

CONFIGURATION SERVICE

PROJECT GOALS

Create an API accessible Service that provides the ability to retrieve and store configuration data.

Rip out configuration data from Chef (where appropriate) and allow approved persons to make changes.

Allow engineering teams to maintain their configuration data via the Ruby library or command line tool.

PROJECT REQUIREMENTS

- Service is API accessible
- A Ruby library to interface with the API
- Data storage technology must:
 - Be abstracted out and not directly accessed
 - Handle replication of data

- The API:
 - Is well documented
 - Requires an API token to use
 - Supports namespacing / separation of data
 - Supports API tokens:
 - To be matched with namespaces
 - That are read, write or read/write
 - Writes data as key -> value pairs
 - Returns data in JSON format

IMPLEMENTATION

- Ruby library
- Command line tool (Rubygem)
- A token is required for access
- ACL's applied to restrict token access
- Supports Hashicorp Consul & Hashicorp Vault
- Consistent adapter interface

RUBY LIBRARY

Basic usage

```
include Zendesk::ConfigurationService

cs = Adapters::Consul.new(
  address: "http://127.0.0.1:8500",
  token:   "2701E633-9EB5-4E38-B190-0CC809CDFC64"
)

cs.read('people/credentials')
=> {"username"=>"admin", "password"=>"woo-ahhh"}

credentials = { username: "admin", password: "whoah" }
cs.write('people/credentials', credentials)
=> true

cs.read('people/credentials')
=> {"username"=>"admin", "password"=>"whoah"}
```

Read/write outside of permitted space

```
include Zendesk::ConfigurationService

cs = Adapters::Consul.new(
  address: "http://127.0.0.1:8500",
  token:   "2701E633-9EB5-4E38-B190-0CC809CDFC64"
)

cs.read('embeddable/credentials')
Zendesk::ConfigurationService::Exceptions::NotFound: Zendesk::C
--snip--

cs.write('embeddable/credentials', {})
Zendesk::ConfigurationService::Exceptions::Forbidden: Zendesk::
--snip--
```

Service unavailable

```
include Zendesk::ConfigurationService

cs = Adapters::Consul.new(
  address: "http://127.0.0.1:8500",
  token:   "2701E633-9EB5-4E38-B190-0CC809CDFC64"
)

cs.read('people/credentials')
Zendesk::ConfigurationService::Exceptions::Unavailable: Zendesk

cs.available?
=> false

cs.status
=> {:available=>false}
```

COMMAND LINE TOOL

ZENDESK-CONFIGURATION-SERVICE

```
$ zendesk-configuration-service --help
```

Toggle(s)

<code>--debug</code>	Enable debugging (default: false)
<code>--warn</code>	Enable warnings (default: true)
<code>--verbose</code>	Enable verbose (default: true)

Option(s)

<code>--config <value></code>	Configuration file path (default: /etc/zendesk-configuration-service.conf)
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Subcommand(s)

<code>status</code>	Show the status
<code>get, read</code>	Read a configuration item
<code>set, write</code>	Write a configuration item
<code>del, delete, remove, rm</code>	Delete a configuration item
<code>watch</code>	Watch a key for changes
<code>update-file</code>	Update a file from a key

CONFIG.YML

```
---  
consul:  
  address: "http://127.0.0.1:8500"  
  token:   "2701E633-9EB5-4E38-B190-0CC809CDFC64"  
  
hashicorp_vault:  
  address: "http://127.0.0.1:8200"  
  token:   "105286C0-63E7-493E-924C-42AA04651F13"
```

ENVIRONMENT VARIABLE

```
$ echo $ZENDESK_CONFIGURATION_SERVICE_CLASS  
consul
```

DEMO

UPDATE-FILE

THANKS 😊