200, Ok
```

## Error

Status: Default

### ONTAP Error Response Codes

Error Code	Description
65536242	One or more Storage Encryption devices are assigned an authentication key.
65536817	Internal error. Failed to determine if key manager is safe to disable.
65536827	Internal error. Failed to determine if the given SVM has any encrypted volumes.
65536834	Internal error. Failed to get existing key-server details for the given SVM.
65536867	Volume encryption keys (VEK) for one or more encrypted volumes are stored on the key manager configured for the given SVM.
65536883	Internal error. Volume encryption key is missing for a volume.
65536884	Internal error. Volume encryption key is invalid for a volume.
65536924	Cannot remove key manager that still contains one or more NSE authentication keys.
65537511	AKV is not configured for the given SVM.
196608301	Internal error. Failed to get encryption type.
196608305	NAE aggregates found in the cluster.

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

## Example error

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

## Definitions

### See Definitions

#### error\_arguments

Name	Type	Description
code	string	Argument code
message	string	Message argument

#### error

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

## Retrieve AKV configuration for an SVM specified by the UUID

GET /security/azure-key-vaults/{uuid}

Retrieves the AKV configuration for the SVM specified by the UUID.

## Related ONTAP commands

- `security key-manager external azure show`

## Learn more

- [DOC /security/azure-key-vaults](#)

## Parameters

Name	Type	In	Required	Description
uuid	string	path	True	AKV UUID
fields	array[string]	query	False	Specify the fields to return.

## Response

Status: 200, Ok

Name	Type	Description
<a href="#">_links</a>	<a href="#">_links</a>	
client_id	string	Application client ID of the deployed Azure application with appropriate access to an AKV.
client_secret	string	Password used by the application to prove its identity to AKV.
key_id	string	Key Identifier of AKV key encryption key.
name	string	Name of the deployed AKV that will be used by ONTAP for storing keys. <ul style="list-style-type: none"><li>• example: <a href="https://kmip-akv-keyvault.vault.azure.net/">https://kmip-akv-keyvault.vault.azure.net/</a></li><li>• format: uri</li></ul>
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".

Name	Type	Description
state	<a href="#">state</a>	Indicates whether the AKV key protection is available cluster wide.
svm	<a href="#">svm</a>	
tenant_id	string	Directory (tenant) ID of the deployed Azure application with appropriate access to an AKV.
uuid	string	A unique identifier for the Azure Key Vault (AKV).

## Example response

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "client_id": "aaaaaaaa-bbbb-aaaa-bbbb-aaaaaaaaaaaa",
  "client_secret": "abcdef",
  "key_id":
  "https://keyvault1.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c5954
  0e2a74",
  "name": "https://kmip-akv-keyvault.vault.azure.net/",
  "scope": "svm",
  "state": {
    "code": 346758,
    "message": "AKV key protection is unavailable in following nodes -
    node1, node2."
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "tenant_id": "zzzzzzzz-yyyy-zzzz-yyyy-zzzzzzzzzzzz",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```

## Error

Status: Default, Error

Name	Type	Description
error	error	



## Example error

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

## Definitions

## See Definitions

href

Name	Type	Description
href	string	

\_links

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

state

Indicates whether the AKV key protection is available cluster wide.

Name	Type	Description
cluster_state	boolean	Set to true when AKV key protection is available on all nodes of the cluster.
code	integer	Code corresponding to the status message. Returns a 0 if AKV key protection is available in all nodes of the cluster.
message	string	Error message set when cluster availability is false.

svm

Name	Type	Description
_links	<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.

## Update the AKV configuration

PATCH `/security/azure-key-vaults/{uuid}`

Updates the AKV configuration.

### Required properties

- `client_secret` - New password used to prove the application's identity to the AKV.

### Related ONTAP commands

- `security key-manager external azure modify`

### Learn more

- [DOC /security/azure-key-vaults](#)

### Parameters

Name	Type	In	Required	Description
uuid	string	path	True	AKV UUID

### Request Body

Name	Type	Description
<code>_links</code>	<a href="#">_links</a>	
<code>client_id</code>	string	Application client ID of the deployed Azure application with appropriate access to an AKV.
<code>client_secret</code>	string	Password used by the application to prove its identity to AKV.

Name	Type	Description
key_id	string	Key Identifier of AKV key encryption key.
name	string	Name of the deployed AKV that will be used by ONTAP for storing keys. <ul style="list-style-type: none"> <li>• example: <a href="https://kmip-akv-keyvault.vault.azure.net/">https://kmip-akv-keyvault.vault.azure.net/</a></li> <li>• format: uri</li> </ul>
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
state	state	Indicates whether the AKV key protection is available cluster wide.
svm	svm	
tenant_id	string	Directory (tenant) ID of the deployed Azure application with appropriate access to an AKV.
uuid	string	A unique identifier for the Azure Key Vault (AKV).

## Example request

```
{
  "_links": {
    "self": {
      "href": "/api/resourcelink"
    }
  },
  "client_id": "aaaaaaaa-bbbb-aaaa-bbbb-aaaaaaaaaaaa",
  "client_secret": "abcdef",
  "key_id":
  "https://keyvault1.vault.azure.net/keys/key1/a8e619fd8f234db3b0b95c5954
  0e2a74",
  "name": "https://kmip-akv-keyvault.vault.azure.net/",
  "scope": "svm",
  "state": {
    "code": 346758,
    "message": "AKV key protection is unavailable in following nodes -
    node1, node2."
  },
  "svm": {
    "_links": {
      "self": {
        "href": "/api/resourcelink"
      }
    },
    "name": "svm1",
    "uuid": "02c9e252-41be-11e9-81d5-00a0986138f7"
  },
  "tenant_id": "zzzzzzzz-yyyy-zzzz-yyyy-zzzzzzzzzzzz",
  "uuid": "1cd8a442-86d1-11e0-ae1c-123478563412"
}
```

## Response

Status: 200, Ok

## Error

Status: Default

Error Code	Description
65537503	Passwords do not match.
65537504	Internal error. Failed to store configuration in internal database.
65537511	AKV is not configured for the given SVM.
65537517	The field "new_client_secret" must be specified.

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

state

Indicates whether the AKV key protection is available cluster wide.

Name	Type	Description
cluster_state	boolean	Set to true when AKV key protection is available on all nodes of the cluster.
code	integer	Code corresponding to the status message. Returns a 0 if AKV key protection is available in all nodes of the cluster.
message	string	Error message set when cluster availability is false.

svm

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

azure\_key\_vault

Name	Type	Description
_links	<a href="#">_links</a>	
client_id	string	Application client ID of the deployed Azure application with appropriate access to an AKV.

Name	Type	Description
client_secret	string	Password used by the application to prove its identity to AKV.
key_id	string	Key Identifier of AKV key encryption key.
name	string	Name of the deployed AKV that will be used by ONTAP for storing keys. <ul style="list-style-type: none"> <li>example: <a href="https://kmip-akv-keyvault.vault.azure.net/">https://kmip-akv-keyvault.vault.azure.net/</a></li> <li>format: uri</li> </ul>
scope	string	Set to "svm" for interfaces owned by an SVM. Otherwise, set to "cluster".
state	state	Indicates whether the AKV key protection is available cluster wide.
svm	svm	
tenant_id	string	Directory (tenant) ID of the deployed Azure application with appropriate access to an AKV.
uuid	string	A unique identifier for the Azure Key Vault (AKV).

#### 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



<b>Name</b>	<b>Type</b>	<b>Description</b>
message	string	Error message
target	string	The target parameter that caused the error.

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