

Vault Tools Documentation

This document provides detailed information about the Vault tools available in the DevOps MCP Server.

Overview

The Vault integration allows you to interact with your HashiCorp Vault server through the MCP protocol. It provides tools for retrieving secrets, authentication information, and system status.

Configuration

The Vault integration can be configured using the following environment variables:

- **VAULT_URL**: The URL of your Vault server (default: `http://localhost:8200`)
- **VAULT_TOKEN**: The token to use for authentication
- **VAULT_TIMEOUT**: Timeout for API calls in seconds (default: `10`)

Available Tools

The Vault integration provides the following tools:

Secret Tools

`list_vault_secrets`

List secrets at a path in Vault.

Parameters:

- **path** (required): Path to list secrets from (e.g., "my-app")
- **mount_point** (optional): The secret engine mount point (default: "secret")
- **limit** (optional): Maximum number of secrets to return (default: 100, max: 500)

Example:

```
list_vault_secrets("my-app")
list_vault_secrets("my-app", "kv")
```

`get_vault_secret`

Get a secret from Vault.

Parameters:

- **path** (required): Path to the secret (e.g., "my-app/database")
- **mount_point** (optional): The secret engine mount point (default: "secret")
- **version** (optional): Specific version to retrieve

Example:

```
get_vault_secret("my-app/database")
get_vault_secret("my-app/database", "kv", 2)
```

get_vault_secret_metadata

Get metadata for a secret in Vault.

Parameters:

- **path** (required): Path to the secret (e.g., "my-app/database")
- **mount_point** (optional): The secret engine mount point (default: "secret")

Example:

```
get_vault_secret_metadata("my-app/database")
```

Auth Tools

list_vault_auth_methods

List authentication methods in Vault.

Parameters:

- **limit** (optional): Maximum number of methods to return (default: 100, max: 500)

Example:

```
list_vault_auth_methods()
```

get_vault_token_info

Get information about the current token.

Example:

```
get_vault_token_info()
```

list_vault_token_accessors

List token accessors in Vault.

Parameters:

- **limit** (optional): Maximum number of accessors to return (default: 100, max: 500)

Example:

```
list_vault_token_accessors()
```

System Tools

get_vault_health_status

Get Vault health status.

Example:

```
get_vault_health_status()
```

get_vault_seal_status

Get Vault seal status.

Example:

```
get_vault_seal_status()
```

list_vault_policies

List policies in Vault.

Parameters:

- **limit** (optional): Maximum number of policies to return (default: 100, max: 500)

Example:

```
list_vault_policies()
```

get_vault_policy

Get a policy from Vault.

Parameters:

- **name** (required): Policy name

Example:

```
get_vault_policy("admin")
```

list_vault_audit_devices

List audit devices in Vault.

Parameters:

- **limit** (optional): Maximum number of devices to return (default: 100, max: 500)

Example:

```
list_vault_audit_devices()
```

Available Resources

The Vault integration provides the following resources:

- **vault://status**: Get Vault server status
- **vault://auth**: Get Vault authentication information
- **vault://secret/{path}**: Get a secret from Vault
- **vault://policies**: List Vault policies

Examples

Working with Secrets

```
# List secrets in the "my-app" path
list_vault_secrets("my-app")

# Get the "database" secret from the "my-app" path
get_vault_secret("my-app/database")

# Get metadata for the "database" secret
get_vault_secret_metadata("my-app/database")
```

Working with Authentication

```
# List all authentication methods
list_vault_auth_methods()
```

```
# Get information about the current token  
get_vault_token_info()
```

Working with System Information

```
# Get Vault health status  
get_vault_health_status()  
  
# List all policies  
list_vault_policies()  
  
# Get the "admin" policy  
get_vault_policy("admin")
```