

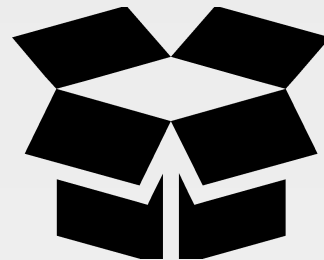
Create Users from a Data Bag

Dynamically search through the Chef Server under the 'users' index to create users

Objective:

- ☐ Generate the 'myusers' cookbook
- ☐ Search for all users belonging to group1
- ☐ Create Users and Groups based on data bag contents
- ☐ Upload 'myusers' cookbook to Chef Server
- ☐ Update 'web' role
- ☐ Converge web1 node

CONCEPT



Where are the users?

Since our users and groups Data Bags are now indexed on the Chef Server, we have a centralized source of truth for this information.

We can search through this information inside of our recipes.

cd and Generate the myusers Cookbook



```
$ cd ~/chef-repo
```

```
$ chef generate cookbook cookbooks/myusers
```

```
Compiling Cookbooks...
```

```
Recipe: code_generator::cookbook
```

```
  * directory[C:/Users/USER/chef-repo/cookbooks/myusers] action create
    - create new directory C:/Users/USER/chef-repo/cookbooks/myusers
  * template[C:/Users/USER/chef-repo/cookbooks/myusers/metadata.rb] action
create_if_missing
    - create new file C:/Users/USER/chef-repo/cookbooks/myusers/metadata.rb
    - update content in file C:/Users/USER/chef-repo/cookbooks/myusers/metadata.rb from
none to 899276
    (diff output suppressed by config)
  * template[C:/Users/USER/chef-repo/cookbooks/myusers/README.md] action
create_if_missing
```

Create default recipe

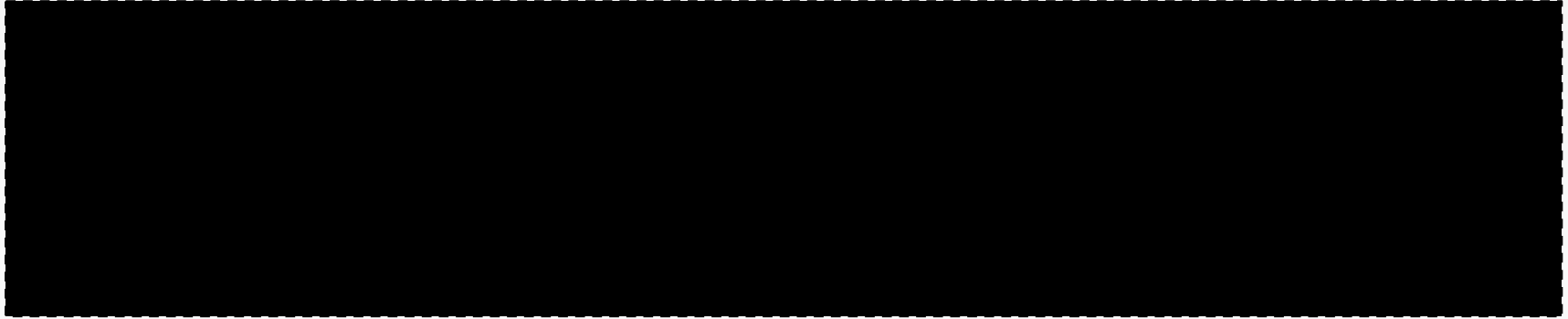
```
~/chef-repo/cookbooks/myusers/recipes/default.rb
```

```
search("users", "platform:centos").each do |user_data|
  user user_data['id'] do
    comment user_data['comment']
    uid user_data['uid']
    gid user_data['gid']
    home user_data['home']
    shell user_data['shell']
  end
end
```

Change to the cookbooks/myusers Directory



```
$ cd cookbooks/myusers
```



Run berks install



```
$ berks install
```

```
Resolving cookbook dependencies...  
Fetching 'myusers' from source at .  
Fetching cookbook index from https://supermarket.chef.io...  
Using myusers (0.1.0) from source at .
```

Upload the Cookbook to the Chef Server



```
$ berks upload
```

```
Uploaded myusers (0.1.0) to: 'https://api.opscode.com:443/organizations/ORG_NAME'
```

Display Cookbooks within Your Org



```
$ knife cookbook list
```

```
apache           0.2.1
build-essential  7.0.2
compat_resource  12.16.2
cpu              1.0.0
haproxy          2.0.0
mingw            1.2.4
myhaproxy        0.1.0
myusers          0.1.0
ohai             4.2.3
seven_zip        2.0.2
windows         2.1.1
workstation      0.2.1
```


Update the web.rb Role to include myusers



```
~/chef-repo/roles/web.rb
```

```
name 'web'
description 'Web Server Role'
run_list 'recipe[myusers]', 'recipe[workstation]', 'recipe[apache]'
```

Upload it to the Chef Server



```
$ knife role from file roles/web.rb
```

```
Updated Role web!
```

View Details of the Role



```
$ knife role show web
```

```
chef_type:          role
default_attributes:
description:         Web Server Role
env_run_lists:
json_class:          Chef::Role
name:                web
override_attributes:
run_list:
  recipe[myusers]
  recipe[workstation]
  recipe[apache]
```

Login to web1



```
$ vagrant ssh web1
```

```
Last login: Sat Dec 31 02:59:27 2016 from 10.0.2.2  
[vagrant@web1 ~]$
```

Run chef-client to converge web1



```
[vagrant@web1 ~]$ sudo chef-client
```

```
Starting Chef Client, version 12.17.44
resolving cookbooks for run list: ["myusers", "workstation", "apache"]
Synchronizing Cookbooks:
  - myusers (0.1.0)
  - apache (0.2.1)
  - workstation (0.2.1)
Installing Cookbook Gems:
Compiling Cookbooks...
Converging 8 resources....
```

Verify the new users has been created



```
[vagrant@web1 ~]$ cat /etc/passwd
```

```
....
```

```
apache:x:48:48:Apache:/usr/share/httpd:/sbin/nologin
```

```
user2:x:101:1:I am user2:/home/user2:/bin/bash
```

```
user1:x:100:1:I am user1:/home/user1:/bin/bash
```

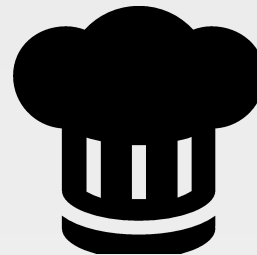
Return to your Workstation



```
[vagrant@web1 ~]$ exit
```

```
logout
```

```
Connection to 127.0.0.1 closed.
```



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