DataBag:

A data bag is a global variable that is stored as JSON data and is accessible from a Chef server. A data bag is indexed for searching and can be loaded by a recipe or accessed during a search.

A data bag item may be encrypted using shared secret encryption. This allows each data bag item to store confidential information (such as a database password) or to be managed in a source control system

Create a Data Bag

A data bag can be created in two ways: using knife or manually. In general, using knife to create data bags is recommended, but as long as the data bag folders and data bag item JSON files are created correctly, either method is safe and effective.

Using Knife

knife can be used to create data bags and data bag items when the knife data bag subcommand is run with the create argument. For example:

$ knife data bag create DATA_BAG_NAME (DATA_BAG_ITEM)

knife can be used to update data bag items using the from file argument:

$ knife data bag from file BAG_NAME ITEM_NAME.json

As long as a file is in the correct directory structure, knife will be able to find the data bag and data bag item with only the name of the data bag and data bag item. For example:

$ knife data bag from file BAG_NAME ITEM_NAME.json

will load the following file:

data_bags/BAG_NAME/ITEM_NAME.json

Continuing the example above, if you are in the "admins" directory and make changes to the file charlie.json, then to upload that change to the Chef server use the following command:

$ knife data bag from file admins charlie.json

In some cases, such as when knife is not being run from the root directory for the chef-repo, the full path to the data bag item may be required. For example:

$ knife data bag from file BAG_NAME /path/to/file/ITEM_NAME.json

Manually

One or more data bags and data bag items can be created manually under the data_bags directory in the chef-repo. Any method can be used to create the data bag folders and data bag item JSON files. For example:

```
$ mkdir data_bags/admins
```

would create a data bag folder named "admins". The equivalent command for using knife is:

```
$ knife data bag create admins
```

A data bag item can be created manually in the same way as the data bag, but by also specifying the file name for the data bag item (this example is using vi, a visual editor for UNIX):

```
$ vi data_bags/admins/charlie.json
```

would create a data bag item named "charlie.json" under the "admins" sub-directory in the data_bags directory of the chef-repo. The equivalent command for using knife is:

```
$ knife data bag create admins charlie
```

For further information please have a look at https://docs.chef.io/knife_data_bag.html

Creating Encrypted Databag:

1. Create a encrypted key
   a. openssl rand -base64 512 | tr -d '\r\n' > ~/encrypted_data_bag_secret

2. Create data bag
   a. knife create data bag dbdetails
3. Create folder structure in chef-repo
   a. mkdir data_bags
   b. cd data_bags
   c. mkdir dbdetails
   d. Create json files
   e. vi test.json
   f. { "id": "mysql_root_password", "password": "root"}

4. knife data bag from file dbdetails test.json --secret-file ~/encrypted_data_bag_secret

```
knife create data bag dbdetails

Mkdir data_bags # root folder of chef-repo
Cd data_bags
Mkdir dbdetails
```