

Vault kv (list vs get)

The difference between `vault kv list` and `vault kv get` lies in their purpose and what they retrieve from the Vault key-value secrets engine:

1. `vault kv list`

- **Purpose:** Used to list the keys (sub-paths) stored at a specific path in the key-value (KV) secrets engine.
- **Output:** Displays a list of keys available under the specified path.
- **Use Case:** When you want to see what secrets or sub-paths are available under a specific directory.

Example:

SHELL

```
vault kv list secret/
```

Output:

Keys

aws

db

api

Here, **aws**, **db**, and **api** are the available sub-paths (keys) under **secret/**.

2. **vault kv get**

- **Purpose:** Retrieves the actual data (key-value pairs) stored at a specific key.
- **Output:** Displays the key-value pairs (secrets) stored at the provided path.
- **Use Case:** When you want to view the secrets (e.g., access keys, passwords) stored at a specific path.

Example:

SHELL

```
vault kv get secret/aws/credentials
```

Output:

```
===== Metadata =====
Key                               Value
---                               -
created_time                      2024-12-
05T10:00:00.000000Z
deletion_time                     n/a
destroyed                         false
version                           1

===== Data =====
Key                               Value
---                               -
access_key                       AKIAEXAMPLE
secret_key                       wJalrXUtnEXAMPLEKEY
```

Here, the command retrieves the actual secret stored at the path `secret/aws/credentials`.

Key Differences

Feature	<code>vault kv list</code>	<code>vault kv get</code>
Purpose	Lists all keys (sub-paths) at a path.	Retrieves the data stored at a specific key.
Output	A list of keys (sub-paths).	Key-value pairs (secrets) and metadata.
Input Path	Directory or path.	Specific key or path to retrieve data from.

Feature	<code>vault kv list</code>	<code>vault kv get</code>
Use Case	Discover what is stored in Vault.	Retrieve the actual stored secrets.

Example Scenario:

1. Listing Available Keys:

SHELL

```
vault kv list secret/
```

Output:

```
Keys
----
aws
db
```

You now know there are keys `aws` and `db` under `secret/`.

2. Retrieving Data for a Specific Key:

SHELL

```
vault kv get secret/aws
```

Output:

```
===== Metadata =====
Key                        Value
---                        -
created_time              2024-12-
05T10:00:00.000000Z
deletion_time             n/a
destroyed                 false
version                   1

===== Data =====
Key                        Value
---                        -
access_key                AKIAEXAMPLE
secret_key                wJalrXUtnEXAMPLEKEY
```

This retrieves the actual secrets stored under the **aws** key.

Summary

- **vault kv list**: Lists available keys or sub-paths under a path.
- **vault kv get**: Retrieves the actual data (secrets) stored at a specific key.

Use **list** to discover the structure of your secrets and **get** to retrieve the actual values.